CONTENTS

Across Europe and Asia ........ John Milne, F. G. S. ....... 1
Analyses of the Take-no-ko ...... D. W. Dwars ......... 73
Some Japanese Musical Intervals ... Rev. P. V. Veeder, D. D. .... 76
Visibility of Mountains from Tōkiyō ... Rev. P. V. Veeder, D. D. .... 86
Discovery of Human Remains ... T. R. H. McClatchie .... 90
Ancient Japanese Rituals.—Part I ... Ernest Satow, B. A. .... 95
On a Karen Inscription ....... Rev. N. Brown, D. D. .... 127
The Church at Yamaguchi from 1550 to 1586 .... Ernest Satow, B. A ... 131
The Feudal Mansions of Yedo ... T. R. H. McClatchie .... 157
Inscriptions in Shimabara and Amakusa ...... Rev. H. Stout .... 185
Foreign Travel of Modern Japanese Adventurers .... J. M. James .... 191
On the Drinking Water of Yokohama ... A. J. C. Geerts .... 211
Transliteration of the Japanese Syllabary ........ Ernest Satow, B. A ... 226
A Discourse on Infinite Vision ...... J. M. James .... 267
Wasōbyōe, the Japanese Gulliver ... B. H. Chamberlain .... 287
Analyses of Surface Waters in Tōkiyō ... R. W. Atkinson, B. Sc. .... 314
The Chemical Industries of Japan ... R. W. Atkinson, B. Sc. .... 318
H. M. S. "Phaeton" at Nagasaki in 1808 .... W. G. Aston, M. A ... 329
Notes on Osaka ........ Rev. J. Summers .... 388
Ancient Japanese Rituals.—Part II ... Ernest Satow, B. A ... 409
Reports of General Meetings. 72-1, 94, 130, 183, 205, 225, 261, 316, 445
Reports of Annual Meeting .......... 456
Report of the Council ........ 457
List of Members ........ 461
ACROSS EUROPE AND ASIA

BY JOHN MILNE, ESQ.

[Read October 15th., 1878]

INTRODUCTION.*

The following paper is a short narrative of a journey from England, across Europe and Asia to Japan. For convenience and also on account of the great differences exhibited by the countries which are described, I have divided it into four parts.

1st From London to S. Petersburgh, across Russia and Siberia to Kiachta.

2nd Across Mongolia to Pekin.

3rd From Pekin to Tien-tsin and overland to Shanghai.

4th Observations and general notes.

Because the greater portion of the road comprised in the first section of my journey is daily travelled over by Russians and Siberians, and much of it has already been described by English and French writers, I shall (2) pass over this strip of country, which for length and flatness exceeds all others on the globe, as briefly as possible.

As in the second portion of my journey which was across Mongolia, I describe a road which lies somewhat out of the route of ordinary caravans, and as the journey described in part three, has but seldom been made by Europeans, I shall treat these with comparatively more detail than I have that which is comprised under part one.

*The Geological notes made during this journey have been published as a series of papers in the Geological Magazine, from July 1877 to February 1878.
Not being able to speak the languages of the countries through which I travelled, I am sorry to say that I lost many opportunities of gaining information which might have been of great value. When in Russian territory it is generally supposed that French and German are of great assistance. In many cases this is true, but where a traveller has to deal with post boys, peasantry, traders, and subordinate officials, these languages are usually of no more use than they would be in Mongolia or China. In these latter countries I had the same linguistic difficulties as in Russia, in consequence of which I suffered physically, mentally, and pecuniarily for my ignorance.

PART I.
ACROSS RUSSIA AND SIBERIA.

Before leaving England I discovered that the popular opinions respecting a journey across Siberia were very vague. Although I advertised in several (3) newspapers and made diligent enquiries for a travelling companion it seemed impossible to obtain one.

In China or Japan where every member of a community must have travelled more or less, the idea of an overland trip across Siberia is by no means preposterous,—almost every one, if he does not actually know some body who has made the journey, is at least acquainted with some one who has discussed it.

In England, however, where the name Siberia is to ordinary individuals but seldom associated with more than gangs of exiles, packs of wolves, and dreary plains of frost and snow, the idea of starting on a journey across such a country is received with astonishment and a supplement of ridicule.
This state of feeling I found to be exhibited even as far as Moscow, where an English resident to whom I had letters of introduction, and to whom I almost daily paid a visit, would, every time he saw me, tip his chair back and roar with laughter at the absurdity of the scheme.

Finding that the help and encouragement which I received in England was so extremely limited, after vainly advertising in *The Field* and other papers for a travelling companion, I started off alone on August 3rd 1875.

The route I chose was *via* Hull to Gottenburg, from Gottenburg by rail to Stockholm, and then by steamer along the coast of Finland to S. Petersburgh, which I reached on the afternoon of the 13th.

This was the longest way that I could well have taken. A much quicker route would have been to have gone from Hull or London to S. Petersburgh direct by steamer. This would have occupied about 6 days. Or a still shorter route would have been to have crossed (4) the Channel and to have had 3½ days of rail across France and Germany.

I took the Sweden route chiefly on account of its newness and its variety. Also I anticipated meeting friends in Sweden.

On reaching Hull, instead of finding the passenger ship I had expected, I was told that the vessel was a coaling steamer. Not wishing to beat a retreat at this early period of my journey, I took my passage amidst clouds of coal dust, in company with a Dutchman who, like myself, had been misled by newspaper advertisements. I narrate this as I shall my other misfortunes, that others who may wish to experience the pleasures of an overland trip, may have an opportunity of avoiding at least some fractional portions of its discomfort.

Excepting difficulties with the language, I found everything in Sweden very pleasant. This however only continued as far as Stockholm, where I fell in with an English-speaking community. My linguistic troubles were overcome by pantomimic representation, an art in which I found, by practice, I became considerably improved. Every-
where many tourists were to be seen, the greater number of whom had come across the Atlantic. I felt that we were all fellow-countrymen,—we were certainly fellow-actors.

At Stockholm, after seeing all the museums, and after having my passport viséd, for which purpose I had to make several visits to the Russian Consulate, and pay the usual fée, I obtained a place in a well-filled steamer for S. Petersburgh. I think I may safely say that from 80 to 90 per cent of my fellow-passengers were Americans. This journey was a very (5) pleasant one. It occupied two or three days and was almost altogether through an archipelago of little pine clad islands. Very often these islands were so thickly packed that there was land on all sides, and in no direction could the open sea be seen—We stopped at several places, and at two of them, Abo and Helsingforș, we landed and had rambles, through clean well-built towns. At the former of these places we were boarded by Custom house officers, who, for some unknown reason, inspected the baggage, not only of those who were landing in Finland but also that belonging to the passengers who were proceeding to S. Petersburgh.

All the country which I saw, was, like the islands, low and undulating, and shewing evidence upon its surface of having been modelled by some form of ice. The general hypothesis amongst geologists is that these appearances were due to a great sheet of ice which during the glacial period covered this portion of the world. I, however, although by no means disbelieving that in bygone times there were periods which we might call glacial, am inclined to think that the causes which produced the peculiar character of the islands and low lying land along these Coasts may yet be seen in action. First there is the elevation of the land going on, which for this portion of the world has been so often proved, and is so often quoted in text-books on Geology and Physical Geography that I will assume its truth. Secondly there is the action of Coast Ice. Every year these seas are frozen over, and during the formation and breaking up of the icy sheet, huge fields of ice are by
the action of the wind and tide rubbed up and down upon the shores. The effects of this in rounding, scratching, (6) and whitening the rocks are so evident to all who pass this way, that I will also take for granted the agent here referred to. Now if we combine these two actions and imagine a low-lying shore which, whilst every year being scratched and rounded is also being slowly elevated, I think we ought to have the same appearances as those we see upon the coast of Finland. Along the shore line there will be whitened and smoothed rocks, worn out into shelving hollows and gentle undulations; above this, but a little removed from sea level, will be similarly shaped rocks, but as these are no longer scrubbed with moving pans and fields of ice, instead of being clean and white, they will be grown over with a covering of lichen; still higher we shall find the same general features, but the details will be hidden by a covering of vegetation; and these three conditions are conditions which I often saw so beautifully illustrated upon the Coast of Finland that the hypothesis of Coast Ice modelling rising areas, appears to me to be clearly demonstrated.*

I stayed in S. Petersburgh a week, occupying myself with arrangements for my trip, and in visiting museums, palaces, and other places of interest, of which this northern capital is so full. Although I had many letters of introduction I was unsuccessful in finding a companion for Siberia.

Starting from the Russian Capital I had many advantages which could not be obtained by persons starting from China or Japan. Foremost amongst these I may mention the fact that through the kindness of our chargé d'affaires, M. Doria, I was enabled to obtain in addition to my ordinary passport, official introductions, (7) which I subsequently found to be of considerable value. I also secured myself against the disadvantage of travelling with a large quantity of money. This I did by paying a portion of my stock into

* For a more detailed account of the action of Coast Ice on a Rising Area, see, Geol: Mag: Vol III, Nos 7. 8. 9—also Vol IV, No 7.—also Quart: Jour: Geol: Soc: Nov. 1877.
one of the banks, and obtaining a circular note for the same
on the banks in Ekaterinburg, Tomsk, and Irkutsk.
The next stage of my journey was to Moscow, where
I also spent several days in trying to find a companion.
Although I had letters of introduction to the directors
of no less than five banks, and each of these amongst
their many acquaintances at the exchange and other
places endeavoured to find me a fellow-traveller, I was
still unsuccessful. The English Consul, Mr. Leslie,
following Russian custom, very kindly advertised in several
of the daily papers for me. The result of this was that
I had five or six applicants, three of whom, if I remember
rightly, were young ladies. As it happens in England
and other countries, so in Russia, young ladies have often
to make long journeys alone,—but as in Russia the
distances have to be overcome by driving night and day
in carriages over rough and lonely roads, it is more neces-
sary in this country that the lady should have a companion.
From this, coupled with the fact that it is almost as cheap
for two to travel together as it is for one alone, the custom
of ladies travelling with "unintroduced" gentlemen has
originated. Finding none of the applicants or rather the
conditions which the applicants suggested, suitable, on the
night of the 26th August, I left Moscow by train for Nijni
Novgorod, where, as the great fair was still going on, I was
told that I should find many merchants returning to Siberia.
Immediately on my arrival I made my last attempt to find
a companion and being (8) once more unsuccessful I took
passage in a steamer on the Volga bound for Perm.

I had a day to spare before the steamer sailed and so had
an opportunity of seeing the fair, which of all fairs is
perhaps the most famed.

For a business man it might be extremely interesting,
but to a pleasure-seeker it is very disappointing. The
portion of the town in which it is held, consists of a great
number of one-storied houses built along the sides of
regularly planned streets. The houses are low and the
streets are straight.
These houses are filled with bales and boxes of various materials, and it is only here and there that one can see anything approaching in character to an ordinary shop or stall, where toys and trinkets are sold, such as one expects to find at fairs.

The journey to Perm took eight days. If our engines had not broken down so often, and if we had not run upon so many sand banks, I think this period might have been made less.

The life and arrangements on board a Russian steamer were very different to those I had anticipated. In consequence of this I was somewhat uncomfortable. In the first place, although most of the passengers were on board for at least three or four days, it did not seem to be customary to provide beds. The only arrangements for sleeping were a number of cushioned seats ranged in parallel rows across what in an English boat would have been the saloon. Each passenger secured one of these seats, on which at night time he rested as he was best able. As it is usual for Russians when they are travelling to carry with them a plentiful supply of pillows for bolstering themselves up in the carriages. when journeying (9) along the roads, most of my fellow travellers had with them rugs and other means of making themselves tolerably comfortable. In addition to the general first-class quarters, there were one or two cabins. These were apparently charged for, according to the number of persons they were built to hold. Hence however, you have also to do your own furnishing. The only advantage of a private cabin is that if it has been engaged by a party, it may be made a means of economy, —it being apparently permissible to cram four or six people, and as much baggage as possible into a cabin only built for two. These were the first-class quarters. In the after part of the ship were the second class quarters, which, so far as I could see, only differed from the first class apartments in having its seats ranged longitudinally, and in having its inmates a little more tightly packed. All these were on the lower deck.
On the upper deck there was a small cabin in which you could take your meals. As there was no fixed time for these, and every one ordered from a buffet according to his pleasure, it generally happened that some one or other of the passengers might, at any time of the day, be observed, staving off the pangs of hunger.

Most people brought with them their own tea and sugar, and many also a certain portion of their food. This seems to be a custom everywhere, and when you leave the large towns it is even customary in the hotels. Corkage dues are things unknown. The chief amusements of the passengers were smoking and card playing, filling up blanks which were unusually monotonous by a meal.

As day by day passed, I gradually made acquaintances. (10) The first of these was a young Jew who kept a small shop, where he sold trinkets, pocket books, and a variety of small articles for the benefit of the passengers. He held his shop in the second-class cabin. After I had bought all that he could persuade me to invest in, he turned his attention to my clothes, making daily bids for the coat I was wearing. These bids came in various forms; sometimes he offered money; then he offered goods, then his own clothes, changing his offers in various ways to tempt me. Altogether he succeeded in making himself the most persistent nuisance which I think I met with on my journey.

As the life on board the steamer was so very tedious, it was with pleasure that I hailed the sight of Perm. The general view which was usually before us, was one of banks of mud to form a foreground, with wide and open cultivated plains stretching to the horizon for the background. Sometimes these were varied by a few miles of yellow and reddish cliffs of sand and clay.

The first portion of this river journey had been down the Volga, and the latter portion up the Kama, two rivers which for monotony and want of life would, I think, rival anything in Europe. In Murray's Handbook for Russia, the scenery on this latter river is said to be "of the grandest description."
Perm is a place which I think may be taken as giving a very fair representation of the conditions which a traveller will find in many of the Russian country towns. In the plan of the place, which from its regularity is as admirable as the project of any building company, you see the good intentions of the founder. Here however from caprice, want of money, (11) or of energy, the original designs appear to have been given up, and unity in design has been destroyed by the eccentricities of individual enterprise. The result of all this is, that you see a number of one-storied wooden houses scattered here and there along the sides of regularly planned streets. These are deep with mud and are bordered with fragmentary planks, the remnants of a side walk.

Here and there, you see a building which towers above the rest. On enquiry you will find that it is either the theatre or some club. In addition to these two omnipresent buildings several churches are usually to be seen. Even in the poorest village these buildings with their green roofs and multitudinous cupola-topped spires are always observable. One church in Moscow, called, I believe, the Cathedral of S. Basil, which has domes like turnips and spires like carrots, is so peculiar in design, and magnificent in its colours, that by an agricultural mind, it might be aptly compared to the closely packed contents of some vegetable garden.

Close to Perm is situated a famous Arsenal, or Russian Woolwich, to which I paid two visits and saw the casting of several large steel guns. I also saw what was said to be the largest steam hammer in the world, the anvil of which was a single casting of 666 tons.

The coal which was used here, originally came from Newcastle, but now it is only found advisable to carry coke so long a distance. They told me that this cost them about 5 per ton. When we consider that the neighbouring Urals are full of coal, one seam which has been discovered in the district of Solikamsk being no less than 40 feet in thickness, we see what Russia will in future gain and England lose.
(12) At Perm I had my introduction to real Russian travelling. The vehicle you use is called a tarántass. It is a seatless four-wheeled carriage, the body of which is suspended on three or four longitudinal poles, instead of springs. If you are making a very long journey it is perhaps better to buy one of these conveyances, which costs from 100 to 200 roubles, according to their capacity and strength.

If your journey is a short one it may be better to hire one from the post station, either to go the whole distance you are travelling, or else from station to station. If you adopt this latter plan, at every station you must move yourself and goods from one vehicle to another, and this when you are travelling continuously both day and night, as is customary in Russia, becomes extremely objectionable. A tarántass has room for two people, but many of them will carry four. To make myself as comfortable as possible, I followed bad advice and bought a mattrass. This was placed upon the top of my baggage, which was stowed at the bottom of the carriage, the idea being that in this way I might ward off some of the jolts, which, by looking at the streets in Perm, I saw I might expect when out upon the country roads. I left Perm at 12, P. M. on the night of Sep. 5th. Before daybreak the novelty had ceased to be a source of pleasure, and I realized the miseries of the roads. In the first place being always well provided with horses we were whirled along at a rate regardless of both ruts and stones. My mattrass instead of acting as a relieving pad, acted as a spring, and bounced me so unmercifully, that as soon as I had opportunity I exchanged it for a quantity of straw. At each post station it was necessary to turn out and (13) present an order for horses or "padorojné" which had been received at the starting place at the rate of so much per verst, in order to obtain new horses. As this was often in the middle of the night, and you had to wake up the station master, who perhaps told you in return for the annoyance you had given him, that all the horses were taken by the previous traveller, getting up to be thus treated was really very unpleasant.
By threats or persuasion you may induce him to procure horses from the village, or if there is no village, from some neighbouring peasant. Having, by some means or other, obtained your horses, you pay for them at a fixed rate, of so much per verst, up to the next post station. To insure yourself against being cheated you can, when not too sleepy, refer to a table hung in a glazed frame against the wall, where these distances are distinctly written down. Should you meet with any great annoyance at any of these stations you can make a record of your grievances in a book which is attached by a government string and seal against the wall or to a table. As the book is periodically inspected by a travelling official, I should think that this system for the encouragement of civility ought to be successful.

At each of these stations there is generally a special room for travellers, where you find a wooden bench, two or three chairs, a table, a holy picture or Icon for the peasantry, to bow to, a huge brick stove which when lighted gives out an intolerable heat, and thousands of cockroaches. The stations are usually located at a village, but many of them are solitary buildings amongst the woods. Their distances apart vary considerably, but you may generally calculate on reaching one of them every two or (14) three hours. At about every third station it will be necessary to stop and get something to eat. As there is seldom anything better than black bread, milk, and eggs, to be found at these resting places, and not even always that, it is customary not only to carry tea and sugar with you, but also your food. However, at all stations there is one thing which you will find, and that is a samovar. This is a huge tea-urn, with a central pipe filled with red charcoal. It is full of hot water, which, from the way in which it steams and spurts, appears to be boiling under pressure. You also get a teapot and some glasses. Being provided with these materials you are left to your own devices. To make the tea, there is no difficulty, but should it be winter and you are provided with food, which will certainly be frozen as hard as any stone, you may at first be somewhat perplexed. Soup may
be thawed by placing a lump of it in a glass, and standing this in the slop basin, which you fill with hot water. To thaw your bread or a piece of chicken you can place it on the top of the samovar, taking care however that it does not fall inside. Proceeding in this way, and exercising a little ingenuity, which never fails the hungry when in search of food, you will no doubt eventually manage to procure a meal. Travelling continuously day and night for three, four, five or even ten days, the whole time being jolted in a manner which it would be difficult to describe, every two hours having to look after the changing of horses and the signing of papers, is extremely trying. If two men are travelling together, these duties may be divided, each one taking alternate nights in endeavouring to sleep. For the first night, although you have managed to stretch (15) yourself out horizontally upon your bed of straw, you will find sleep impossible, but afterwards you sink into a drowsy nodding state, which, the moment the carriage stops for the changing of horses, immediately becomes sleep. Should a gentleman travel with a lady, the duty of turning out to wake up sleepy post masters, and of generally fighting the battles of the road, must, according to the usages of European society, devolve upon the former. For 24 hours to thus wait upon a lady, is an act of gallantry which is pleasing; but after that, when both passengers have aching bones, and wish to sleep, but can find no rest; when only moans and growls are to be heard at every rut you cross; when at a post station you get out to find fresh horses and are unmercifully grumbled at for creating a disturbance in the internal arrangements of the carriage, bodily and mental aggravations will have arrived at such a pitch that I think most natures would succumb, and a gentleman when travelling with a lady, would see that there were more troubles than had been anticipated.

Now this was exactly my position when I crossed the Urals. Farther on my journey I had again the opportunity of taking a carriage ride in company with a lady; but the fact that I found myself with much regret unable to accept
the invitation, may be a circumstance, worthy of the atten-
tion of future travellers, who may undertake a journey across
Siberian plains.

The chief point of interest on the journey between Perm
and Ekaterinburg is the crossing of the Urals. When I
looked at a map of Europe, and saw the formidable Alpine
barrier which seemed to be indicated by this chain of
mountains as dividing Europe from Asia, I had anticipated
a little climbing before I (16) crossed them. My expecta-
tions were however disappointed.

After leaving Perm the country was flat and covered with
nodding fields of yellow corn or bristling stubble. Along
either side of the road there was a line of birch trees, which
by their yellow tints seemed to tell us that we should not
have long to wait for winter weather. Here and there
amongst the corn fields I saw a clump of spruce or fir. As
we went on, the road became undulating. On the after-
noon of the last day before we reached Ekaterinburg, when
fairly in among the Urals, it might be described as being
hilly. No doubt this portion of the Urals, where they are
crossed by one of the main roads leading from Europe into
Asia, is one of the lowest points along their length, and
therefore it would hardly be fair to judge of their magnitude
from the little portion which is visible between Ekaterin-
burg and Perm. However, the highest point is only about
6000 feet above the sea, and the ascent to the water parting
is generally very gentle. If we compare the Urals with
mountains like the Alps, the Himalayas, or the Andes we
shall find that these latter are incomparably more important
as physical features of the globe. If, however, we examine
them geologically, we shall see that the Urals are the most
ancient, it being found that they were raised high and dry
before the sediment of which the large mountains are form-
ed had begun to be accumulated at the bottom of the seas
from which they were gradually uplifted. We may even
imagine that the present Alps and other high mountains
were partly formed from materials which were degraded
from the present Urals, and if thus regarded we see many
of the European mountain (17) ranges standing up like children of greater stature than their parent. I might here suggest that the comparatively low and undulating character of the Urals is in great part due to their antiquity, for the longer a mass of rock is exposed to the influence of subaerial degradation the more worn must it become.

Although the Urals do not present a serious barrier to the migration of the human species, still from the few facts that I could glean, they have played their part in preventing a wholesale mixture amongst creatures of a lower order. To give an example, I may take craw fish, which up to the year 1843 or 1844 only lived in European rivers. In this year some philanthropically disposed acclimatizer helped a few of these creatures across the barrier and deposited them in the rivers on the Asiatic side, where they have so thriven that certain rivers are said to swarm with them. As another instance I will take rats. Rats we know will travel everywhere where there are boats or railways. But across the Urals there are neither boats nor railways, so the rats have to content themselves with wandering in Europe. However at the time I made my journey a railroad was being built from Perm to Nijni Tagil and Ekaterinburg, and for this the rats were waiting. It is now completed, and I think I may predict that the rats have started eastwards. As a farther consequence rat trap construction and other industries must have arisen in this portion of Siberia. This railway will not only have its influence upon rats, but by lessening the difficulties of the overland route it will produce its effect upon the human species, who now will more easily be induced to perform a journey which has become less tedious.

(18) Whilst travelling I was told that it was a Russian custom, to carefully abstain from ablution for fear of causing a cracking and peeling of the skin. As I had followed Russian custom, the first thing that I did on reaching Ekaterinburg was to have a wash.

Ekaterinburg contains about 30,000 inhabitants, and it is one of the best towns in Siberia. It has fine open streets,
and many large buildings, the greater number of which are built of wood. Dotted here and there amongst these houses you observe the usual surfeit of green roofed churches surmounted by their gilt and silvered pear-shaped cupolas and domes.

As the hotel accommodation in Ekaterinburg is typical of that which the traveller may expect to find throughout the better portions of Siberia, I will describe it briefly. First there is the room which may or may not be papered, generally not, a little whitewash upon the rounded logs which form the walls being usually considered sufficient in the way of decorations. The floor is carpetless. Two chairs, a table and a bed-stead complete the furniture, which often seems to have withstood in a greater or a less degree the wear of many ages. Projecting from the wall or reared in a corner of the apartment there is a huge brick stove, which is supplied by fuel through a door in the outside passage. Five minutes after this has been lighted you realize its capabilities, and I can easily imagine that in the depth of winter it would be possible to dispense with bed clothes. This may perhaps be in part an explanation of the fact that at all these hotels you find your bedstead destitute of such accessories.

I may also mention that towels, soap, wash-hand basins, and other small necessaries, which are found in (19) most hotels, are without representatives in Siberia.

After having engaged your room you can sit in it as king, and should you care to do so you may invite fifty strangers to share your quarters without any serious objections being made.

In Ekaterinburg I stayed two or three days to rest myself and to see any objects of interest which there might be in neighbourhood. Amongst these there were some large gold mines at Berezovski, a village about 10 miles distant. To these I made several visits. One day, when about half way upon one of these journeys, the axle of the carriage broke, which necessitated my sitting for nearly three hours in a snow storm, whilst the driver returned to Ekaterinburg to
fetch a substitute for the broken portions and two new wheels. I mention this as it is an accident which all travellers across Siberia must expect to meet with, but at the same time I must also mention that they are not usually lucky enough to have their break-down near a city of 30,000 inhabitants. Another journey which I made from Ekaterinburg was to the mining district of Nijni Tagil, lying about 150 miles to the north. On account of the snow and sleet, the cold, the disgraceful condition of the roads, and being obliged to travel on the system which compels you to change carriage at every station, this was one of the most disagreeable journeys which I experienced whilst in Russian territory. However, the mines of Copper, Iron, Gold and Platinum, together with the insight which I had into the geology of the Urals and the entertainment which I received from Russian and other officials who are employed at Tagil, well repaid me for all my troubles.

Altogether in and about Ekaterinburg I spent (20) about two weeks.

For the next section of my journey as far as Tomsk I had now the opportunity of either travelling directly overland across the Barabinsk steppes, or of going by road to Tumen, and there joining a steamer which was to tow a barge-load of convicts along the Irtish and Obi towards East Siberia. The former of these journeys represented a distance of about 1800 and the latter about 3300 versts, or 1200 and 2206 miles respectively. Having had sufficient experience of the roads I chose the latter route, preferring to spend 8 or 10 days in a steamer, to 5 days jolting in a carriage.

This time my companion was a penniless tailor's apprentice, who forced himself upon me, offering to do almost anything if I would only take him as far as Krasnojarsk, where he told me his parents lived. Partly by working on my feelings of compassion, and partly by his untiring solicitations, I agreed to take him if he would sew on my buttons, pay the fare at post-stations, and act generally as servant, I of course providing the money. He was a Jew,
and his name was Kaib. After travelling over a country of corn fields and fir woods, through villages of log-huts, altogether very similar to that upon the Russian side of the Urals, I reached Tumen upon the 23rd. September, 36 hours after leaving Ekaterinburg. Here I joined a small steamer on the River Toufa. This river, which is narrow and shallow, is one of the tributaries of the Tobol. After running several times into the bushes on the banks, and grazing over many shallows we anchored for the night. As there was a total absence of sleeping accommodation and the salon was small and crowded with passengers, it was impossible to derive more rest than that which can be obtained whilst (21) sitting vertically on a wooden bench. Next morning we reached the Tobol, where at a place called Eveleva we changed ourselves and baggage over into a larger steamer. Now commenced the river journey. Behind us we towed a large barge, in shape something like the toy representations of Noah's Ark. This was full of convicts,—I should think from six hundred to a thousand. As this was very unwieldy it was a great impediment to our progress, continually running upon sandbanks which we had been fortunate enough to miss. As we were travelling with the stream, the river became wider and deeper as we went along, and our load in consequence became less and less of a drag upon our progress. Every day we generally stopped once or twice to take in firewood. At these times the monotony was varied by the sight of one or two log-huts belonging to emigrants or native settlers.

It was very seldom that I saw anything approaching to what we could call a village. If we stopped at such a place there was invariably a rush amongst the male passengers, many of them carrying empty bottles, to see if milk could be procured. The first one or two were generally the lucky individuals who secured the lion's share. Excepting for these small excursions, which sometimes lasted half an hour, everything was extremely tiresome. All that we had to look at were low mud-banks capped with a fringe of willow. When we stopped we had opportunity of making
a close inspection of the convicts. The sides of their conveyance were made of iron bars, which gave it a likeness to a huge bird-cage, but as the inmates, whose only impediments to walking freely about were some iron shackles, clutched the bars with both hands and put as much of their (22) faces through the vertical interstices as the interstices would admit of, the ark was perhaps more like one of those well filled cages which attract so much attention in any zoological collection. It seemed to me that many of them had taken their wives, or else vice versa, the wives being the malefactors had taken the poor husbands. Altogether with the wives, and samovars, notwithstanding the iron bars and shackles, they did not appear to be particularly unhappy, the free intercourse with each other and with any compassionate outsider who would stop to chat with them being conducive to demonstrative hilarity.

The arrangements on board our steamer were very similar to those I had experienced on the Volga. My companions chiefly amused themselves with card playing, a pastime in which the ladies seemed to be particularly successful, having every night a lap-full of paper roubles to count over as the day's proceeds. Interims were filled up with smoking, and cracking small nuts, which are called from the monotonous gaps they often fill at Siberian parties by a word which means "Siberian conversation." The only place of any note at which we stopped was Tobolsk, a large town of 18,500 inhabitants, built near the junction of the Tobol with the Irtish. Here everything is built of wood. Stone is such a rarity that I could not even find a pebble. Tobolsk is chiefly interesting from its historical associations, as connected with the home of many early exiles. There is here a monument built to the memory of Yermack, a robber chief, who is regarded as the conqueror of Siberia. There is also another monument of a different kind commemorating the folly of Ivan the Terrible. This is in the form of a bell, which having been ringing at the time of one of his (23) butcheries, or else not having been
ringing upon that occasion, was shipped as an exile to Siberia, and after having had a small piece broken from it, it was ordered that, never so long as it was a bell, was it to ring again.

After joining the River Obi, which in places was about three quarters of a mile broad, our progress was much slower because our course was now up stream. The ark however became less of an impediment than it had been when we were travelling down stream, because when it happened to run upon a bank, the current instead of jamming it tighter tended to loosen it. We here saw a number of Ostitacks, who form a portion of the aboriginal inhabitants of Siberia.

On Oct. 5th we reached the River Tom. Because this was shallow we had to leave our large steamer and go on board a smaller one. Through this not being strong enough to tow us and our satellite against the stream, which was very rapid, we were greatly delayed.

In this river I observed that there were many pebbles, indicating that we had crossed the alluvial plains, and that the hills were near. These alluvial plains, which give such a monotonous character to Siberia, appear to be the result of a deposition of sand and mud from a huge fresh-water lake. This is supposed to have been produced during the glacial period, through the damming up of those great Asiatic Rivers which flow into the Arctic ocean by a barrier of ice. Without accepting such an hypothesis, which requires for its just appreciation a fertility of imagination, when we consider that the ice in the southern portion of these rivers breaks up generally a month before it does near their mouths, we can see that we have annually a barrier of ice obstructing an unusual flow of water. If we take this in conjunction with the fact that the (24) northern portion of Siberia appears during recent geological periods to have been rising, I think that sufficient causes are now in action to produce all the phenomena which the Siberia plains present us with.

At last on the 6th. October we reached Tomsk. This,
I should think, is the chief business town in Siberia. It contains many fine buildings in the form of churches and government offices, and about 29,500 inhabitants.

Having on board the steamer made the acquaintance of General Smirnoff, who was returning from an excursion he had been making through Europe, and Baron Stackelberg who was on his way to Eastern Siberia to fill up an official vacancy, I bought a small tarantass, and by invitation I joined their party en route for Irkutsk.

As far as Krasnojarsk, a distance of about 523 versts (362 miles), we continued night and day. Every two or three hours we drew up at a small village and changed horses. With the exception of having once or twice to wait for horses, the breaking of axles and sundry portions of our vehicles, we had but little difficulty. The road was straight, and as far as Bogotol, with the exception of a few insignificant undulations, was quite flat. At this point, however, the undulations increased in size and we saw some hills. On either side of us there was generally a strip of cultivated ground, but beyond that there came black woods of scrubby spruce and fir. If it were possible to look down upon this main road of Siberia from a great height, I think that we should see it like a narrow band of cultivation and log-hut villages running through a wilderness of wood. However, seeing it as I did, one might be easily impressed with the idea (25) that Siberia was a highly cultivated country.

When we reached Krasnojarsk, where there are some real hills, we were all so tired that it was unanimously agreed we should stop for a wash and a sleep. On the evening of our arrival we were very kindly invited by the military governor of the town to dine with him. He was evidently delighted to have guests visiting the oasis of civilization over which he ruled. Every thing that he could think of he did to amuse us,—he talked unceasingly, told stories, brought in his pets for us to see, amongst which, so far as I remember, there were a fox and a pony, all of which were marched round the drawing room; but it
was no use, our inclinations for sleep were too great to be overcome by these exhibitions. For some time I listlessly regarded my enthusiastic host, until at last completely overcome I fell asleep.

Krasnojarsk, like most Siberian towns has its club and theatre, but the latter, unfortunately for the inhabitants, who like all Siberians so far as I could see are passionately fond of the theatre, has but seldom the opportunity of securing the services of a troupe of actors.

From Krasnojarsk to Irkutsk (1006 versts or 670 miles) the road was very similar to that from Tomsk. At Nijni Udinsk snow fell and greatly impeded our progress. The roads were so very slippery that it often happened, both night and day, that we had to get out of our carriages and help our struggling horses in getting up the hills. In going down one slope one horse was over-run, and we had to leave him on the road side for dead.

Toiling along we at length reached the last station before Irkutsk. Here we found a number of General (26) Smirnoff's friends who had come to bid him welcome. Just before reaching Irkutsk we passed a large church containing the remains of S. Ennocainti (S. Innocent), which are said to remain as fresh as when he died. S. Ennocainti, who is regarded, I believe, as the chief of the Siberian saints, was originally a missionary who in 1721 was sent to China; the Chinese government refusing him admission to that country, he finally in 1727 settled at Irkutsk. Here we waited a short time, whilst my friends went inside to make an offering to the saint for their safe arrival. After crossing the Angara by a flying bridge we were in Irkutsk, the S. Petersburg of the Eastern Russia.

As an example of the prices of travelling, I may give the following account of my expenses between Tomsk and Irkutsk, a distance of 1559½ versts or 1039 miles. The time taken to travel this distance, exclusive of the 20 hours in Krasnojarsk, was about 8½ days.
West Siberia.

From Tomsk to within 30 versts of Krasnoyarsk, a distance of 523 versts, 3 horses each 1½ kopecks per verst. 23. 53

Roubles kopeck

East Siberia.

30 versts into Krasnoyarsk, 3 horses at 3 kopecks per verst. 2. 70

Krasnoyarsk to Irkutsk, 1006½ versts at the same rate. 60. 40

Drink money to drivers at 70 stations. 7. 0

Grease for wheels. 3. 50

Expenses in Krasnoyarsk. 1. 50

Blacksmith for repairs to carriage. 2. 0

Food bought on the road, about. 4. 0

Roubles 104. 63

To this, which is about £1 5 sterling, must be added the cost of food which I took with me, and the padorojne or order for horses.

(27) As the winter roads were not yet formed, and the rivers not sufficiently frozen for the passage of sleighs, whilst at the same time there was sufficient ice to obstruct boats, I followed the advise of my Russian companions, and took up my quarters for a month at Irkutsk. At first I stayed in a hotel, but as this, like most Siberian things, was very expensive, I removed to private lodgings which were much more economical. In Irkutsuk there is a theatre which is open every other night, two clubs where once a week there is generally dancing, a geographical society, a newspaper, and other, means for education and enjoyment much as are found in Western Russia.

At the hotels, of which there are some six or eight, you may choose your dinner from a list of 50 dishes. The people, with whom through my travelling acquaintances I had every opportunity of associating, seemed to be self-contained,—they knew little of the outer world and they apparently cared less. A foreign visitors is, if I may judge from the lengthy description he elicits in the local paper, and the battery of glasses which are brought to play upon him in the theatre, a “rara avis.”
On reaching Irkutsk one experiences the same kind of enjoyment that you have after a morning bath. A sort of reaction sets in, and you feel that you are once more in a position to lead the life of an ordinary individual. Whilst paying calls and visits in Irkutsk I was occasionally startled by several of my friends and acquaintances most seriously recommending me, if I wished to reach Japan quickly, to turn back to England and go via America. When I was at home, and travelling in imagination across a Mercator’s Chart, on which I staked out the distances with a pair of compasses, I always thought that if (28) ever I was fortunate enough to reach Irkutsk I could consider myself as being almost in Japan. I had reached the expected goal, and then to be told that I was farther off my destination than I was three and a half months ago at starting, was most disheartening. For numerous reasons having settled that it would never do to retreat, I made enquiries and found that from Irkutsk I had two courses open for me, one to go down the Amoor, which before I could reach it would have been frozen over, and therefore must have been travelled along in sleighs rather than in steamers, and the other was to go to Kiachta and travel with camels across Mongolia to Pekin. Notwithstanding the poor trust which my friends placed in the amiability of the Mongols, I chose this route, for had I gone by the former it might have been necessary to have remained in Vladivostock until the end of April, before the ice would have broken up and I could have obtained a vessel for Japan.

It was with feelings of sorrow that I took leave of Irkutsk. This was partly on account of leaving friends who had shewn me so much kindness, and partly because I knew something of the miseries before me.

I started on the 23rd, November in a sleigh, and for the first time since leaving Novgorod, I was quite alone. The roads were very rough, and I did not find sleigh travelling that easy gliding motion I had anticipated; it was in fact quite the reverse, and I think that I had as much bumping
in the sleigh as I had previously experienced in the tara-
tass. As the Baikal lake was not yet frozen over and there
was so much ice that steamers were prevented from cross-
ing, I had to take the long road round its southern
extremity. Most of (29) this was mountainous, and for the
first time I may say that I saw a country approaching the
picturesque. However it was very cold and very lonely.
There were very few villages, and the post stations where
something enlivening might have been expected usually
consisted of solitary log houses built in amongst the firs
at the bottom of a sheltered valley. As I never met any
travellers on this road, the sudden appearance of two men
one night somewhat alarmed me. The driver had stopped
to do something to his horses, when in front of me I heard
a whistle which was immediately replied to. This roused
me from my drowsy state, and I sat upright in the sleigh
and ordered the man to drive his fastest. This he did. Dash-
down into the bottom of a ravine we rose quickly upon the
opposite side, when I saw two men standing beneath the
trees, one on either side of the road. We passed between
them; nobody spoke and nobody did anything.

Before starting I had been told that this portion of the
country was very dangerous, being filled with escaped con-
victs. This, together with the general desolate character
of the district through which I was passing, may have
aroused fears which were as likely as not quite groundless.
Although there were but few cases that I heard of, where
travellers had been attacked along these roads, yet nearly
every Russian when travelling carries his revolver. This
is generally a tiny little weapon swung by a silken cord
about his neck, which I suspect is more for show and orna-
ment than for active service. When I left Irkutsk I was
fully assured that I should find snow all the way to Kiacha,
and it would be therefore advisable for me to buy my own
sleigh. After passing Selenginsk the snow became less and less, (30) until I reached a small post station called
Povorotruya where I saw that it was impossible to go on
farther in my sleigh, and that I must hire a carriage. Feel-
ing annoyed at having purchased a sleigh and having thus to leave it, I persisted in having horses, and started over the stones towards the next post station. The shaking soon dissipated my obstinacy, and leaving my vehicle with the post master, who gave me a receipt for the same, should I or my friends ever return that way, I completed the rest of my journey to Kiachta "pereclodnoi."

This may be a warning to future travellers never to buy a conveyance during those months when the roads are neither fit for sleighs or carriages; otherwise he may find himself hundreds of miles away from any large town at a small log hut amongst the fir trees, where he will have to relinquish his vehicle, and proceed upon his journey with the only comforting idea that he owns property in Siberia.

With regard to the purchase of carriages, so far as I could judge, it would seem that when he relinquishes them he must be prepared to be as great a loser as you are with sleighs. In Russia he is told that by buying a carriage, and driving in it to Irkutsk, he will then sell it at a profit. The one I bought at Tomsk cost me 120 roubles. After paying for horses to drag it nearly 1000 miles to Irkutsk, for I myself rode in the carriage with Baron Stackelberg, I occupied myself during my month’s residence in that city in endeavouring to sell it. A preliminary wash, for it had become very dirty on the roads, and some slight repairs cost me 10 roubles. After all this the highest bid was only 20 roubles, and this I had eventually to accept. The moral to be derived from my experiences is, that foreigners (31) when travelling in Russia, unless they make their journey wholly by sleigh, or else wholly by carriage, ought not to buy a vehicle, unless they are prepared to sacrifice from 80 to 100 per cent of their outlay.

After passing through an interesting volcanic district near Kalenishnaya, I reached Trotiskojarsk very tired on the 28th of November. I was now upon the Mongolian frontier, 6388 versts or 4258 miles distant from S. Petersburg.

During this portion of my journey the cold had been something intense, my moustache and beard being often so
tightly frozen together that, without thawing off the ice, I was unable to open my mouth. All my food, including wine, was frozen solid, and in spite of sheep-skin clothes and many skin-covers I often felt bitterly cold.

PART II.
ACROSS MONGOLIA TO PEKIN.

Trotskojarsk is situated near the head of an open sandy valley between two ranges of moderately high hills. This is a moderately large town, chiefly made up of small wooden houses, and containing about 5000 inhabitants. The aristocratic portion of this community reside at Kiachta, which is a small place made up of churches and a few well built houses about two miles farther down the valley. About 100 yards farther, you cross the Mongolian frontier and enter (32) the Chinese town of Maimachin. At the time of my arrival, excepting upon the hill tops, there was but little snow, although farther to the East it had fallen in quantity. In consequence of this want of snow about Kiachta, sleighs are but seldom used.

On reaching this place it had been my intention to proceed across Mongolia with a friend, a Russian officer. As he was travelling on official duty he was privileged to travel as a courier by a special route. Although this route which is traversed by couriers is much longer than that taken by the trains of camels, which are ever crossing and recrossing with loads of merchandise, it is accomplished much more quickly, as riders are sent on ahead to collect horses from the inhabitants. This is not always possible upon the other route, and it is especially difficult to obtain horses during the winter months when many of the summer
inhabitants have shifted their quarters. Although much influence and argument were applied to the Commissary of the Frontier, my project of proceeding by this route was knocked on the head by his clearly shewing that there was a compact between the Russian and Chinese Governments, by which it was only allowable for couriers who were Russian subjects to take this road, and therefore for him to fill up the form required to be presented to the Chinese governor of the adjoining town of Maimachin, and by the outriders in search of horses, for two couriers instead of for one, would have been a breach of contract. My only alternative was now to say good bye to my friend, and to make preparations for twenty extra days in crossing the tract of snow which was before me. These were made with difficulty, and I then hired camels to join a caravan which was to cross in (33) a few days' time.

It was eleven days after my arrival in Kiachta before I was ready to leave it, which I did at midday on the 9th of December. I had with me as an attendant, a Cossack very kindly given to me by M. Pfaffins the Commissary. I also had four camels, one of which was harnessed to a small two-wheeled Chinese cart called a "Telega" or "Turga." The contract which I made with the Mongols was to the effect that they should take me to Kalgan in 30 days for 100 silver roubles. For every day under that time I was to pay three roubles extra, and for every day beyond that time they were to pay me three roubles. There was also a clause that a tent, fire, & water should be supplied. In our train we had altogether nearly 100 camels, and these were looked after by five Mongols. After crossing a small open square outside Kiachta, we were under the palisading of the Chinese frontier town of Maimachin, which, I may remark, is the cleanest specimen of a Chinese town that I have ever seen. The officials and merchants who live in it are not permanent residents, and are said not to regard it as a home, a feeling which may help in allowing it to be easily separated from the Chinese Empire.

Immediately outside Maimachin we were in the country
which, like that round Kiachta, is very sandy. In the plains between the hills there were many "Yours" (the Russian name for the Mongolian felt tent), around which cattle were grazing on the ends of tall brown tufts of grass, which cropped up through the snow.

By 8 P. M. we reached a place called Stamock, where there were a few 'Yours'. This was about 30 versts from Kiachta. The temperature was—21° R. After a cup of tea round a fire, we travelled until 2.30 A. M. to a place called Yeroh, where we got quarters in a small yurt, inside which, in addition to the men, women, and children, there were three goats and a pig. Next day at about 10 A. M. we walked over the frozen R. Ura.

Our general plan of travelling was as follows. During the day we were on the move until about 7 or 8 P. M., at which time we stopped at a yurt to get a cup of tea. After this we continued until 12 P. M. or 2 A. M., when we halted to have a sleep and then to start again at 8 to 10 A. M. in the morning. As we went on, the country became more hilly and the snow more plentiful. During the night I usually rode in the waggon, but I was compelled to walk up the hills. The temperature at night was generally about—18° R. To withstand this I was clothed in a suit of sheep skin, and wore felt boots. When in the waggon, in addition to a large wolf-skin robe, I found that two rugs of sheep-skin were also necessary. On some of the hills there were a few fir trees, whilst in the valleys where the rivers were there were a few small willows. The trees I often observed only grew upon the North side of the hills. During the afternoon of the 11th I counted upon our right 13 small lines of hills all running east and west; on their south sides these were steep and barren, whilst upon their north sides the slopes were gentle and were covered with trees. The gentle slope upon the north is due to the trees and other vegetation, which prevent rain and other disintegrating agents from readily washing away the materials of which the hills are made up. If the reverse had been the case, and the gentle slope had given rise
to the vegetation, I ought to have seen trees upon a few (35) gentle slopes which I observed to the south, but this was not the case. These trees were larch and pine. Near the rivers I saw willows and also, I think, poplar. In some of the valleys I saw sections of alluvium up to 40 feet in thickness. It was made up of fine sand, and was filled with fragments of granitic rocks. On the night of the 12th we passed through the Makatah Pass. Our slippery snow-covered road here led up a steep valley, bounded right and left with precipitous hills covered with large birch trees. We here met a caravan of about 200 camels travelling in an opposite direction. To pass this train and get to the top of the pass was a troublesome struggle. The camels and two oxen, which it had been necessary to hire for my waggon before entering the pass, slipped and fell continuously. I found walking at night very trying, from the cold being intense enough to continually bridge icicles across my mouth and to freeze my beard tightly to my coat. At 2 P. M. we reached a few yoursats at a place called Barah, after 27 hours' travelling and with only half an hour's rest. During this time the camels were without food, and it was 18 hours since I myself had eaten. Eating only once a day is at first trying, but it is almost impossible to do otherwise when travelling during the winter months. Our travelling was so arranged as to take advantage of the moonlight. At about midnight on the 13th we passed the Olindowa Pass, at 7 A. M. next morning the Gatinawa, and in the afternoon of the same day we reached Urga, the religious centre of Mongolia. I made my way to the Russian Consulate, which lies about 1½ miles away from the town on its east side, at which place I was very kindly received. The approach to the town is down a broad flat valley, bounded on either side by (36) steep hills. At right angles to the end of this valley is a high range of hills, beneath which, at the juncture, so to speak, of three openings in the hills, Urga is situated. The houses in Urga are very small and are made of mud, very much like those of an Arab village. You cannot see much of them
on account of high palisadings of poles by which each of
them is surrounded. Walking along the streets you pass
between two such rows of palisades about 10 feet in height,
the joints between which are carefully filled with clay.
There are many churches in the town, most of which in
shape are very like large circuses. These are the life of the
place, and the thundering boom of a Mongolian service may
be heard issuing from them at all hours. The inhabitants
number about 15,000. There is a famous Mongolian
Doctor living here, Chio-in-dun by name, who is visited
not only by Mongolians, but by Russians and other
strangers, who make the arduous journey to Urga in order
to consult him. Round an open square in the town I
found several small stores kept by Russians, where many
things were for sale, even to walking dolls. In this part
of the town much business was going on. There were
many clusters of camels and ponies, all apparently exposed
for sale. Small huts of felt, about the size of large packing
cases, were standing about different parts of the square.
These were small shops which at night time could be
carried home. Black-smiths with portable forges, hawkers
selling hats, and pious Mongols turning the great vertical
drums, which are set up in many places as "praying
machines," filled up the blanks between the establishments
of those whose employments were more lucrative and
extensive. I left Urga on the morning of Thursday the
16th. (37) About 15 minutes after starting we skirted
along the palisaded walls of another town called Mai-
machin, a place which on account of its Chinese owners,
the Mongols regard with jealousy. The valley is here about
three quarters of a mile broad, and is covered with large
limestone boulders. Not long after passing the town we
walked across the R. Tola, which was apparently, made up
of 2 streams, each about 20 yards broad. On some of the
hills, where steep scarps prevented an accumulation of
snow, red-coloured stratified rocks dipping to the south
were visible. In the valleys, however, the boulders were
of limestone and granite rocks. On the north and north.
west sides of the hills a few trees remained, but before the next day was ended all had disappeared. With this disappear-
ance of the trees, magpies, which had thus far accom-
ppanied us, also disappeared, and all that we had left to us as companions were many large black ravens. These
were so bold in riding on the camels’ backs and tearing open bags containing provisions, that they became very troublesome. As yourts were not to be found, I had now to live with my five Mongols in our own small canvas tent. During the afternoon the temperature was usually—14°
or—15° R. and at night it sank to—20° and—25° R. At
times between 12 and 3 in the afternoon we scraped a piece of ground clear of snow, and pitched our tent. We there cooked our daily meal in the pungent smoke of a fire made out of camels’ dung. Whilst this was going on, the camels were turned loose from half an hour to 2 hours, to ramble about in search of food, after which they were brought back to the tent and made to sit down between their packs, to rest whilst we slept. At (38) 8 or 9 P. M. we were again upon the move, and after travelling all night we continued until the same time next day. The country was hilly, but smooth in outline. On the morning of the 19th, we en-
tered a large plain, which was brown with grass cropping up through the covering of snow. The hills surrounding this plain, which was typical of the country for several succeeding days, although not high, were very rugged. They were made up of black, and in some cases, reddish rock of a volcanic origin. On many of the plains between the hills small herds of antelopes were dotted about, but these, although not appearing to be greatly alarmed at any approach which was made to them, kept slowly trotting on ahead at a distance of from 300 to 600 and 800 yards. Where the snow had been blown away by the wind, or worn away by traffic, I saw large quantities of agate and chalcedony, resulting from the decomposition of the volcanic rocks. In several of the valleys there were a few “Yourts,” at many of which a few herds of cattle, together with some sheep and ponies, could be seen. Some of the
herds of ponies numbered as many as 500. At night time, when we camped, we generally did so at some place where the snow was thin and there had been a previous encampment. In such places we were now able to pick up a little cow and horse-dung, which made a much more cheerful and warmer fire than that from camel's. As the snow was now becoming scanty we always picked up any pieces of ice we met with along the road, to melt for water in the evening. Being able to obtain plenty of water either from snow or ice is the only advantage that Mongolia gives to the winter traveller, as compensation for all the other disadvantages. Although it (39) was now usually dark at our starting time, which was from 7 to 9 P. M., we were not deterred from pushing on, as the track was clearly visible as a black band through the white snow. At 1 P. M. on the 22nd we reached a village called Teck-sha-buinta. It contained about 150 buildings, many of which were like small storehouses built of wood, which I presume must have come from the neighbourhood of Urga.

There were also four churches. The town is situated on a flat plain below a low rise. Immediately on my arrival myself and my Cossack were surrounded by an inquisitive crowd. Although we endeavoured to take all in good part, this inquisitiveness soon led to impudence, and those at the back tried to push those in front upon the top of us. Fearing lest this should lead to hostilities, which under the trying position of being buffeted and jeered at were difficult to refrain from, I hit upon a happy expedient of diverting their attention. I had in my pocket a number of small Russian coins and brass buttons. Shewing one of these to the crowd, I threw it in the air, and let them scramble. With this they were so attracted, that before I had tossed away 40 kopecks and a few brass buttons, our caravan was on the move out of the village. This was the largest sum of money disbursed upon the road, and I always thought that it was well spent. At 5 P. M. that evening we reached Kooistelroi, a place where there were 5 or 6 yourts, the head quarters of a Mongolian Mandarin or Niyin, called Besherilt.
On nearing the place I had to get into my cart, on account of the dogs which at nearly all the yourts in Mongolia are a plague to approaching strangers. Here it was declared that our camels, through sore feet and other causes, were unfit to go (40) any farther, and fresh ones must be obtained. This took three days, during which time I lived in one of the yourts, which was used as a kitchen, in company with two cooks, several girls, and a variable number of passing visitors. During my stay I had numbers of visitors to examine my property and watch my actions, all of which were apparently both interesting and amusing. I was never honored by an invitation to the yourt of the Mandarin. Perhaps I had committed a breach in some point of Mongolian etiquette, but what my failings were I never discovered. However, my objects of interest were taken in for him to see, and in return he drew some pictures for me on a piece of paper.

As my residence amongst the Mongols was of so short duration, I had but little opportunity to gain much idea of their character. Two features were however too prominent to be overlooked, even by the most unobservant. The first of these was their light-heartedness, which contrasted very strongly with the stolidity of their neighbours the Chinese. They were ever ready to make and to enjoy a joke, and more especially so, if it were in any way practical. The other feature was their hospitality. When visitors came to our tent they were apparently always welcome, and they seldom went away without having taken part in a meal.

When I was in Russia, the Mongols had always been represented to me as charaters of the blackest dye, amongst whom it was hardly safe to travel. This was the chief reason why I was urged to take the Amoor route rather than the one via Pekin. If our only acquaintance with the Mongols had been from histories which described their ancestors the Huns, (41) who overran Europe and Asia, and of leaders like Ghengis Khan and Timour, who whilst massacring their millions and building pyramids of human heads, subjected an extent of territory which was unparallel-
ed by the warriors of other nations, we might naturally expect to find in the relics of these conquerors, the embers of a warlike spirit and a ferocious nature. However, to the superficial gaze of a passing traveller the whole of this has entirely disappeared, and you only see what is apparently a simple-minded quiet pastoral people. By some these signs are regarded as the slumbering of a Vesuvius which may yet burst forth to swallow up a modern Naples, as it did an ancient Pompeii, but from my experiences I should say the volcanic spirit of the Mongolians is no longer dormant, but quite extinct. The country surrounding Kooistelroi, like that which I had already passed over, was of a volcanic nature. Most of the hills were low and undulating, but there were a few which rose to heights of about 400 feet, and had ragged summits. The ground was everywhere perforated by the burrows of small marmots, which were very full of fleas. In addition to a few large kites and ravens one or two finches were to be seen. These, with the antelopes, a small sand partridge (?) and a doubtful wolf were the only varieties of animal life which I saw. The Mongols manage to shoot the antelopes by means of a long rifle with a small bore. It has a flint lock, and costs at Urga about 50 r. We left Kooistelroi about midday on the 25th Dec. The temperature rose to—10° R, and in consequence I had a wash.

For some distance the road led along the bed of a small water course the sides of which, as well as an island in it, were covered with tufts of tall grass. In (42) these there were many hares. Their bodies were brown, but their tails, which I had many opportunities of observing, were black. The water was not a continuous stream, but in frozen pools from 10 to 50 yards in breadth. In addition to the black basaltic rocks which had been so common, there were some exposures of a pinkish porphyritic felsite. In the evening I saw some large boulders of granite. These were lying on the surface of the ground, and I think they had been produced by disintegration from the rocks on which they were lying. Next day most of the country was granitic, and there
were so many boulders about, that during the night it was necessary to have a lantern. As we went on vegetation became scantier, and the country flatter. On the 28th the boulders were so numerous and large that they formed quite a rockerylike feature in the landscape. The hard ground began to tell upon the feet of our camels, and several hours were spent every night in doctoring them and stitching over the sore parts small pieces of leather to act as shoes.

On the 2nd of January there was a high wind from the N. W., and an increase of cold, the thermometer falling to $-25^\circ$ R. Our discomforts were increased by a driving snow storm which prevented us from seeing many yards ahead. During the afternoon a large herd of antelopes passed close by us. Through the wreaths of drifting snow they looked quite ghostlike. On the 3rd we were overtaken by a small caravan going to Pekin, and that evening we camped together at Borkon-lame-sum. On the 4th the character of the country changed, and the whole surface of the ground now looked as if it had been cut up into earthworks for fortification. Instead of the gritty remains of a degraded granite, there was now much red sand. In the morning I left the remainder of the caravan, and pushed on ahead with my baggage for Kalgan. At 11 A. M. we sighted mountains before us, which, from the fragments of rock strewn about, I think consisted of a greenish porphyry and granite. These latter were very rugged. In the gap at the entrance to these mountains there are about 20 youtrs, which showed their black tops sticking up through the tall yellow grass covering a small plain. This place was called Haila. Magpies, but much smaller than those in Northern Mongolia, and one stunted fir-tree here made an appearance. In places the snow was knee deep.

Next day we were crossing a very open flat plain, in which there were many youtrs and several large herds of horses. We travelled until 1.30 next morning, when we reached a place called Pogon, where there were a number of youtrs and low wooden houses. These latter mark the limit to which the Chinese have pushed northwards. We
took shelter in a yourt. This was so hot, that it was only by keeping on the ground that the place was bearable. At the height of a standing man, and as far from the fire as it was possible to get, the temperature was +48° R.

At this place my Mongols, having met with friends, partook of so much liquor that at starting time on the following morning they were unfit to move. This was rendered more aggravating by myself and my Cossack being kept prisoners in the yourt which had been set aside for us, by some 7 or 8 dogs. These were sitting outside anxiously waiting for our appearance.

Sparrows with brown heads began to appear again. About 7 P. M. on the night of the 8th, after travelling (44) over cultivated land, we reached Tourgeourta, a small village in the hills.

Before daybreak on the following morning, we had left the plains, and were descending the steep and rocky pass towards Kalgan. This descent was down one of the roughest roads on which up to this time I had had to travel. In the upper portions we passed between many beds of red earth, but lower down there was nothing but huge boulders and perpendicular cliffs. In places the distance between these cliffs was not more than 60 yards, and as this space was in many places covered from side to side by a sheet of smooth ice, owing to the freezing of a small stream, we had considerable difficulties with our camels.

Before reaching Kalgan a few stunted trees and several flocks of magpies were seen.

Now and then we saw a tower of the Great Wall standing upon a peak, like the dilapidated base of a truncated obelisk. Here and there between the rocks, small quantities of earth had accumulated, each of which had been taken possession of to make a garden. Some of these in the upper portions of the valley appeared to be surrounded on all sides by a precipice, and it seemed as if it were impossible to approach them without the use of a bridge. At other times they were situated on a ledge, to reach which it seemed to me that it would be necessary to use ladders. In places where it
seemed impossible for these industrious agriculturalists to climb themselves, they had sent their oxen to feed, which looked like flies clinging to the face of some huge wall. Just before entering Kalgan, which is divided from Mongolian territory by the Great Wall, you pass through to a small village called Yamborshaw. At this place there are living the officials of the (45) Russian post-office, and a few Russian merchants, who attend to the transport of tea and other merchandise across Mongolia. Here I halted on the 9th of January, 37 days after leaving Kiachta. My host was M. Shismanoff, chief of the Russian post-office, whom I have to thank, as I have many of his countrymen, for the hospitality he so kindly shewed me. After spending a day and a half in washing, sleeping, visiting temples, admiring the Great Wall and having a general introduction to Chinese life, I started in a palaquin carried by two mules for Pekin.

Passing through Kalgan, which seemed to be the busiest town I had seen since leaving London, I was soon out upon the country roads. Here I saw many villages and towns, with uncountable numbers of inhabitants. At night time I put up at an inn, when I had a room to myself and a small coalfire. Although the floor and walls of this room were made of dried mud, and it was seldom that there was any furniture to be found, with my remembrance of Mongolia still fresh upon my mind, I regarded these sleeping accommodations as being highly satisfactory.

After passing through the famous Nankow pass, where I saw another branch of the Great Wall, I entered upon a level country, which carried me to Pekin four days after leaving Kalgan. Here I found my friend the Russian officer who had journeyed as a courier. From Kiachta to Urga he had travelled in a "tarantass" and had taken 48 hours to perform a journey which had occupied me 5 days. From Urga to Kalgan, owing to an absence of yourts for near 200 miles, and a consequent want of horses, his travelling had not been so rapid as expected. On this section of the journey he was 15 days, whilst I had been 24 days.
PART III.

PEKIN TO TIENTSIN AND OVERLAND TO SHANGHAI.

At Pekin I spent a pleasant week with Dr. Bushell of the English Legation, whom I have to thank for his kindness and assistance in seeing the sights of that interesting city. During the summer the greater portion of the journey from Pekin to Tientsin may be performed by boat, but as the river was frozen at the time of my visit, the journey had to be made by the aid of mules. This was accomplished in two days. In Tientsin I spent nearly a week in making preparations for the overland journey to Shanghai, and in waiting for Colonel Unterberger, the Russian officer who had preceded me in traversing Mongolia. The reason for taking this journey was that the Gulf of Pechelee was frozen over, and to wait for the breaking up of the ice which was expected to take place in about three weeks' time, would have caused considerable delay.

At last, in company with my Russian friend, I left Tientsin for Shanghai at 12 A.M. on Saturday the 5th of February. We had with us four two-wheeled Chinese waggons, each harnessed with two mules, and also a saddle-horse. Both carts and mules accompanied us for 15 days as far as Tsing-kian-pu, where we took boats upon the Grand Canal, and in 2½ days more reached Ching-kiang. The distances from station to station along the road were estimated very differently by the different persons from whom we sought information. Taking in all cases the lowest figures that were given, the total distance travelled in carts was 1555 li
or about 466½ miles. The time actually spent in travelling, exclusive of all rests, was 14½hr 35mi which gives an average of about 10.16 li as the rate per hour. As our course was pretty fairly divided over a country presenting the three aspects of regions which were mountainous, hilly and entirely flat, and the weather was moderate, I think that the above average fairly represents the rate at which ordinary travellers are able to pass through this country. On our first day we reached Ching-hai-sai. The country passed over was flat, cultivated, and open, very much like that surrounding Tientsin. Our course was S.W., and we continued in this direction as far as Te-chung.

On the next day (Feb. 6th) we struck some portion of the Grand Canal at a place where it was about 50 yards broad. It was frozen, and numerous sledges were being pushed along its smoother parts. From the embankment, which is a land-mark to the surrounding country, a good view could be obtained. Everywhere the ground was flat and under cultivation. Its monotony was varied by clumps of houses, each of which had a few trees about it, and by the conical mounds of numerous graves. Notwithstanding the openness of the country and total want of any cover during a great portion of the year, foxes and hares exist in large numbers. The latter are caught with hawks, (Goshawk, Astur palumbarius, and Sparrowhawk, accipiter nasus). Not long before reaching Tsinze we passed through a breach in the two banks of an old canal, each of which was about 30 ft. in height. It ran east and west, and we were told that at one time (48) it joined the Grand Canal.

Along the sides of the road, at the distance of three li apart, there were small huts, one side of which was covered with large Chinese inscriptions on a white ground. These were government guard-stations for the protection of travellers. As a rule they were tenantless, and it was not until after several days' journey that I saw one of the guards, whose presence was indicated by three tall spears, a crossbow, and several pikes standing in a rack outside the door of one of these huts.
On our third day (Feb. 7th) we passed along the east side of the long embattled wall of Tsang-jow, about half an hour past which, upon the right hand side of the road, were the remains of an avenue of images.

Only eight of these were still in position. On the sides of the avenue the images represented full-sized squatting horses, whilst those at the end were large white squatting images of men. The general arrangement of the figures was very like that of the tombs of the Emperors to the north of Pekin.

During a great part of the day a slight breeze from the S. E. drove clouds of dust in our faces, which was painful to the eyes. All the villages we passed through had much the same appearance. The entrance was generally through a gateway in a mud wall. The streets were narrow, uneven and dirty. The houses had smoothly plastered mud walls, the blankness of which was relieved by very few projections or openings.

Early on the following morning (Feb. 8th) we passed through the city of Tunghow, the walls of which were much decayed. Before midday we mounted on an (49) embankment, which was either that of the Grand Canal or of some continuation of it. It was from 40 to 50 yards in breadth, and had a somewhat winding course. Owing to the dust storms the ice which covered it was very rough. At the town of Songer, which we passed through in the afternoon, there were many trees and temples. Thus far on our journey the only trees which we had seen were willows, but here there were a few black groves of Arbor Vitæ. At Dajorw, where we spent the night, the horse of my companion broke down, and he had to take to a cart. We here saw something of New-Year Festivities. A large paper dragon, from 20 to 30 yards in length, was the chief object of attraction. Its body was made of long cylinders of paper, each of which was carried on a pole. These were united by bags of linen which gave it flexible joints. Its interior was lighted up with candles. A band accompanied it as it was paraded through the streets.
Next morning as we passed out of the town, there was a strong smell of fireworks, which, with the burnt ends of paper lying in the road, told of the past night's amusements.

We encountered these fireworks and dragons in towns and villages for several successive evenings. The Chinese seem to be fond of pyrotechnic displays; yet we were told that fires, which might in consequence be expected, were not common. The wind which had been blowing rather freshly on the previous day, slightly increased, and shifted round to the S. W. It now brought with it such quantities of dust from the roads and open ploughed-up land, that the sky became like a fog, and from the unbearableness of it we were compelled to halt much sooner than we otherwise (50) should have done.

The roads along these plains were covered with travellers, the greater part of whom, if not journeying on foot, were riding in wheelbarrows. Sometimes one barrow carried two persons, one on either side. As long as the wind was blowing and the barrows were going with it, a small sail was hoisted.

On Friday the 11th a sight of the hills of the Shantung Province on before us promised a relief from the monotony and dust of the alluvial plains. About 9 o'clock we passed the walls of Chee-kan-chin close upon our left, and five minutes afterwards we were upon the banks of the Yellow River, which the people here call the Pondechowe and not the Hwang Ho. We were rowed over it in a small cranky barge. The water, which was thickly charged with mud, and covered with pieces of floating ice, was at least from three hundred to four hundred yards in breadth. At this time it was apparently very low, at least 25 feet below watermarks in its banks on either side, which evidently showed its level in flood time. Along the shores there was a fringe of ice about 6 feet in breadth. From watching pieces of ice floating down in mid-stream and timing several of them as I walked along the bank, I found that they travelled with the current at the rate of about 200 feet per minute.
I now saw along the roads numbers of Parson Crows and Blue Jays, which I had not noticed farther to the north. As we ascended the slope leading to the hills, we passed through several defiles or natural cuttings in the alluvium which flanked their sides. This alluvium, instead of being a homogeneous mass of consolidated silts, like that upon the plains, (51) contained pieces of limestone derived from the hills upon which it was lying. At a village called Kaisa we were fairly at the entrance to the hills, as we now had them upon our right and left, instead of their being only before us. In appearance they were high and rugged. The only indication of their nature which we could see was a bluish black limestone, which cropped up all around. For the first time I now saw a few sheep and goats. At many points whilst travelling amongst these mountains we passed through narrow defiles of alluvium. These seem in a great measure to have been cut out from the level of the valley bed through which they run by means of traffic. We could see them in all stages, from mere rut marks of two wheels to deep cuttings flanked by perpendicular walls 40 & 50 feet in height. When from the bottom of one of these latter one looked up at the loose material of the walls, charged with stones ranging from pebbles to boulders, one could not but speculate on the risk incurred by passing travellers. The villages in these mountains were strikingly different from those in the plains. The entrance to them was through a high and massive gothic archway, over which there rose a gable-ended house. These entrances, which were noteworthy from their picturesque appearance, were very similar in the various towns. The houses, instead of being built of mud, like those in the plains, were here built of stones, and the roofs were thatched. About 8 A. M. on Saturday 12th the limestone mountains ended, and gave place to granite. With the change the roads and the hills on either side became rougher.

Everywhere there were people who like ourselves seemed to be on the move from before sunrise until (52) after sunset. The country roads were as much thronged as the
streets of many small towns at home on a busy day. Travellers were so numerous that we often had to wait at the entrance to one of the alluvial defiles for the passing out of a long line of barrows coming in our direction, before we could enter. There were also great numbers of beggars; these were so numerous, that for several hours along one section of our course, we passed small groups of them at distances not greater than from 20 to 50 yards apart. They were chiefly half-clothed and naked children, women and old men,—all very dirty and many covered with sores. Not far along the road outside Tientsin, where we took our midday rest, there were several freshly decapitated heads hanging up by the side of the road in wicker-work cages. These I saw at several places. About 1 P. M. we had apparently crossed a water-parting, for we now had a small stream running in the direction in which we were travelling. During the afternoon we passed through several crowded streets, forming the suburbs of the town of Kinnan (or Tai-nan). This town is large in area, and from its compactness must contain many people. It is beautifully situated beneath a high rugged granitic clump of mountains. Upon these a few patches of snow were just visible. There was also a little snow lying in heaps in the streets through which we passed. No sooner were we through the town than we saw from the broad flat plain before us, that the rough jolting we had been undergoing must be nearly over. Right and left of us, however, there were still some mountains. At night-fall we forded the River Vanko. It was about 100 yards broad, and deep enough to come up to the axle-trees of our waggons.

(53) Next morning (Feb. 13th) shortly after starting we bent our course towards the East, and turned up a slope on to a low part of the hills, which on the previous day had been upon our right. They were granitic. About 8.30 P. M. we crossed what was apparently a second small water-parting. The country in the neighbourhood is round and undulating, in its contour not unlike some of the mining districts in Cornwall.
We now began to see new varieties of trees. From the materials used in building some of the houses and walls, I think that in addition to the granite which I saw in situ, there must also be limestone in the neighbourhood. During the afternoon our course was S. S. E. along a plain about 6 or 8 miles broad, and bounded right and left by hills which were partly of limestone and partly of granite. Crossing the road there were many small streams, all of which ran to the right. Next morning (Feb. 14th) we were travelling over limestone. Projections and boulders produced by the weathering of this rock rendered the road so uneven, that riding in the cart became unbearable and we had to walk. The rivulets continued, as on the previous day, to run towards our right until 7.30 A. M., when we passed a small river running to the left. During the morning we saw hills upon our right, which were grey with snow. Every few 里 upon the road there was a short square tower-like fortress. Many of these were much decayed, and all were unoccupied. Next morning (15th) the weather was dull, cold, and drizzly, not unlike ordinary winter weather in England. As we went on the country grew flatter and flatter, and the mountains on either side gradually became lower. The gentle termination of the hills upon the south was very noticeable, as being the reverse of that upon the north, where their ending is abrupt. The limestone now shewed interstratified shales and sandstone. In the afternoon, after crossing a small stream about 50 yards broad, flowing to the left or S. E., we passed through a large and formidable wall into the town of Ejow. This was one of the largest and dirtiest towns I had seen hitherto. The side-walks were raised, whilst the road-ways in between them were like broad gutters, filled with water, dirt and boulders. As we passed through these the wheels of our cart churned up the filth to produce a sickening and disgusting smell. We were 35 minutes in reaching the other side of the town and making an exit, which we did through three courtyards, each of which was guarded by a heavy gate. At night we forded
a broad and rapid river, called the R. Yee-kai, and reached Yee-kai-sai, where we slept. Here my companion lost his horse. It had been tied behind one of the carts, and probably during the darkness and confusion before fording had either escaped or been stolen.

Next morning (Feb 16th) our course was S. by W., following a large embankment upon our right, which had been built, I presume, to keep the waters of the Yee-kai back during flood-time. Although a few very low hills were just visible to the west, the country around was very flat, and all ploughed up. During the day the only novelties that I saw were great numbers of geese flying about, one or two thorn bushes bearing a few green leaves, and a drunken man reeling along the road. That night we reached the village of Kwun-kwa-poo. The pools in the streets through which we had to pass were in most respects like cesspools. Great crowds of people followed us, and at all the inns (55) we were refused admittance, as "foreign devils" could not be received. Although we made many applications, it was not until we came to the limits of the village that we found a private person, who put his yard and an empty outhouse at our disposal. During the journey we had several times been refused admittance to inns, and at those where we did find shelter, we had often to put up with one of the worst chambers. At almost every town through which we passed we had to put up with impertinent curiosity and insulting appellations from the crowds of people who followed us. At this place, however, our small inconveniences and annoyances were at their maximum. At 5 P. M. the next day (17th) we crossed the gravelly bed of an old river about 200 yards in width. At the point of crossing there were 19 massive stone piers standing, belonging to a bridge which at one time must have spanned the course. When complete there must have been at least 100 of these piers, for they ran some distance on to the land on either side. Judging from the direction in which their sharp edges pointed, the water must have run to the left. Our men called the old river the R. Lenda.
ho, and the bridge Oo-a-chau. During the wet season this river-course is filled with water. Shortly afterwards we saw the R. Yee-klan-ho upon our right. On the afternoon of the next day (18th) we travelled a short distance along the embankment of a canal, which was about 50 yards broad and ran towards the east. The surrounding country was very flat. Next morning at 1.30 P. M. we reached Tsing-klan-pu. Here we left our carts and mules, which were apparently as fresh as they were at starting, and engaged a boat upon the Grand Canal. The stream being with us, and the wind generally (56) favourable, we journeyed rapidly. On our way we passed many large towns, at each of which the canal, which has an average breadth of about 140 feet, was crowded with junks. The high sloping banks on either side prevented our seeing much of the surrounding country. At 9. 40 A. M. on Monday (21st) a breach in the right bank gave us a view of Lake Koiskho. It is connected with the Canal, and its depth is about 15 feet. The canal itself at this point is narrow, and only from 2½ to 3 feet in depth. Now and then we passed a war-junk carrying a cannon at its bows. Just before reaching Yanzoo we passed several large forts, some of which were however only in the process of construction. Everywhere along the canal junks were numerous, and so much so about the towns, that nothing but a comparison with the shipping at the London Docks will give any just idea of their numbers. Fishermen and beggars were also numerous. These latter collected alms from the passing boats in an extremely novel manner. They had several long bamboos lashed together forming a pole of great length. At the end of this a small deep bag was attached. In order to lift the immense rod thus made, and present the bag to the passengers on the various levels of the passing junks, the whole was supported on the top of a post driven in the shore and turned about upon it like a swivel. The master of this begging machine stood on the shore, and whilst beating a small drum to attract attention, worked the rod, raising, lowering and swinging his bag into any position where he thought a return might be expected.
On Tuesday at 2 P. M. we reached Ching kiang, where we joined a steamer, and next morning were in Shanghai after a quick trip of 19 days from Tientsin. (57)

IV

OBSERVATIONS AND GENERAL NOTES.

List of Principal towns in Siberia.

<table>
<thead>
<tr>
<th>Town</th>
<th>Date of Foundation</th>
<th>Population</th>
<th>Distance in versts from S. Petersburg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnaul</td>
<td>1738</td>
<td>12,927</td>
<td>4209</td>
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<tr>
<td>Blagovaitchinsk</td>
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<td>3,385</td>
<td>1819</td>
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<td>Verkne Kamschatka</td>
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<td>210</td>
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<td>Vladelvostock</td>
<td></td>
<td></td>
<td>2000?</td>
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<td>Enessees</td>
<td>1618</td>
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<td>Chita</td>
<td>1851</td>
<td>2598</td>
<td>6624</td>
</tr>
<tr>
<td>Yakutsk</td>
<td>1632</td>
<td>4778</td>
<td>8563</td>
</tr>
</tbody>
</table>

In addition to the towns given in the above list there are many others which contain about 3000 inhabitants.

From the foregoing table we see that in Siberia there are several towns of considerable magnitude, and that it is not altogether such a wilderness as is popularly supposed.
At the same time we observe that the towns with which we are perhaps the most familiar, (58) like Kiachta and Petro-paulovsky, are by no means those which contain the largest number of inhabitants; these latter being chiefly those which are situated in districts which have been newly annexed. The high population of towns like Tashkend, I was told, was due to the large number of soldiers which were quartered there at the time when the census was taken.

From the first column of the table it will be seen that many of the towns in Siberia boast of a considerable antiquity. Thus Tobolsk was founded in 1586, and Irkutsk, which is nearly 4000 miles away from S. Petersburg, was founded in 1652.

By looking at the third column, an idea may be gained of the difficulties which the Russian Government has to contend with in dealing with places like Petropaulovsky, situated 5000 miles away from the seat of government in S. Petersburg. The distances which separate such places from their capital, have I think in many instances as in other countries, given opportunities for abuses both social and political, which would never have occurred had these distances been less, or the means of communication more easy.

### Number of days of Rain & Snow in various portions of Siberia.

<table>
<thead>
<tr>
<th></th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ishim</td>
<td>36.2</td>
<td>38.7</td>
<td>39.3</td>
<td>45.0</td>
<td>159.2</td>
</tr>
<tr>
<td>Turinsk</td>
<td>27.0</td>
<td>23.0</td>
<td>28.2</td>
<td>20.0</td>
<td>98.2</td>
</tr>
<tr>
<td>Barnoul</td>
<td>21.5</td>
<td>25.8</td>
<td>30.2</td>
<td>29.6</td>
<td>107.1</td>
</tr>
<tr>
<td>Verknie Udinsk</td>
<td>23.8</td>
<td>20.5</td>
<td>28.0</td>
<td>23.5</td>
<td>95.8</td>
</tr>
<tr>
<td>Irkutsk</td>
<td>9.5</td>
<td>17.0</td>
<td>25.0</td>
<td>11.0</td>
<td>62.5</td>
</tr>
<tr>
<td>Nertchinsk</td>
<td>5.0</td>
<td>17.3</td>
<td>25.7</td>
<td>11.7</td>
<td>59.7</td>
</tr>
<tr>
<td>Yakutsk</td>
<td>22.4</td>
<td>16.5</td>
<td>21.9</td>
<td>29.4</td>
<td>90.2</td>
</tr>
</tbody>
</table>
Table of Mean Temperatures (Réaumur) taken at some of the more important Siberia towns.

<table>
<thead>
<tr>
<th>N. Lat.</th>
<th>E. Long.</th>
<th>Name</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.55</td>
<td>187.4</td>
<td>Ust Yansk</td>
<td>-30.2</td>
<td>-14.5</td>
<td>6.5</td>
<td>-20.6</td>
<td>-13.0</td>
</tr>
<tr>
<td>68.32</td>
<td>178.36</td>
<td>Nijni Kolimski</td>
<td>-26.2</td>
<td>-10.5</td>
<td>8.3</td>
<td>-11.7</td>
<td>-10.0</td>
</tr>
<tr>
<td>68.2</td>
<td>147.25</td>
<td>Yakutsk</td>
<td>-31.1</td>
<td>7.7</td>
<td>11.5</td>
<td>-9.0</td>
<td>-8.6</td>
</tr>
<tr>
<td>59.21</td>
<td>160.51</td>
<td>Okotsk</td>
<td>-17.9</td>
<td>3.6</td>
<td>8.9</td>
<td>-3.3</td>
<td>-3.0</td>
</tr>
<tr>
<td>63.56</td>
<td>82.44</td>
<td>Berezovski</td>
<td>-17.1</td>
<td>5.1</td>
<td>-11.6</td>
<td>2.9</td>
<td>3.4</td>
</tr>
<tr>
<td>51.18</td>
<td>137.16</td>
<td>Nerichinski</td>
<td>-21.6</td>
<td>1.7</td>
<td>12.8</td>
<td>-3.2</td>
<td>-3.4</td>
</tr>
<tr>
<td>53.8</td>
<td>138.27</td>
<td>Nickolaievski</td>
<td>-17.0</td>
<td>5.5</td>
<td>11.9</td>
<td>-5.4</td>
<td>2.1</td>
</tr>
<tr>
<td>56.30</td>
<td>102.50</td>
<td>Tomsk</td>
<td>-13.8</td>
<td>1.3</td>
<td>13.2</td>
<td>1.1</td>
<td>0.4</td>
</tr>
<tr>
<td>52.16</td>
<td>121.58</td>
<td>Irkutsk</td>
<td>-14.8</td>
<td>0.7</td>
<td>13.1</td>
<td>0.6</td>
<td>0.4</td>
</tr>
<tr>
<td>58.12</td>
<td>85.56</td>
<td>Tobolak</td>
<td>-13.5</td>
<td>0.1</td>
<td>14.0</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>57.49</td>
<td>125.24</td>
<td>Verkne Udinski</td>
<td>-15.2</td>
<td>1.0</td>
<td>14.7</td>
<td>0.6</td>
<td>0.0</td>
</tr>
<tr>
<td>55.27</td>
<td>95.58</td>
<td>Kansk</td>
<td>-14.5</td>
<td>0.9</td>
<td>14.6</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td>50.15</td>
<td>145.16</td>
<td>Blagovaischinski</td>
<td>-18.0</td>
<td>3.6</td>
<td>15.1</td>
<td>7.1</td>
<td>0.1</td>
</tr>
<tr>
<td>53.20</td>
<td>101.37</td>
<td>Barnoul</td>
<td>-13.9</td>
<td>0.1</td>
<td>14.0</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>50.24</td>
<td>97.56</td>
<td>Semipalatinski</td>
<td>-12.8</td>
<td>6.4</td>
<td>15.3</td>
<td>5.2</td>
<td>0.6</td>
</tr>
<tr>
<td>53.0</td>
<td>176.22</td>
<td>Petropavlovski</td>
<td>-5.2</td>
<td>1.2</td>
<td>10.4</td>
<td>2.6</td>
<td>2.3</td>
</tr>
<tr>
<td>56.6</td>
<td>87.7</td>
<td>Ishim</td>
<td>-13.5</td>
<td>0.2</td>
<td>14.0</td>
<td>1.1</td>
<td>0.5</td>
</tr>
<tr>
<td>55.20</td>
<td>82.40</td>
<td>Kurgan</td>
<td>-13.5</td>
<td>0.8</td>
<td>15.6</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>57.47</td>
<td>81.30</td>
<td>Turinsk</td>
<td>-12.0</td>
<td>1.5</td>
<td>13.8</td>
<td>0.7</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table of the time of Freezing and Breaking up of the Ice on Various rivers.

<table>
<thead>
<tr>
<th>Name of River.</th>
<th>N. Lat.</th>
<th>Ice forms about</th>
<th>Ice breaks up about</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basin of the Obi</td>
<td>Syr Darya, near Aral</td>
<td>45° 0'</td>
<td>Nov. 20</td>
</tr>
<tr>
<td></td>
<td>Obi, near Barnaul</td>
<td>53° 14'</td>
<td>Oct. 20</td>
</tr>
<tr>
<td></td>
<td>Tobol, near Kurgan</td>
<td>55° 32'</td>
<td>Oct. 20</td>
</tr>
<tr>
<td></td>
<td>Irtish, near Tobolsk</td>
<td>58° 20'</td>
<td>Oct. 24</td>
</tr>
<tr>
<td></td>
<td>Obi, near Obdorsk</td>
<td>67° 28'</td>
<td>Oct. 20</td>
</tr>
<tr>
<td>Basin of the Yenisei</td>
<td>Angara; near Irkutsk</td>
<td>52° 20'</td>
<td>Dec. 30</td>
</tr>
<tr>
<td></td>
<td>Lake Baikal</td>
<td>53° 0'</td>
<td>Dec. 23</td>
</tr>
<tr>
<td></td>
<td>Yenisei, near Krasnoiarisk</td>
<td>58° 6'</td>
<td>Oct. 29</td>
</tr>
<tr>
<td>Basin of the Lena</td>
<td>Lena, near Kirensk</td>
<td>58° 40'</td>
<td>Oct. 25</td>
</tr>
<tr>
<td></td>
<td>Lena near Yakutsk</td>
<td>61° 58'</td>
<td>Oct. 27</td>
</tr>
<tr>
<td>Basin of the Yana</td>
<td>Yana near Ust. Yansk</td>
<td>71° 23'</td>
<td>Sept. 6</td>
</tr>
</tbody>
</table>

This table giving dates for the formation and for the breaking up of ice on various rivers, shews in an approxi- mate manner the mean of a series of results of observations extending over several years.
(60) As the greater number of Siberian rivers have a course from South to North, the result exhibited in this table, namely that the northern portions of any particular river freeze up earlier and break up later than the more southern portions, is one that would be naturally anticipated. The time of formation of ice in the north near the mouth of a river, is roughly speaking, about one week earlier than in the more southern portions, whilst the breaking up is one month later. Both of these phenomena are influential in producing floods, which will have caused a deposition of silt to have been spread over the surrounding country.

NOTE ON SIBERIAN EXILES.

According to the Siberian Calendar for 1875 from which I extracted the preceding tables, 159,990 persons were exiled to Siberia between the years 1827 and 1859, and of these 134,231 were males, and 25,759 females. The causes for which they were sent were various. Upwards of 6000 were serfs, who were sent by the will of their masters on account of bad conduct.

About 40,000 were sent for robbery, 14,000 for murder, for high treason about 440, for libel 398, for family quarrels 71, for arson, forgery, smuggling, deserting, sacrilege, each from 1000 to 2000.

During these years from 1863-1866, about 18,606 political exiles were distributed over various portions of Siberia, of whom 3,894 were put to hard labour.

From what I saw of Siberian exiles, although in many cases they have to abide beneath the arbitrary (61) rule of the officers immediately above them, they are apparently much more leniently treated than I imagine prisoners would be, if in a similar position beneath the rule of any other European power.

Some of the exiles are only required to act as colonists. Others are condemned for a period to hard labour. Several of the many political exiles whom I met with, had been
transported for 10 years, the first two of which had been spent in the mines. After that time they had been permitted to reside in some of the towns, where they were joined by their friends from Europe, who had provided them with capital to carry on some business. One gentleman with whom I was acquainted, owned a farm, a large store, and had also interest in several mines and fisheries. In the theatre at Irkutsk on one side you might see the governor-general, who ruled over a territory as large as Europe, whilst on the other side, in a box which was almost opposite, an exiled Polish family. Although in this respect there appears to be an apparent mixing of the rulers and the ruled, when you know them more intimately you will see, as might naturally be expected, that they each have their own society.

The other class of exiles have hardly so pleasant an existence, but nevertheless, as compared with the persons who may be seen breaking stones at Portland, they lead a happy life. Any day when walking in Irkutsk you see gangs of them employed in cleansing and repairing the roads. Should you be charitably inclined you may find vent for your philanthropy in presenting them with a few kopecks. In certain cases, I believe if their offence has been a light one, and their behaviour good, they are presented with a cottage and a piece of land.

(62) In this way portions of Siberia are being colonized, either by persons who have been transported for life, or else by persons who during the period of their exileship have obtained so much property or other interest in the country, that it becomes inconvenient to leave on the expiration of their involuntary service. The remaining portions of the Siberian population consist of government officials, chiefly military, and merchants. A great number of these latter are Jews who speak German.
NOTES FOR PERSONS INTENDING TO MAKE THE OVERLAND JOURNEY.

In making the journey from the Eastern extremity of Siberia to Europe, I believe that it is possible for a Russian to travel as quickly and at a cheaper rate overland than he could by an ordinary mail steamer. The journey, however, would be extremely fatiguing, and might be dangerous to any one without a strong constitution. Murray in his handbook of Russia says that the journey from London to Pekin by travelling without intermission, may be performed in 50 days, a statement which appears to me be very like that which you see in almanacs about the cannon ball which might reach the sun in so many thousands of years, quite possible if each continued at the rate at which (63) they started. On enquiry I found that 50 days was the average time taken for a letter which travels day and night, and it is said that it has been accomplished by a courier who has had special facilities for crossing Mongolia with relays of horses,—a method of travelling which cannot be adopted by an ordinary traveller. For the journey I should allow from 70 to 80 days. The rate at which you travel will depend greatly on the season of the year, the best times being either in summer or winter, and the worst times being between these seasons, when there are roads for neither sleighs nor carriages, and when the rivers are obstructed with floating ice. The advantages of winter travelling are that you travel quickly, and that you can carry with you a large quantity and variety of provisions, those like soup for instance, being in a frozen state. The disadvantages are, that it is very cold, and you are in consequence so hampered with furs, felt boots and other necessary cumbersome covers that you can scarcely walk, and secondly that everything is white with snow,
in consequence of which one portion of the country looks pretty much the same as any other portion.

The disadvantages of summer travelling are that it is rather warm, very dusty, and there are many mosquitoes.

In winter time, judging from my own experiences, I should most strongly advise travellers to avoid Mongolia, unless they wish to taste hardships which I strongly suspect are very little inferior to those of an Arctic expedition. The easiest and quickest way to cross Europe and Asia is to proceed to Irkutsk and then to take the route from Stretinsk, down the Amoor by steamer, then up the Shilka to Lake (64) Hanka, and down the Siphoon to Vladivostock. In this way a person may travel from the Atlantic to the Pacific without having more than 20 days in carriages, the journey being chiefly accomplished by river steamers. The disadvantage however would be that such a journey is altogether through Russian territory, which if considered only with regard to its flatness would be extremely monotonous.

If a traveller starts from London or S. Petersburg to make the overland journey, he has an advantage in obtaining many introductions and perhaps even official letters which he could not obtain, or at all event only with difficulty, if travelling in the opposite direction. He also may avoid the necessity of carrying a large quantity of money, by paying a certain amount into one of the Banks at S. Petersburg, and obtaining a letter of credit for the same to several of the banks in the more important towns, like Ekaterinburg, Omsk, Tomsk and Irkutsk in Siberia. On the other side, however, you must remember that as you travel eastwards your difficulties increase with your weariness, and this will be especially noticeable if you cross Mongolia.

The expenses of the journey will be considerably lightened if two persons travel in company, but it must by no means be inferred from this that it is necessary to take your companion with you from your point of starting. So long
as you are in Russia and Siberia, companions are to be met with without difficulty, and in fact the most expeditious and cheapest way of travelling would be to travel in company with a Russian, and share the expenses. So long as I was alone and travelling on steamers, my fellow voyagers were one and all extremely attentive. They were invariably desirous of giving me assistance, and always helped me (65) off upon my next stage when we parted company.

With regard to the carriage of luggage both in Russia and China, there is little or no difficulty; two portmanteaus of moderate dimensions might be considered a reasonable quantity. The clothes you need, will be those you would use in any other country,—taking with you dress suits and all the other paraphernalia of civilized societies, should you intend to mingle amongst the inhabitants of any of the towns at which you stay. In matters of dress Russians are very punctilious, and it will be well to observe their customs, even to the wearing of a dress coat for a morning call; that is, if you wish to leave a favourable impression behind you. Winter clothes are best bought in the country, and to attempt to wear others and defy the cold will be an expensive and rash experiment, which will probably be paid for by your being frost-bitten.

Food for the road can be bought at all the large towns. English notes and English gold may be exchanged at the banks there.

Persons crossing Siberia must not imagine that they are diving into unknown regions, where they may meet with untold dangers and accomplish heroic deeds. On the contrary, they will rather find themselves travelling on good roads, between good towns inhabited by a refined community. Inhospitable frozen plains, packs of wolves and gangs of exiles are to the observer upon the ordinary post-roads of Siberia almost as mythical in existence as the capering sleek charger of the Arab or the docile dog of Newfoundland, "raræ aves" which we often hear about but never see.
At times a voyager may be uncomfortable and cold, but if he mingles with his fellow travellers he will probably meet with kindness and hospitality which (66) will obliterate all unpleasant feelings and leave behind an impression which will ever make him think with pleasure of the days he spent in Russia and Siberia.

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List of temperatures taken on the journey across Mongolia with a Réaumur Thermometer.

<table>
<thead>
<tr>
<th>Dec. 9th</th>
<th>8 P.M.</th>
<th>— 21°</th>
<th>at Stanock.</th>
</tr>
</thead>
<tbody>
<tr>
<td>— 10th</td>
<td>2.30 A.M.</td>
<td>— 18°</td>
<td>at Yeroh.</td>
</tr>
<tr>
<td>— 11th</td>
<td>3 P.M.</td>
<td>— 13°</td>
<td>at Witun sharn.</td>
</tr>
<tr>
<td>— 12th</td>
<td>10 P.M.</td>
<td>— 13°</td>
<td>at Zaltra nars.</td>
</tr>
<tr>
<td></td>
<td>10 A.M.</td>
<td>— 9.5°</td>
<td>R. Sharin Kol.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>By-yan-gulta.</td>
</tr>
<tr>
<td>— 13th</td>
<td>7 P.M.</td>
<td>— 18°</td>
<td>Makatah Pass.</td>
</tr>
<tr>
<td></td>
<td>8 P.M.</td>
<td>— 18°</td>
<td>at Barah.</td>
</tr>
<tr>
<td>— 14th</td>
<td>12 P.M.</td>
<td>at Borogoldia.</td>
<td></td>
</tr>
<tr>
<td>— 16th</td>
<td>2 P.M.</td>
<td>— 17°</td>
<td>Gatinawa Pass.</td>
</tr>
<tr>
<td>— 17th</td>
<td>10 P.M.</td>
<td>— 21°</td>
<td></td>
</tr>
<tr>
<td>— 18th</td>
<td>3 P.M.</td>
<td>— 7°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 P.M.</td>
<td>— 10°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7 A.M.</td>
<td>— 14°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 P.M.</td>
<td>— 21°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8 P.M.</td>
<td>— 24°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 P.M.</td>
<td>— 15.5°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8 P.M.</td>
<td>— 20°</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Time</td>
<td>Temperature</td>
<td>Additional Details</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>-------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>19th</td>
<td>9 P.M.</td>
<td>15°</td>
<td>in tent; outside — 19°</td>
</tr>
<tr>
<td>20th</td>
<td>3 P.M.</td>
<td>14°</td>
<td>—</td>
</tr>
<tr>
<td>21th</td>
<td>8 P.M.</td>
<td>17°</td>
<td>in tent.</td>
</tr>
<tr>
<td>22th</td>
<td>5 P.M.</td>
<td>20°</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>1 P.M.</td>
<td></td>
<td>reached Techsha</td>
</tr>
<tr>
<td></td>
<td>8 P.M.</td>
<td>17°</td>
<td>buinta.</td>
</tr>
<tr>
<td>25th</td>
<td>10 A.M.</td>
<td>10°</td>
<td>—</td>
</tr>
<tr>
<td>26th</td>
<td>10 P.M.</td>
<td></td>
<td>in tent. — 19° outside.</td>
</tr>
<tr>
<td></td>
<td>about 12 A.M.</td>
<td></td>
<td>— 17° to — 3°</td>
</tr>
<tr>
<td>28th</td>
<td>9 P.M.</td>
<td>0°</td>
<td>—</td>
</tr>
<tr>
<td>29th</td>
<td>12 A.M.</td>
<td>15°</td>
<td>at Khoburr.</td>
</tr>
<tr>
<td>30th</td>
<td>11 A.M.</td>
<td>70°</td>
<td>5 yourts Arroisosum.</td>
</tr>
<tr>
<td></td>
<td>12 A.M.</td>
<td></td>
<td>Ingliotuk</td>
</tr>
<tr>
<td></td>
<td>12 A.M.</td>
<td></td>
<td>Siatuk.</td>
</tr>
<tr>
<td>31st</td>
<td>12 A.M.</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>Jan. 1st 1876</td>
<td></td>
<td>11°</td>
<td>10 yourts &amp; 2 large buildings.</td>
</tr>
<tr>
<td>2nd</td>
<td>1 P.M.</td>
<td>10°</td>
<td>—</td>
</tr>
<tr>
<td>3rd</td>
<td>4 P.M.</td>
<td></td>
<td>Boorkon-lama-sum.</td>
</tr>
<tr>
<td>4th</td>
<td>after 1 P.M.</td>
<td></td>
<td>Bortelroi.</td>
</tr>
<tr>
<td>5th</td>
<td>2 P.M.</td>
<td></td>
<td>Sakildig.</td>
</tr>
<tr>
<td></td>
<td>Morning</td>
<td></td>
<td>Torantasums (a shrine)</td>
</tr>
<tr>
<td>Dec. 6th</td>
<td>12 A.M.</td>
<td>9°</td>
<td>Mountains before us.</td>
</tr>
<tr>
<td></td>
<td>11 A.M.</td>
<td></td>
<td>Halla.</td>
</tr>
<tr>
<td></td>
<td>5 P.M.</td>
<td></td>
<td>Dam nur saza.</td>
</tr>
<tr>
<td>7th</td>
<td>1 P.M.</td>
<td></td>
<td>Porgon.</td>
</tr>
<tr>
<td>8th</td>
<td>1 A.M.</td>
<td></td>
<td>Tourgeourta.</td>
</tr>
<tr>
<td>9th</td>
<td>1 A.M.</td>
<td></td>
<td>Kaligan.</td>
</tr>
<tr>
<td></td>
<td>5 P.M.</td>
<td></td>
<td>—</td>
</tr>
</tbody>
</table>
List of places passed between Urga and Kalgan, as given to me by me Mongol drivers.

<table>
<thead>
<tr>
<th>Dec. 16th</th>
<th>Urga or Krendur</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tarkura</td>
</tr>
<tr>
<td></td>
<td>Baindur</td>
</tr>
<tr>
<td></td>
<td>Olandowa</td>
</tr>
<tr>
<td></td>
<td>Araksta</td>
</tr>
<tr>
<td></td>
<td>Kungalota</td>
</tr>
<tr>
<td></td>
<td>Dutch</td>
</tr>
<tr>
<td></td>
<td>Boim bulum</td>
</tr>
<tr>
<td></td>
<td>Ustan kalander</td>
</tr>
<tr>
<td></td>
<td>Bain alla</td>
</tr>
<tr>
<td></td>
<td>Baintal</td>
</tr>
<tr>
<td></td>
<td>Dakerunero</td>
</tr>
<tr>
<td></td>
<td>Et kayos</td>
</tr>
<tr>
<td></td>
<td>Tzoislung</td>
</tr>
<tr>
<td></td>
<td>Bus</td>
</tr>
<tr>
<td></td>
<td>Kokhul</td>
</tr>
<tr>
<td></td>
<td>Artim</td>
</tr>
<tr>
<td></td>
<td>Elan</td>
</tr>
<tr>
<td></td>
<td>Oorjirun</td>
</tr>
<tr>
<td></td>
<td>Kokus</td>
</tr>
<tr>
<td></td>
<td>Jodjr</td>
</tr>
<tr>
<td></td>
<td>Bara-ya-mata</td>
</tr>
<tr>
<td></td>
<td>Tunda-ya-mata</td>
</tr>
<tr>
<td></td>
<td>Choo-ya-mata</td>
</tr>
<tr>
<td></td>
<td>Tima-ya-mata</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dec. 22nd</th>
<th>Tecksha buinata</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kooistelroi</td>
</tr>
<tr>
<td></td>
<td>Bondo bullock</td>
</tr>
<tr>
<td></td>
<td>Hhargo pi</td>
</tr>
<tr>
<td></td>
<td>Harol</td>
</tr>
<tr>
<td></td>
<td>Bointolok</td>
</tr>
</tbody>
</table>

Left here on the 25th yourts.

yours.
Dec. 27th

| Kor pun har             |
| Botte'                  |
| Yast                    |
| Sainghar                |
| Mele khit               |
| Beedoot                 |
| Sekul                   |
| Zaird                   |
| Zowk                    |
| Olant otuk              |
| Olanhad                 |
| Amra                    |
| Mogoi                   |
| Tosot                   |
| Bainzurch               |
| Ālāhāmba                |
| Haratin sootch          |
| Some cholo              |
| Batka                   |
| Sabuk                   |
| Olon-otuk-sum           |
| Tubungura               |
| Tamjetalla-gat          |
| Migee-suk               |
| Khandar-sum             |
| Bolkun-lamma-sum        |

Jan. 3rd

| Torum elis              |
| Tagant sum              |

Jan. 5th

| Nowan oroo              |
| Japulun ungurr         |

Jan. 6th

| Bunbun darwa            |
| Cholo                   |
| Saganor                 |
| Umgwa Dowas             |
| Nārā khol               |
| Manj bullock            |
| Senjet Towa             |
| Kasursum                |

9th Jan. 1876

| Kalgan or Chang-giku    |
(70) ITINERARY & OBSERVATIONS MADE ON THE ROAD BETWEEN TIEN TSIN & SHANGHAI.

Itinerary of route from Tientsin to Ching Kian.

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Mileage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1876 Feb. 5th Saturday</td>
<td>75 li</td>
<td>Left Tientsin at 12 P. M.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feb. 6th Sunday</td>
<td>110 li</td>
<td>Left Ching-hat-sai at 5.30 A. M.</td>
</tr>
<tr>
<td></td>
<td>Feb. 7th Monday</td>
<td>120 li</td>
<td>Left Tszinze 6.10 A. M.</td>
</tr>
<tr>
<td></td>
<td>Feb. 8th Tuesday</td>
<td>110 li</td>
<td>(71) Left Yanpi at 5.5 A. M.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>'Baidzoa. 7. &quot;&quot;Tunghow (walls much broken) &quot;&quot;Linjen. 9. left at 11. 60 li. Followed along the bank of the Grand Canal for a short distance. &quot;&quot;Tun-ja-fa 11.20</td>
</tr>
</tbody>
</table>
Feb. 9th
Wednesday
120 li

Left Dajow at 6.10 A. M. & passed through houses (Hung-tun) until 7.40.

Feb. 10th
Thursday
100 li

Left Urshili-po at 5.45 A. M.

Feb. 11th
Friday
100 li

Left Yan-chen 6.45 (could see hills ahead)
Feb. 12th  
Saturday
100 li

Left "" Chanza at 5.10 A. M.
"" Shidai 5.55 "" Thing-an-shua 6.20
Chingan 7. Tinva, 'Gwan-ja-jow 7.30 Sow-
ling-gwa 7.40 "" Showander 7.50 Gwanda
8.5. crossed a stream for the third time 8.50
"" Chan-chung, 9 Chowden 9.30 "" Tientai
9.50. Left at 11.45 50 li.

"" Chadzoa 12.10. country gets open 12.30.
Fairly over the water parting & a stream
running with us 1.15. "" Tashendo 1.18.
' Village 2 ' Ebilo 2.4. "" Kinnan or Tainun
3.20 (largest town thus far) ' Poidzoar 4.5
' Gwandozar 4.10 ' Village 4.20 ' Shilear
5.30 ' Lienjow 5.50 "" Shididza 5.30 & river
Vanho, Village 5.55 & ford the river 80
yards broad ' Kaipanzoan 6.10. "" Sujoan
7.30.50 li.

Feb. 13th  
Sunday
100 li

Left Sujoan at 5.45 A. M.
' Village 6 ' Tanza 6.50 "" Chidzaw 7.20
"" Mowan 8.20 ' Hung-kwa 8.25 (72a) Moi-
ko-lin 8.55 "" Gwanzer 9.10 "" Gwan-chow
9.30 ' Voujlen 10.5 "" Allejona 10.30.
"" Yungluda (mud wall) 10.80 left at 12.59
50 li.

' Shinzar 1.50. ' Village 1.40. Fou-son
mud walls 1.50 ' Soquishoa 2.15 ' Yenzaw
2.45 a stream running to our right. ' Zairdo
3.10 Kwoie 3.30 2 Villages upon our right
' Kow-ma-chow 3.55 Bed of stream 4.15
"" Shang-tai-shai 4.45 a town with suburbs.
' Quoiur 5.5 small stream "" Ghin-ed-zoar
5.50 "" Noyan 50 li.

Feb. 14th  
Monday
110 li

Left Noyan at 1.50 A. M.
' Village 2.15. ' Wanzaw 2.40. white house
on right on top of a rise 2.55 "" Tonzo 3.20.
' Village 4.10. ' Village 4.35 "" Tung-tu-fu
5.15. Stream runs to right, & high mountains
on the same side  'Village 5.20  'Tuntai 5.40 top of a rise  'Village 6.  'Moi-in-sha 6.30 on our right  'Whoda 7.15 ‘Bowja 7.30.  'Hojichho 7.35.  'Tanzuma 7.45.


'Village 10.50  "'Tosanjow 11.5.  "Dodzi0 12.15, left at 1.55 60 li.  'Chum-to-dzar 2.15

a walled village.  'Shoipo 2.30 stream on right running with as  'Yenja 3.  'Bosh-ho-ha 3.20  'Village 3.40  "Kwang-ha 4.  'Shangdur 4.25 Kai-za-kwo 4.40 (72b)  "Shing-daso 5.5 Mountains on right, those on the left tail out. 50 li.

Left Chang-to-so (or Shing-da-so) at 5.15 A.M.

'Village on right 6.0  'Mosateur 6.15 stream to left, Village 6.30, rounded hills ahead, make for western end of hills 6.40  'She-gunda 7.  Village 7.10 Stream to left 7.45  'Wiege-tun 8.10.  'Village 8.30  'Shidzao 9.5  "Pon-sha-ho 9.35 and left at 11.30. 50 li.

'Sinlaso 11.40 Hills in distance on the right, but flat country ahead.  'Village 11.15.

"Low-gwa-hoo 12.15  "Natzoan 12.50  'Village 1.35  'Village 2.15 stream 50°ds broad flows S. E. 2.25  "'Ejow (Yechow) 2.45

left the town at 3.20,  'Village 3.25  'Village 4.10  'Village 4.30  'Tai-chun-lai 5  'Village 5.35.  River Yee-kai 5.55  'Village 6.10.  crossed R. Yee-kai 6.15 about 250°ds broad flowing to right and reached Yee-kai-son

Left Yee-Kai-San 6.10 A. M.

'Village on left 6. 25.  Hills to S. W.  'Tienfur 5.50  'Village 7.30 ‘Village on left
Feb. 17th
Thursday
120 li

8 Newdzoa 8.30 'Shechow 9. "" Taboa 10
"" Sileepoo 11.10 stream runs to right, left at
12.45. 60 li. 'Quang-boe-khoo 1.15 Embank-
ment right & left 'Village 1.25 "" Tun-chun
1.35 'Village 2 'Towsuja 2.35 (72c) Village
2.45. 'Village 3 'Yanzer 3.10 'Tung-shin-o
3.40. 'Village 4 'Village 4.15 'Village 4.35
'Village 4.50. "" Kwun-kwa-po 5.15 60 li.

Left Kwun-kwa-po at 6 A. M.
'Village 6.15 'Village 6.30. "" Songnan-
jan 7.5 Village 8.10! Village on left 8.10
'Village 8.45, 9.15 Village on left. Rivulet
runs to right. 'Village 9.30 'Village to
right 9.55 & can see a river to the left 'Vil-
lage 10.30 "" Sahou, 10.35 left at 12.40, 60 li.
'Village 12.50 'Village 1.45 "" Village 2.20
"" Village 3.30, 'Village 4.10. Village 4.35
"" Sil-un-tow 4.50. Bed of old River Len-da-
ho 5. 'Village on right 5.16 Village 5.25 &
River Yen-kla-nho Son-ka-dee 5.45. 60 li.

Feb. 17th
Friday
120 li

Left Son-ka-dee at 6.35 A. M.
'Village on right 7. 'Village on left 7.20
'Village on right 7.50 'Village 8.0. 'Village
on left 8.35 'Village on right 9.15 Village
on left 9.20. Needzoar 9.45 (houses & well)
'Village 10.15 'Village 10.25, Bed of River
120 (mud wall) left at 1.5. 50 li.

'Village on left 1.30. House on all sides.
On embankment of Canal 2.15 travelled
in the stream East. Left embankment
5.25 Crossed to a raised-road all along which
were houses 'Village 4.25. 'Village 5.
(72d) 'Village 5.20. "" Toi-chan-gwa or Jon-
san-dzea (mud wall) 6. P. M. 50 li.

Feb. 19th
Saturday
70 li

Left Toi-chan-gwa at 6. 40 A. M.

Mounted an embankment on the left em-
bankment at 7.35 Houses 7.45 Houses 7.55. Houses 8. Houses 8.30. Houses continued in a scattered manner until after 9. ""Son-karsho 10.12. Wangove, an enclosure ½ mile square 10.25. Houses 10.35 Two solitary stone arch ways in a field on the left 11. Mounted embankment 12.15 see a town to the right. Descended from the embankment on the right & crossed sandy plain. Crossed bed of almost empty canal 12.35. Crossed through a breach in a second embankment down to & then over a Canal. A quarter of a mile further we passed through a third embankment. These last two embankments marked the bed of the old Yellow River. ""Tsing-kian-pu 1.25 & Grand Canal. 70 li.

Feb. 10th
Sunday
130 li


Feb. 21st
Monday
160 li

Left ""Lig-a-baw at 5.30 A. M. Loyango 8. 30 Ma-jun-gwa 9.40 (72e) Lake Koi-co-kho on our right, Chinggueda 10.40 ""Quoityu 12.15 ""Tacbelou 2.25 ""Luchin 3.30 Sawba 5. 160 li.

Feb. 22nd
Tuesday


One the afternoon of our arrival at Ching-kian we joined a steamer on the Yang-tsi-kiang & reached Shanghai at 12 o'clock next day, Wednesday Feb. 23th
In this Itinerary all the names printed in italics indicate large towns with walls round them.

Those preceded by 3 small comas are large villages or small towns at which several inns may always be found. Those with 2 comas are small villages where inns may perhaps be found, whilst those with one dash are only clumps of houses.

The spelling of the names of these places, which names are in many cases perhaps only local, is probably wrong, and this itinerary as it stands will be of little use excepting to those who actually travel along this route. For the purpose of comparing my spelling with that which is recognized as the best, I append the following table kindly drawn up for me by Mr. Byron Brenan of the British Legation at Pekin.

<table>
<thead>
<tr>
<th>Recognized spelling not always like the local sound</th>
<th>My spelling from the local sound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chen-chia-tun.</td>
<td>Ching-gwan-tun.</td>
</tr>
<tr>
<td>Chin-hsien.</td>
<td>Tsinze.</td>
</tr>
<tr>
<td>Tsang-chow.</td>
<td>Tsang-jow.</td>
</tr>
<tr>
<td>Tung-kwan.</td>
<td>Tung-hou.</td>
</tr>
<tr>
<td>Lieu-wo-chen.</td>
<td>Linjen.</td>
</tr>
<tr>
<td>Tea-chow.</td>
<td>Dajou.</td>
</tr>
<tr>
<td>Li-chi-chai.</td>
<td>Lu-jai-sai.</td>
</tr>
<tr>
<td>Yu-cheng.</td>
<td>Urshinsa.</td>
</tr>
<tr>
<td>An-cheng.</td>
<td>Yan-chen.</td>
</tr>
<tr>
<td>Tan-tsun.</td>
<td>Panzun.</td>
</tr>
<tr>
<td>Koshou.</td>
<td>Kaisa.</td>
</tr>
<tr>
<td>Chang-hsia.</td>
<td>Chausa.</td>
</tr>
<tr>
<td>Chieh-shou.</td>
<td>Chadzoa.</td>
</tr>
<tr>
<td>Kwan-chwang.</td>
<td>Gwanjow.</td>
</tr>
<tr>
<td>Kwan-chiao.</td>
<td>Gwanjow.</td>
</tr>
<tr>
<td>Hsin-tai-hsien.</td>
<td>Shing-tai.</td>
</tr>
<tr>
<td>Tung-chu-fo.</td>
<td>Tung-tu-fu.</td>
</tr>
<tr>
<td>Recognized spelling not always like the local sound.</td>
<td>My spelling from the local sound.</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Meng-yin-hsien.</td>
<td>Moiinsha.</td>
</tr>
<tr>
<td>Ching-to-ssà.</td>
<td>Shing-da-so.</td>
</tr>
<tr>
<td>Yi-chow.</td>
<td>Ejow.</td>
</tr>
<tr>
<td>Ta-fou.</td>
<td>Taboa.</td>
</tr>
<tr>
<td>Siao-hu.</td>
<td>Sa-how.</td>
</tr>
</tbody>
</table>
ANALYSIS OF DISTANCE AND TIME
ALONG THE ROAD.

| Date of Month | Morning | | | | | | Afternoon | | | | | Total | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Treating | Distance | Rest | Treating | Distance | Treating | Distance | Treating | Distance | hr. min. | li | | | hr. min. | li | | | hr. min. | li | | | hr. min. | li | | | hr. min. | li | |
| Feb. 5th | 3.30 | 50 | 0.30 | 6.30 | 75 | 6.30 | 75 | 6.30 | 75 |
| — 6th | 4.20 | 50 | 1.30 | 7.30 | 70 | 5.20 | 60 | 8.40 | 120 |
| — 7th | 3.55 | 50 | 2.0 | 7.0 | 50 | 6.5 | 70 | 11.50 | 120 |
| — 8th | 2.30 | 50 | 1.50 | 6.5 | 70 | 8.35 | 120 |
| — 9th | 5.5 | 50 | 1.55 | 7.40 | 50 | 8.55 | 100 |
| — 10th | 4.40 | 50 | 2.0 | 5.0 | 50 | 12.25 | 100 |
| — 11th | 5.5 | 50 | 5.0 | 3.10 | 50 | 10.5 | 100 |
| — 12th | 10.0 | 60 | 1.40 | 6.45 | 50 | 13.10 | 110 |
| — 13th | 4.20 | 50 | 1.55 | 6.45 | 50 | 11.5 | 100 |
| — 14th | 4.0 | 60 | 1.35 | 5.30 | 60 | 9.30 | 120 |
| — 15th | 4.35 | 60 | 2.5 | 5.5 | 60 | 9.40 | 120 |
| — 16th | 4.45 | 50 | 4.45 | 4.55 | 50 | 9.40 | 100 |
| — 17th | 6.45 | 70 | — | — | — | 6.45 | 70 |

This gives as an average rate of 10.16 li per hour.

My total distance is probably too short, because where I have had any choice of distance I have always taken the smaller.
TEMPERATURES TAKEN WITH A REAUMUR THERMOMETER.

<table>
<thead>
<tr>
<th>Date of Month</th>
<th>Morning A.M.</th>
<th>Midday Afternoon A.M.</th>
<th>Midday Afternoon P.M.</th>
<th>Evening P.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 5th</td>
<td>+ 9° +3-50</td>
<td></td>
<td></td>
<td>8 + 3° 9 P.M. -1° Light breeze from S. E.</td>
</tr>
<tr>
<td>6th</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7th</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th</td>
<td>+ 1°</td>
<td></td>
<td></td>
<td>9 + 4° Wind in morning S. W.</td>
</tr>
<tr>
<td>9th</td>
<td>- 3° 9 A.M. + 4°</td>
<td></td>
<td></td>
<td>9 + 2.5</td>
</tr>
<tr>
<td>10th</td>
<td></td>
<td></td>
<td>12 + 7.5°</td>
<td></td>
</tr>
<tr>
<td>11th</td>
<td></td>
<td>12 - 3 1 P.M. +12°</td>
<td>9 + 3°</td>
<td></td>
</tr>
<tr>
<td>12th</td>
<td>+ 3° 10 A.M. + 2°</td>
<td>3 P.M. +12°</td>
<td>9 + 5°</td>
<td></td>
</tr>
<tr>
<td>13th</td>
<td>1° 11 A.M. + 3°</td>
<td>3 P.M. +15°</td>
<td>9 + 2</td>
<td></td>
</tr>
<tr>
<td>14th</td>
<td>+ 1°</td>
<td>12 + 8° &amp; +110°</td>
<td>8 + 4°</td>
<td></td>
</tr>
<tr>
<td>15th</td>
<td>- 1°</td>
<td>12 + 3°</td>
<td>8 + 3.35°</td>
<td></td>
</tr>
<tr>
<td>16th</td>
<td>+ 3°</td>
<td>1 P.M. + 6°</td>
<td>8 + 7°</td>
<td></td>
</tr>
<tr>
<td>17th</td>
<td>+ 5°</td>
<td>1 P.M. +5.5°</td>
<td>9 + 10°</td>
<td></td>
</tr>
<tr>
<td>18th</td>
<td>+ 2.5°</td>
<td>12 + 4°</td>
<td>8 zero</td>
<td></td>
</tr>
<tr>
<td>19th</td>
<td>- 3.5°</td>
<td>3 P.M. +5°</td>
<td>8 + 5°</td>
<td>On the Grand Canal.</td>
</tr>
<tr>
<td>20th</td>
<td>+ 3°</td>
<td>11 A.M. + 4°</td>
<td>6 + 30°</td>
<td>&quot; &quot; &quot; &quot; On the Grand Canal.</td>
</tr>
<tr>
<td>21st</td>
<td>+ 3°</td>
<td>12 + 6°</td>
<td>7 + 3°</td>
<td>Ching kian.</td>
</tr>
<tr>
<td>22th</td>
<td>+ 4°</td>
<td>12 + 10°</td>
<td>6 + 4°</td>
<td></td>
</tr>
</tbody>
</table>

Those temperatures which are underlined were taken in the sun. The whole only represent a few rough observations taken at irregular times. The thermometer used agrees in its readings with several made by Casella.
BAROMETRIC OBSERVATIONS MADE
BY MY COMPANION
COLONEL P. UNTERBERGER.

<table>
<thead>
<tr>
<th>Date of Month</th>
<th>Place</th>
<th>Time</th>
<th>Millimetres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 5th</td>
<td>At Tientsin</td>
<td>12 A.M.</td>
<td>796.4</td>
</tr>
<tr>
<td>6th</td>
<td>Tsinze</td>
<td>9 P.M.</td>
<td>782</td>
</tr>
<tr>
<td>11th</td>
<td>Tonja-ma</td>
<td>12 A.M.</td>
<td>786</td>
</tr>
<tr>
<td>11th</td>
<td>Kaisa</td>
<td>3.20 P.M.</td>
<td>782</td>
</tr>
<tr>
<td>12th</td>
<td>Chan-chung</td>
<td>9 A.M.</td>
<td>777</td>
</tr>
<tr>
<td>12th</td>
<td>Suijoan</td>
<td>9 P.M.</td>
<td>778</td>
</tr>
<tr>
<td>13th</td>
<td>On road</td>
<td>9 A.M.</td>
<td>771</td>
</tr>
<tr>
<td>13th</td>
<td>&quot;</td>
<td>9 P.M.</td>
<td>780</td>
</tr>
<tr>
<td>15th</td>
<td>Yee-kai-son</td>
<td>9 A.M.</td>
<td>782</td>
</tr>
<tr>
<td>16th</td>
<td>She-chow</td>
<td>9 P.M.</td>
<td>786</td>
</tr>
<tr>
<td>17th</td>
<td>On road</td>
<td>9 A.M.</td>
<td>783</td>
</tr>
<tr>
<td>17th</td>
<td>Son-ka-dee</td>
<td>9 P.M.</td>
<td>786</td>
</tr>
<tr>
<td>18th</td>
<td>On road</td>
<td>9 A.M.</td>
<td>789</td>
</tr>
<tr>
<td>19th</td>
<td>Grand Canal</td>
<td>9 P.M.</td>
<td>795</td>
</tr>
</tbody>
</table>

The instrument used was one of Goldsmith's Aneroid Barometers.
An Itinerary from Pekin to Chingkiang given to me by Mr. Byron Brenan of the British Legation, Pekin. It may be useful in the determination of my Itinerary.

<table>
<thead>
<tr>
<th>Starting from Pekin.</th>
<th>Distance</th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td></td>
<td>30 li to</td>
<td>Hwangtsun</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>Kuanhien</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>Kung-chia-ying</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>Hiung-hien</td>
<td>Walled town</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>Jen-chon-hien</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>Ho-chien-hsien</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>Fon-chwang-yi</td>
<td></td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>Man-ho</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>Ping-ho-yen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>Urh-she-li-pao</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>Yen-cheng</td>
<td>Cross Yellow R.</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>Lui tze miao</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>Tientai</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>Tai-an-fu</td>
<td>Walled city</td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>Yang-liu-tien</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>Tsi-kia-chwang</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>Tien-tsin-miao</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>Hochwang</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>Hwang-kwa-pu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>Siu-chow-fu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>Tsing-to-sze</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>Ta-fow</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>Sin-an-chen</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Sze-wu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Wre-hwa-kiao</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shun-ho-chi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Yang-hwa-chi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Chung-hing-chen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Wang-chia-tsum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Tsin-kiang-pu</td>
<td>Grand Canal</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Hwei-kwan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>Chao-cha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>Yang-chow</td>
<td>Walled town</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>Chin-kiang</td>
<td>Cross Yangtze</td>
<td></td>
</tr>
</tbody>
</table>

The total distance is 2393 li or about 800 miles (English). It generally takes about 23 days. The post travels this way in winter.

I think that my route was to the East of this one, which I fancy runs round the Shantung mountains rather than through them. It will be seen that only a few of my places corresponded with those above mentioned.
The first General Meeting of the Society in Session 1878-79 was held at the Shōheikuwan, Seido, Tōkiō, on the 8th October, 1878, Dr. David Murray, the President, in the chair. There was a very large attendance.

The minutes of the previous general meeting, having been already published in "The Japan Weekly Mail," were taken as read.

The Recording Secretary announced the appointment by the Council of the Rev. C.T. Blanchet as Librarian.

Mr. Dixon as Acting Librarian reported the receipt of various books and periodicals, among others "The Smithsonian Report for 1876" and "The Journal of the American Geographical Society of New York, Vol II."

Mr. John Milne, F. G. S., then presented to the Society his paper entitled, "Across Europe and Asia." Owing to its length, he was unable to read it at the meeting, but he made some interesting general observations on his journey across the two continents.

The president expressed much interest in what Mr. Milne had said. He regretted that as there was another communication to receive attention at this meeting, there was no time for discussion. He was sure that he complied with the views of all in expressing thanks to Mr. Milne and admiration of the heroism displayed by him in crossing these plains. A vote of thanks was unanimously carried.

Mr. J. A. Ewing, B. Sc., F. R. S. E., then exhibited the phonograph, explaining the construction of the instrument, the principles on which its action depended, and some of its scientific applications as an instrument of research in connection with problems in acoustics. Several sentences spoken to the instrument were reproduced by it so as to be audible in all parts of the room.

The unanimous thanks of the society were given to Mr. Ewing for his courtesy in consenting to deliver his able and interesting lecture.

The meeting was then adjourned.
ANALYSIS OF THE TAKE-NO-KO.

BY

D. W. DWARS, Esq.

(Read October 23rd, 1878.)

The great value of the bamboo to the Eastern nations, and especially to the Chinese and Japanese, is very generally known. All parts of the bamboo are made profitable and all sizes are utilized, the thinnest as well as the largest stems being used as material in the manufacture of numerous domestic articles. Even some of the buds from the rootstock are utilized before they assume the form which we see in the tall bamboo: these are used as food by the natives. When these shoots are sufficiently developed under ground, they bear in Japan the name of Take-no-ko. Some kinds of bamboo, e.g. the Bambusa puberula, furnish good edible shoots. In Java, as well as in Japan, foreigners make a delicious pickle of them, and some prefer them to gherkins and cucumbers as an addition to the table. Also when boiled and properly dressed they are much in favour, as they form a good substitute for asparagus and other vegetables. The Japanese eat them in rather large quantities, and this has induced me to analyse some bamboo-shoots, the more so as I believe no analysis has ever been made of this article of food.

On the 8th of April I procured of the first kind (1) two pieces taken from the plant called Mōsō-dake, 20 and 21 centimetres long, weighing together, after the yellow
powder which was attached to them had been (74) brushed away, 586 grm. As the white heart only is eaten, the outer covering (scaly leaves) was also stripped off, and they then weighed 309 grm. The second kind (2), obtained on the 21st of May, were samples from the plant called *Ma-dake*. These buds were more developed, 35 and 40 centimetres long, and weighed 1060 grm., and after the outer covering had been taken away their weight was reduced to 527 grm. Each kind presented on the vertical section distinct forms of the nodes and cavities of the ascending stem of the bamboo: this was especially the case in the second kind, and these became gradually less distinct, until at the top the shoot consisted of a solid substance, which forms the most palatable part of the entire shoot. Under the microscope several small starch-granules were noticed. They were almost spherical, and had a central *hilum* (nucleus). In (2) the second kind they were less numerous, which may be ascribed to their more developed condition.

The analysis of the two kinds proved them to contain the following substances:

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>90.21 per cent.</td>
<td>91.79 per cent.</td>
</tr>
<tr>
<td>Ashes</td>
<td>1.01 &quot; &quot; &quot;</td>
<td>1.10 &quot; &quot; &quot;</td>
</tr>
<tr>
<td>Fat</td>
<td>0.13 &quot; &quot; &quot;</td>
<td>0.11 &quot; &quot; &quot;</td>
</tr>
<tr>
<td>Albumen</td>
<td>3.28 &quot; &quot; &quot;</td>
<td>2.59 &quot; &quot; &quot;</td>
</tr>
<tr>
<td>Sugar</td>
<td>1.93 &quot; &quot; &quot;</td>
<td>0.50 &quot; &quot; &quot;</td>
</tr>
<tr>
<td>Organic matter, free from nitrogen, extracted by water</td>
<td>1.17 &quot; &quot; &quot;</td>
<td>1.58 &quot; &quot; &quot;</td>
</tr>
<tr>
<td>Cellulose</td>
<td>0.90 &quot; &quot; &quot;</td>
<td>1.10 &quot; &quot; &quot;</td>
</tr>
<tr>
<td>Starch, etc</td>
<td>1.37 &quot; &quot; &quot;</td>
<td>1.23 &quot; &quot; &quot;</td>
</tr>
</tbody>
</table>

The ashes consisted principally of phosphates, carbonates, and chlorides; only a small quantity of sulphates was present. Much potassium was found, but of sodium, magnesium, calcium and iron very little. The matured stem of the bamboo contains a considerable quantity of silicic acid, but the *Take-no-ko* appears to be almost free from it.
The analysis has proved that the bamboo shoots brought to me at that period of their development must be considered a nourishing vegetable, and that they may even rival the cauliflower and asparagus. The taste cannot be brought into account: *de gustibus non est disputandum*.

The *Take-no-ko* is also eaten in a more developed state. Then of course a larger quantity of cellulose has been produced, and the quantity of albumen and sugar has become smaller in proportion.
SOME JAPANESE MUSICAL INTERVALS.

BY

REV. P. V. VEEDER, D.D.

(Read October 23rd, 1878.)

In the First Part of Vol. V. of the Transactions of this Society there was printed in connection with the Rev. Dr. Syle's paper on Primitive Music, a diagram the original of which was prepared by me and intended to exhibit to the eye some Japanese musical intervals which I have measured, by means of the syren and the monochord, and to afford the means of comparing these intervals with those of certain European scales. Having been asked by several members of this Society for an explanation of the diagram, and further requested to describe the results of my examination of the intervals given by some very ancient flutes and flageolets brought from the temples at Nara, I propose in this paper to comply with their request.

I may first be allowed to explain the meaning of a few technical terms and to refer to some of the principles of the physical theory of music. My task is rendered comparatively easy by the fact that public attention is just now so powerfully drawn by the telephone and the phonograph to the physical nature of the more or less musical sounds produced by the human voice. Every musical sound is now familiarly known to be produced by regular vibrations, first imparted to the air or some other elastic medium by a vibrating body, and then imparted by that medium to the ear: and further the pitch of (77) a
musical tone is well known to depend solely upon the number of vibrations per second. If, then, two tones are each produced by the same number of vibrations per second, they have the same pitch and may be conceived of as being on the same level, and in musical notation their notes would be written upon the same line or in the same space between lines. If one of two tones is higher than the other it is because its vibrations are more rapid, and it is said to be higher perhaps because its note in European notation would be written on a higher line or space. A musical interval, therefore, may be represented to the eye by a difference of level or by a distance between two lines, and this is the method adopted in the diagram. It should be clearly understood, however, that, strictly speaking, a musical interval is measured by a ratio of numbers—that is, by dividing the number of vibrations producing the higher tone by the number producing the lower tone. Thus, if the vibrations are as 2 to 1, that is if the ratio is 2, we have the interval called an Octave: if the ratio is \( \frac{3}{2} \) the interval is called a Quint or a Fifth. It follows from this that when intervals are combined or added together, these ratios must not be added but multiplied together. Thus, if we wish to add a Fifth to an Octave we must multiply the ratio \( \frac{3}{2} \) by the ratio 2, obtaining as the result the interval \( \frac{6}{2} \), and not the interval \( \frac{2}{2} \), which would be the result of the ratios. In like manner, if a larger interval is to be diminished by a smaller one, the ratio of the first interval must be divided by that of the second. This will explain the import of the fractions placed between the unbroken lines on the diagram. Thus, in the Natural scale the interval between the tones E₂ and F₂ (called a Major semitone) is expressed by the ratio \( \frac{16}{15} \), which is exactly equal to the ratio \( \frac{218.5}{200} \) between the number of vibrations producing these two tones. The corresponding interval in the Pythagorean scale is seen to be smaller, and is expressed by the ratio \( \frac{256}{243} \) found by dividing \( \frac{16}{15} \) by \( \frac{81}{80} \), because the Pythagorean semitone is less than a Major semitone by the interval \( \frac{81}{80} \), called a comma. So, again, the second interval from the
bottom in the Pythagorean scale is the ratio $\frac{9}{8}$, called a Major tone (the word "tone" being here used in the sense of interval), while the corresponding interval in the Natural scale is $\frac{10}{9}$, called a Minor tone, being smaller than a Major tone by a comma, and we have but to multiply $\frac{10}{9}$ by $\frac{81}{80}$, in order to obtain the Major tone $\frac{9}{8}$ so characteristic of the Pythagorean scale.

(78) But there is a way of representing these ratios and these processes of multiplication and division of ratios to the eye by means of spaces between lines. Availing ourselves of the fact that numbers may be multiplied together by adding together their logarithms and divided by subtraction, we may represent any number of successive intervals by the significant figures of their logarithms, and exhibit them to the eye by a succession of lines whose distances apart are measured by these significant figures. For example, the logarithm of the Minor tone $\left(\frac{10}{9}\right)$ is .0511, that of the Comma $\left(\frac{81}{80}\right)$ is .0054, and the logarithm of their product is .0565, the sum of these two numbers. Taking now from a scale of equal parts a distance equal to 511, and another equal to 54, and another equal to 565, these distances will represent respectively the two intervals and their sum. As another example, the interval between the third and fourth strings of the Koto tuned in Banjiki (see the diagrams) is $\frac{33}{47}$, which may be called the Pythagorean Minor Third, consisting, as it does, of the modern European Minor Third $\frac{6}{5}$ diminished by a Comma. If now we subtract the logarithm of $\frac{81}{80}$ from that of $\frac{6}{5}$ we shall have a remainder of .0739, which is the logarithm of $\frac{33}{47}$. Comparing the distance 739 between the lines representing the tones of the 3rd and 4th strings, we find that the distance is less than the distance between the lines representing the tones A₄ and C₄ in the Natural Scale, which latter distance represents a Minor Third $\left(\frac{33}{47}\right)$. It is also shown in the diagram that the same interval $\frac{33}{47}$ is equal to a Major tone increased by a Pythagorean semitone, or to $\frac{33}{47}$.

In order to compare different scales of intervals
together with respect to their musical value and effect it is necessary to examine them in the light of the Physical Theory of Music, and this I propose very briefly to do in respect to the different series of intervals given in the diagram.

Let us suppose that we have an instrument of sixteen strings, all having the same size, density, and tension. Then the number of vibrations of each string when struck will be exactly proportionate to its length. If the first string vibrate (i.e. move completely to and fro) 134.6 times in a second it will give the tone $C_1$, the easy C of the ordinary male voice. If we make the eighth string half as long as the first it will vibrate 269.2 times in a second, and will give the tone $C_2$, the low C of the female voice. If the fifteenth string be one-fourth as long as the first its tone will be $C_3$ and its number of vibrations 538.4 (79) (See the Diagram). Strike these three strings simultaneously, and they will sound to an unpractised ear quite like a single tone, although they are in fact one and two Octaves apart. The physical reason of this is, that every second pulsation communicated to the ear by the upper tone is coincident with corresponding successive pulsations due to the next lower tone. Thus the two tones mutually strengthen each other while each retains its own character, and hence the qualities of strength and life, and even of grandeur, which belong to the music of voices and instrument in octaves.

If now the fifth string be made two-thirds as long as the first it will give 201.9 vibrations per second, or 3 vibrations while the first string gives 2, and we shall have the interval $\frac{3}{2}$ or a Fifth. Struck together, they give two tones which harmonise so perfectly as to sound almost like a single tone, for or the reason that every third vibration of the upper tone coincides with every second vibration of the lower. The harmony is, however, slightly less perfect than that of the Octaves, on account of a little confusion created by the intervening vibrations. Making now the third string four-fifths as long as the first, it will give $\frac{5}{4}$ as may vibrations and produce the tone $E_1$, the inter-
val between which and C₁ is called a Major Third. Struck at the same time with the strings C₁, G₁, and C₂ it forms to modern ears one of the most pleasing tones of the brilliant harmony called the Major Chord. Thus far we have measured these intervals from the first string, C₁. Let us now form their similar intervals from the fifth string G₁, by making the twelfth string ⅓, the ninth string ⅔, and the seventh string ⅗, as long as the fifth string. They will give forth a pleasing harmony when sounded together, exactly similar in character to the major chord just described. Making now the 2nd string twice as long as the ninth, we have the tone D₁, which will give 9 vibrations while C₁ gives 8. Let now the sixth string be made ⅔ as long as the first and we shall have the tone A₂, at an interval above C₁ called a Sixth (⅔). Let also the 4th string be made ⅔ as long as the 1st, we shall have the tone F₁ at an interval of a Fourth (⅔) above C₁. If we now subtract this Fourth from the Sixth we shall have the interval (⅔) or a Major Third. It is evident too that C₂ is a Fifth above F₁ and thus the three tones F₁, A₂, and C₂ will form another triad similar in musical character to the two previously described. But we have thus obtained all the eight tones of what is called the Natural (80) Gamut, or Diatonic Scale, without flats or sharps; and by an easy calculation from the simple ratios given above we have the following intervals:

\[
\begin{align*}
C &\quad 8 \quad D &\quad 10 \quad E &\quad 15 \quad F &\quad 9 \quad G &\quad 10 \quad A &\quad 9 \quad B &\quad 15 \quad C.
\end{align*}
\]

I have referred to the coincidence of vibrations as one cause of the pleasing effects of the chords described above. Another equally potent physical cause must be mentioned. When a tense string vibrates, it vibrates not only as a whole, but also in parts, as in halves and thirds, each part giving forth its own tone. Thus we hear not only the lowest or fundamental tone of the string, but also the Octave, the Fifth above the Octave, the second Octave, and the Third above the second Octave. When the tone C is heard, for example, we also hear the tones C₃, G₂, C₃, E₂, and yet higher tones. In like manner if the fundamental tone of a
another string be $G_1$, its overtones will be $G_3$, $D_2$, $G_3$ and $C_1$, of which the first and strongest will coincide exactly with the second overtone $G_2$ of $C_1$, and blend well with the first overtone $C_2$. In the case of octaves it is evident that all the distinctly audible overtones are in harmony. In the case of Fifths the higher overtones are not in harmony, but they are so feeble as to mar the effect but very little. As the intervals grow smaller, the lower overtones grow more and more dissonant. No ear can be pleased with such a discord as that produced by the two tones of a semitone when sounded together; there is a confusion of beats which is very disagreeable.

It thus appears that the modern Natural Gamut or Diatonic Scale has its origin in the exigencies of harmony and of what is called just intonation.

We must, however, observe at this point that this gamut is an invention of modern times, and the reason is perhaps not far to seek. If we attempt to tune a stringed instrument according to just intonation, we have to follow a somewhat simple but practically difficult rule. Starting with some tone as $C_1$, tune $E_1$ a Third and $G_1$, a Fifth above $C_1$. This gives the Tonic Major Triad. Then tune $B_2$ a Third, and $D_2$ a Fifth above $G_1$. This gives the Dominant Triad. Then tune $F_1$ a Fifth below $C_2$, and $A_2$ a Third above $F_1$. This gives the sub-dominant Triad. Lastly, tune $D_1$ an Octave below $D_2$ and we have all the eight tones of a Normal scale without flats and sharps. The difficulty here lies in the inability of any but an ear of great delicacy and (81) the utmost familiarity with the harmony of the Triad to tune a Major Third perfectly. As late as the twelfth century the Third was classified as an imperfect consonance. In fact it is easy to see that when only every fifth vibration of the upper tone coincides with every fourth of the lower tone the intervening vibrations must produce some confusion, while the overtones will increase this confusion. Hence, while the ancients were familiar with the absolute consonances, such as Unisons and Octaves, and with the perfect consonances, such as the Fifth and the Fourth, they hardly
recognized the Third as a consonance at all. According to Helmholtz, the earliest example of instrumental compositions in several parts was the dance music of 1529. In fact it is only in comparatively recent times that the true physical theory of music has given to the musician those specimens of perfect Major Thirds, by familiarity with which he is now able to obtain just intonation.

Now the Pythagorean scale, the most celebrated of all scales, ancient or modern, being the basis of the intervals of all stringed instruments turned only in Octaves, Fifths, and Fourths, presents no difficulties to the tuner of any delicacy of ear. The violin and violoncello are tuned solely in Fifths, and if we were to make a scale by means of these two instruments, and a third and smaller violin having a B string, we should have the Pythagorean intervals as the result. The E of the violin would be a little sharper than the E of just intonation, and a similar remark would apply to the B of the third instrument. It follows that a violin player, accompanying a violoncello played in just intonation on the key of C₁ would be unable to play E₂ on the open string. Without stopping to demonstrate this, I will give here the Pythagorean intervals and then proceed to show the extent to which the intervals of the Koto, as generally tuned in Fourths and Fifths, agree with them.

The intervals are:—

\[
\begin{align*}
C & \quad 0 \, \frac{5}{6} \quad D & \quad 0 \, \frac{5}{6} \quad E & \quad \frac{255}{243} \quad F & \quad 0 \, \frac{5}{6} \quad G & \quad 0 \, \frac{5}{6} \quad A & \quad 0 \, \frac{5}{6} \quad B & \quad \frac{255}{243} \quad C.
\end{align*}
\]

Comparing these intervals with those of the Modern Diatonic scale, we observe that between D and E, and between G and A we have two Major tones \( \left( \frac{5}{6} \right) \), in place of two Minor-tones \( \left( \frac{10}{9} \right) \), and between E and F, and between B and C, in place of two Major semitones \( \left( \frac{15}{13} \right) \), we have two small semitones \( \left( \frac{255}{243} \right) \).

Turning now to the different intervals of the Koto given in the (82) diagram, we see that in three cases out of five all the intervals except two are Major tones. The interval \( \frac{10}{9} \) is unknown in this scale.
The small semitone $\frac{216}{243}$ is wanting, but in reality it is twice combined with a Major tone to form the two Pythagorean Minor Thirds ($\frac{25}{27}$) which appear in each of the examples given in the diagram.

I have already shown that $\frac{25}{27} = \frac{9}{8} \times \frac{28}{243}$; that is, this Third is the sum of a Major Second and a Pythagorean semitone.

If we compare together the four series of intervals of the Koto, including that given by the mathematical method described by Dr. Müller, we find that the chief difference between these consists in the positions of these two Minor Thirds. The lower Third lies between the 4th and 5th strings in three of the scales, and between the 3rd and 4th in the remaining one. The upper Third lies between the 6th and 7th strings in three of the scales, and between the 7th and 8th strings in the remaining one.

In all cases but one the 1st string is tuned in unison with the 5th string, and in that one case (that of the Koto tuned in Sōchō) the 1st string is an Octave below the 5th string.

The three chief methods of tuning—the last three in the diagrams—were explained to me by Mr. Tōgi Suyehira the chief musician of the Emperor's band. The method, are named after the pitch pipe from which the pitch of the string tuned first is obtained. Thus in tuning the Koto in Taishiki, the tuner began with the 2nd string, which he put in unison with the third pitch pipe called Taishikicho (668 vibrations), corresponding nearly to $E_2$. He then tuned the other string in Fifths, Fourths, and Octaves, in the following order. Making the 5th string a Fifth above the 2nd string, the 1st an Octave below the 5th, the 3rd string a Fourth below the 5th, the 6th a Fifth above the 3rd, the 4th a Fourth below the 6th, he obtained all the intervals necessary for tuning the rest of the strings by means of Octaves, that is, he tuned the 7th an Octave above the 2nd, the 8th an Octave above the 3rd, etc., etc.

The mathematical method of tuning, described by Dr. Müller, gives the same intervals. In tuning the Koto in
Banjiki the 7th string was first tuned in unison with the pitch pipe of the same name (1017 vibrations). Then in order, the 2nd string was tuned an Octave below the 7th, the 4th a Fourth above the 2nd, the 3rd a Fourth below the 5th, the 6th a Fifth above the 3rd, the 1st an Octave below the 5th (83) and then the 8th, 9th, 10th, 11th, 12th and 13th respectively an Octave above the 3rd, 4th, 5th, 6th, 7th and 8th. The Koto tuned in Sōchō had its 2nd and 1st strings in unison with the pitch pipe of that name (806 vibrations: nearly G2). Then the 3rd string was tuned a Fourth below the 5th, the 6th a Fifth above the 3rd, the 4th a Fourth below the 6th, the 7th a Fifth above the 4th, and then the 8th, 9th, 10th, 11th, 12th and 13th strings respectively an Octave above the 3rd, 4th, 5th, 6th, 7th and 8th strings.

The astronomical method of tuning the Koto requires the use of twelve pitch pipes, the names and intervals of which are given in the diagram, and are in the following order, beginning with the pipe whose pitch is the lowest. Ichiyedzu, Dankin, Taishikicho, Shōjo, Kamu, Sōchō, Fushō, Wōshō, Rankio, Banjiki, Shinsen, Jōmu. The pipes which I examined were very ancient ones, and consisted of small bamboo pipes, from 3 to 6 inches in length, and arranged side by side. At the present day the pitch pipes are usually reed pipes, and give somewhat different tones and intervals. The astronomical method of tuning is derived from a supposed connection between tones and the seasons of the year, and depends upon the use of a circular diagram, commonly placed upon a movable disk, in which the names of the twelve months of the year are written in order near the circular edge. Lines are drawn across the circle in such a way as to pass from a selected month, first to one 6 months forward then to one 4 months backward; then again to one 6 months forward and lastly to one 4 months backward. In this way the five Koto tones, called in succession Kin, Sho, Kaku, Tshi and U, are determined by simply making one of the strings, say the second, agree in tone with one of the pitch pipes, say Taishiki, and then making the 5th, 3rd,
6th, and 4th strings agree respectively with Rankio, the 6th pipe above Taishikicho, Kamu the 4th pipe below Rankio, Shinsen the 6th pipe above Kamu, Fushō the 4th pipe below Shinsen. In practice the circular disk is placed on a plate so that the circle containing the names of the months may be adjusted at pleasure in connection with the names of the pitch pipes.

According to Dr. Müller, however, the two Koto tones, Tshi and U, are made a little flatter than the tones which the rule above would give.

This method of tuning is said to be much in use, but the imperial musicians did not appear to use it in tuning the Koto for the performance (84) of any of the ancient music of which they gave me specimens. It is probable that one of its chief uses is to determine the normal for the position of the two Minor Thirds in the different styles of tuning the Koto, described in a preceding part of this paper.

I now propose to give the results of a careful examination of the intervals given by a number of very ancient flutes and flageolets brought from Nara by Mr. Machida, the Director of the Hakurankai, who aided me in the examination.

For the sake of brevity I omit a detailed description of these instruments, further than to say that the flutes were of the ordinary size of Japanese flutes, from 16 to 18 inches in length, and provided with six large finger holes at equal distances, and a mouth-hole one-fourth of the whole length of the flute from the closed end, and that their materials were ivory, bamboo, and marble. The flageolets were of the same description and size, the mouth-hole being replaced by a mouth-piece at the upper end.

The accompanying diagrams will need but little explanation. They give simply the intervals ascertained, and are drawn, according to the method already described, by means of the differences between the logarithms of the numbers of vibrations of the successive tones; produced first by closing all the finger-holes and then taking the fingers off one by one, commencing with the lower hole. The diagrams also
afford the means of comparing the intervals obtained with those of the normal scale.

It is apparent at a glance that these instruments, thus fingered, give intervals very irregular and incompatible with the requirements of the Koto, with which it is often played. But it should be observed that the flute players of the imperial band succeed perfectly in playing in unison with the Koto, and they do it by only partially closing, with the lower finger used, the hole which, fully stopped, would give too low a tone. The most skilful performers are fond of flattening or sharpening a tone in playing both the Koto and the flute. In the case of the Koto they do this by either pressing or lifting the string behind the bridge with the left hand: this hand, indeed, is seen to be very actively engaged in producing this effect.

If we inquire what estimate we should set on the musical character of these irregular intervals, giving in some cases three semitones in succession, we may be guided by a consideration of the difference between melody and harmony. The most perfect melody is of course that given in tones of the normal scale, but the ear of the cultivated musician also takes pleasure in chromatic runs and even in slides. A melody gives no dissonances, and therefore it will tolerate irregularities immensely greater than the sharp Thirds of the Pythagorean scale. It would be a hasty thing to condemn the music of the intervals given by these flutes. But we have seen that skilful Japanese players are able to play their flutes in perfect harmony with the Koto: in short there is a near approach to just intonation. It should be remembered, too, that until recently melody or homophonous music alone was known to the Japanese. Even at this day melody alone is intelligible to most of the people. The trumpet-players in the army are, however, familiarizing the ear of the people with the successive tones of the major chord, and gradually making them acquainted with the Major Third, and thus preparing the way for the introduction of modern polyphonic music.
## Diagrams of Intervals of Several Ancient Japanese Flutes and Flageolets

<table>
<thead>
<tr>
<th>Intervals of the Normal Scale</th>
<th>Marble Flute</th>
<th>Two Bamboo Flutes</th>
<th>Ivory Flute (Flageolet)</th>
<th>White Marble Shakuhachi</th>
<th>Engraved Bamboo Shakuhachi</th>
<th>Bamboo Shakuhachi</th>
<th>Bamboo Shakuhachi</th>
<th>Bamboo Shakuhachi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratios Logarithms per second</td>
<td>V.</td>
<td>Logarithms of their ratios</td>
<td>V.</td>
<td>Logarithms</td>
<td>V.</td>
<td>Logarithms</td>
<td>V.</td>
<td>Logarithms</td>
</tr>
<tr>
<td>16/15</td>
<td>.028</td>
<td>1054</td>
<td>—</td>
<td>—</td>
<td>1051</td>
<td>—</td>
<td>890</td>
<td>—</td>
</tr>
<tr>
<td>12/9</td>
<td>.051</td>
<td>970</td>
<td>—</td>
<td>—</td>
<td>925</td>
<td>—</td>
<td>810</td>
<td>—</td>
</tr>
<tr>
<td>9/6</td>
<td>.051</td>
<td>757</td>
<td>—</td>
<td>—</td>
<td>703</td>
<td>—</td>
<td>611</td>
<td>—</td>
</tr>
<tr>
<td>15/13</td>
<td>28</td>
<td>685</td>
<td>—</td>
<td>—</td>
<td>657</td>
<td>—</td>
<td>555</td>
<td>—</td>
</tr>
<tr>
<td>9/6</td>
<td>.046</td>
<td>640</td>
<td>—</td>
<td>—</td>
<td>633</td>
<td>—</td>
<td>496</td>
<td>—</td>
</tr>
<tr>
<td>9/6</td>
<td>.051</td>
<td>563</td>
<td>—</td>
<td>—</td>
<td>553</td>
<td>—</td>
<td>487</td>
<td>—</td>
</tr>
</tbody>
</table>
RESULTS OF OBSERVATIONS OF THE VISIBILITY OF FIVE OF THE PRINCIPAL MOUNTAINS SEEN FROM TOKYO.

BY

REV. P. V. VEEDER, D.D.

(Read October 23rd, 1878.)

(86) The condition of the atmosphere with respect to the visibility of distant objects is obviously a subject of great practical interest to the astronomer and the navigator. The most powerful telescopes are almost useless in a hazy atmosphere: and the navigator who, after days of cloudy skies, catches a glimpse of the sun over a well defined horizon or of the moon and a lunar star in a clear sky, and is thus enabled to determine his latitude, and longitude, feels that to that glimpse he owes his safety. The state of the lower strata of the atmosphere particularly is a matter of the greatest moment to coasting vessels and to ships approaching a coast. No mariner can be free from anxiety when he cannot discern the outlines of the land near which he is sailing. The clearness of the sky and especially the conditions of the lower strata of the atmosphere, with respect to transparency, are of the greatest scientific interest to the meteorologist. No region on the globe presents to him, and the astronomer and navigator as well, a more important field of inquiry in this direction than Japan. The length of its coast, the frequency of its atmospheric changes of all kinds, its position in a region (87) often, but not always, reached by the monsoons; its proximity to the largest continent, the magnitude of its maritime and agricultural interests, render the researches of the meteorologists with regard to the subject of this paper of great practical importance.
VEEDER'S VISIBILITY OF MOUNTAINS.

I have not thus far seen any detailed account of observations of the clearness of the lower strata of the atmosphere made and recorded for the purpose of throwing light on the visibility of distant objects. During the past ten months I have twice a day noted the visibility of the more prominent mountains seen from Kaga Yashiki, in Tokio, situated about four miles from the Bay of Yedo, the point of observation being about 30 feet above the ground and 108 feet above mean sea level. I have tabulated the results as follows:

(For table see page 89.)

In this table the numbers of times of "partial visibility" are given next below those of "distinct visibility," for the reason that partial visibility is in most cases, so far as it goes, a distinct visibility, the mountains being partly hidden, not by a mist, but by a well defined cloud.

I regret that lack of time precludes all detailed discussion of the results given above.

I can only say in general that a mere glance at them shows the atmosphere of this part of Japan cannot be claimed as a clear one, as compared with many continental regions. At Bombay, seven days out of every ten are clear, and the same remark applies to the Sacramento valley in California; while here not more than two days out of every ten offered views of a lofty peak like Fujiyama, about 60 miles distant, or less than three days out of every ten of a nearer peak like Bukōsan.

It will be seen, too, on a nearer inspection, that the warm months present very few clear days, at least this year. This circumstance is probably due to the influence of the south-west monsoons. In more southerly regions the vapours carried by these winds are invisible, but coming here in contact with colder masses of air are condensed sometimes into clouds, and at others into a mist only. These clouds do not often rest as fog on the surface of the earth, but are generally at considerable elevations, and they are often accompanied by a haze or mist of a sufficient impenetrability to hide the mountains entirely from view.
TABLE SHOWING THE NUMBER OF TIMES THE MOUNTAINS NAMED WERE EITHER DISTINCTLY, PARTIALLY, OR DIMLY VISIBLE FROM KAGA YASHIKI, TOKYO, DURING THREE HUNDRED AND FOUR DAYS, FROM DECEMBER 21ST, 1877, TO OCTOBER 21ST, 1878, INCLUSIVE, THE OBSERVATIONS BEING TAKEN AT 7 A.M. AND 1:30 P.M. EACH DAY.

<table>
<thead>
<tr>
<th>NAMES, DISTANCES, AND HEIGHTS</th>
<th>JANUARY, 31 DAYS</th>
<th>FEBRUARY, 28 DAYS</th>
<th>MARCH, 31 DAYS</th>
<th>APRIL, 30 DAYS</th>
<th>MAY, 31 DAYS</th>
<th>JUNE, 30 DAYS</th>
<th>JULY, 31 DAYS</th>
<th>AUGUST, 31 DAYS</th>
<th>SEPTEMBER, 31 DAYS</th>
<th>TOTAL</th>
<th>NUMBER TIMES SEEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fujiyama: 60 miles, W. by S.; Height, 12302 feet.</td>
<td>Distinctly 112</td>
<td>13</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>55</td>
<td>216</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Partially 1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Dimly ... 4</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>Total 216</td>
<td>18</td>
<td>19</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>89</td>
<td>75</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Bukōsan: 40 miles, N. W. by W.; Height, 4633 feet.</td>
<td>Distinctly 117</td>
<td>24</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>Partially ...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
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<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>Dimly 3</td>
<td>12</td>
<td>7</td>
<td>6</td>
<td>10</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Total 4</td>
<td>12</td>
<td>3</td>
<td>11</td>
<td>5</td>
<td>6</td>
<td>12</td>
<td>8</td>
<td>15</td>
<td>12</td>
<td>137</td>
</tr>
<tr>
<td>Asama yama: 84 miles, N. W.; Height, 8284 feet.</td>
<td>Distinctly 1</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Partially ...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>Dimly 1</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>15</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total 1</td>
<td>6</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>11</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>39</td>
<td>35</td>
</tr>
<tr>
<td>Nantai san (Nikkō): 76 miles, N.; Height, 8196 feet.</td>
<td>Distinctly 3</td>
<td>10</td>
<td>15</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>49</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Partially ...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
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<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>Dimly 4</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>Total 7</td>
<td>21</td>
<td>22</td>
<td>14</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>34</td>
<td>82</td>
</tr>
<tr>
<td>Tsukuba san: 40 miles, N. E.; Height, 5000 ft. (est'd)</td>
<td>Distinctly 2</td>
<td>14</td>
<td>15</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Partially ...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
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<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td>Dimly 4</td>
<td>6</td>
<td>12</td>
<td>15</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>46</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total 6</td>
<td>2</td>
<td>27</td>
<td>11</td>
<td>11</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>5</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Grand total 20</td>
<td>92</td>
<td>103</td>
<td>78</td>
<td>32</td>
<td>15</td>
<td>21</td>
<td>29</td>
<td>17</td>
<td>39</td>
<td>35</td>
<td>2</td>
</tr>
</tbody>
</table>

In the cooler months, on the other hand, the prevailing winds are from northerly directions; and coming, as they

1These distances and heights were kindly furnished by E. Knipping, Esq.
do in this part of Japan, from over the interior ranges of mountains, they are generally dry and (89) transparent. Hence the great amount of sunshine in this locality as compared with Great Britain in the months from September to April.

The totals of the number of times of the visibility of all the mountains taken together for each month, and given at the bottom of the table, give the following as the order of the months, beginning with the clearest month:—

February, January, March, October, December, September, April, July, June, August, May.

In this series December (1877) and October (1878) are assigned places determined by multiplying their numbers respectively by 3 and 2.
NOTE OF A RECENT DISCOVERY
OF HUMAN REMAINS IN THE
IBARAKI KEN.

BY

T. R. H. McCLATCHIE, Esq.

(Read October 23rd, 1878.)

The province of Hitachi, which forms the principal portion of the district under the jurisdiction of the Ibaraki Ken, is bounded on the south-east by the Tonégawa. From this river, which is just here a very fine and broad stream, there run inland, in a northerly and north-westerly direction, several large lagoons of considerable length. Of these lagoons, that on the extreme east is styled Nishi-ura, and between it and the Pacific Ocean stretches a long narrow promontory, extending so far to the southward as to face the town of Chôshi at the very mouth of the Tonégawa. This promontory comprises the whole of the department of Kashima, so named after a very ancient and celebrated shrine therein, situated half-way down the said promontory. Just to the south of the Kashima shrine lie two small villages called Hirai and Kitaki, and at this latter place it was that there was made, towards the end of May, 1878, a very interesting discovery of human remains.

The locality in question is as a whole rather low, but at intervals small bluffs rise up abruptly from the rice-fields, as in the neighbourhood of Kamakura. Near to the village of Kitaki stands one of these bluffs, commonly known in
the vicinity as "the terrace," on the lands of the Ebisawa Heihachi, of the above village. It is some (91) twenty feet in height, and for the greater part overgrown with trees and thick brushwood. Owing to a landslip, a portion of this bluff recently fell away, and disclosed an aperture leading to a small cavern within. The size of the aperture thus discovered was about two feet square, and the floor of the cave within was nine feet in length by six in breadth. The aperture was in the centre of one of the longer sides. The roof within was cut in the shape of a rough dome, its height from the floor being about six feet in the centre, decreasing towards the walls of the cave. The floor was divided into three sections, each six feet by three, by means of two small earthen banks or ridges, each three inches high, connecting the two longer sides of the cave. In the central space thus marked off there lay, at the time of the discovery, a rusty swordblade with sword-guard attached, while in each of the two outer space were laid out at full length two human skeletons.

The drawings appended to these notes were taken on the spot by Japanese officials; and for copies of them, and of certain documents relating to the discovery I am indebted to the kindness of Mr. Hamada Katsuyoshi, Superintendent of police in the Ibaraki Ken.

Fig. 1 shows the general physical structure of the locality;—Fig. 2 gives a plan of the space of the cave itself;—and Fig. 3 explains the division of the floor, with the position of the sword and the skeletons.

Upon the news of this find being reported to the local government office of the Ibaraki Ken, at the large town of Mito (some 12 ri, or say 30 miles, due north of the Kashima shrine), enquiry was instituted by that office in the hope of acquiring some further information regarding this ancient tomb. A shizoku residing in the neighbourhood, named Kashima Mototoki, then sent in a paper containing extracts from old family records in his possession. This document seems so reliable that it may not be uninteresting to quote it here in full. The translation of it runs as follows:—
Fig. 2.—Plan of cave, with entrance.

Fig. 3.—Division of floor of cave, with position of sword and skeletons.
Fig. 1.

A.—Scene of landslip, without vegetation.  B.—Former landslip, now occupied by houses.  C.—Part of bluff, with vegetation.  D.—Entrance to cave, discovered owing to landslip.  The dotted line marks the base of the bluff.
"The descendant in the 8th generation of Yoshimochi, the Daijō of Hitachi (whose name was afterwards changed to Kunika), was called Akimoto (originally named Narimoto). He dwelt in the Castle of Kashima, and was the ancestor of the Kashima family. When the family line descended to Harutoki—in the 21st generation from Akimoto—he possessed a fief yielding merely 35,000 koku, in the department of Kashima. At this time the Sataké family dwelt in the Castle (92) of Mito;—they put forth their might, created disturbance in the country, and endeavoured to seize upon the lands of Kashima also. Harutoki opposed this, and in consequence troops were repeatedly sent against him; and in the 2nd month of the 19th year of the period Tenshō (1591 A.D.) a large army laid siege to the Castle of Kashima. Being unable to cope with the superior numbers of the enemy, the Castle was eventually taken, and Harutoki, in company with his son Akichika, left it and proceeded in the direction of the village of Hirai. While still on the road they committed suicide. At this time large numbers of their young samurai and chief retainers fell in battle. Among these, one Tokisuké, grandson of Kitaki Nagato Sanénobu, endeavoured to reach the fortress under his charge at the village of Kitaki. This place, however, was already surrounded by the enemy, and so, being unable to enter it, he is said to have committed suicide in its neighbourhood. In my opinion, the cave in which were found the human bones and the sword was probably the ancient tomb of Tokisuké and the others who attended him."

This document is dated May 23rd, 1878, and the author of it appends a note to the effect that he had copied the above verbatim from a record compiled by one Iséjiu-maru Mototsura, the third son of that Kashima Harutoki who is therein stated to have committed suicide in consequence of having sustained defeat.

Whether these human remains were actually those of Kitaki Tokisuké and his followers, with whom the author of the above document strives to identify them, is naturally open
to considerable doubt; but it is beyond all question that the whole of the locality is filled with the graves of those who fell in the great battle. In several other places, and particularly on the same bluff that contains this tomb, there are traces of numerous other apertures of a similar nature. These have, of late years, often been brought to notice owing to landslips, and in some instances resemble the small caves visible in the hills around Kamakura. At the latter place, however, these caves are said to be the remains of subterranean dungeons, not of tombs.

The sword mentioned as having been found alongside the skeletons is now preserved at Mito, in the office of the local government, and I was there favored with a sight of it. It was about three feet in length, and nearly straight, the blade being very broad and heavy—all characteristic (93) marks of the swords made in the province of Déwa, over which the Sataké family formerly ruled. The metal was completely destroyed by rust, but the general shape of the blade could still be easily distinguished. About three inches below the point a large portion of the edge had been broken away, as though by a heavy blow. No metal mountings or ornaments, such as are usually placed on scabbards, had been found, and this would seem to imply that the weapon was laid in the tomb unsheathed. An iron guard, shaped like a heart, the point being towards the edge of the blade, was fixed in its place on the sword when discovered: this is a comparatively old style of Japanese swordguard.

The ancient custom of burying with a corpse different articles that had belonged to the person during his life-time has formed the subject of discussion by this Society on a former occasion. In some families of rank it was a common occurrence to place in or on the coffin a drawn dirk, supposed to act as a charm to defend the body from the attacks of demons. And in the case of soldiers who had fallen in fight, as it seems reasonable to suppose that these men did, it would be an idea essentially Japanese to inter with them some weapon that might have been wielded by them at the time they met their death.
I should add that as a good deal of attention appears to be given at the present time to antiquarian research in the Ibaraki Ken, it is not improbable that there may ere long be made other discoveries of a similar nature.
A General Meeting of the Society was held at the Grand Hotel, Yokohama, on Wednesday, 23rd October, at 8.30 p.m Mr. J. J. Keswick, Vice-President, occupied the chair.

The following papers were read:—"Note of a Recent Discovery of Human Remains in Ibaraki Ken," by Mr. T. R. H. McClatchie; "An Analysis of the Bamboo Root," by Dr. Dwars; and "On some Japanese Musical Intervals," by the Rev. Dr. Veeuer.

Dr. Veeuer also gave an explanation of some Meteorological Diagrams for 1878.

Announcement was made of the election of the following gentlemen as members of the Society:—Mr. W. M. Angas, Mr. W. Barr, A.I.N.A., Mr. G. S. Brindley, Mr. J. A. Ewing, B.Sc., F.R.S.E., and Mr. A. W. Thomson, C.E., B.Sc.
ANCIENT JAPANESE RITUALS.

No. 1.—THE PRAYING FOR HARVEST.

BY

ERNEST SATOW.

(Read November 12th, 1878.)

One of questions most frequently asked by those who take interest in Japanese subjects is, "What is the nature of Shiōtau"? It might seem at first sight that the answer should be easy, but this is not the case. In the first place, there are several kinds of Shiōtau to be distinguished before an answer can be given. There is the Ryāubu Shiōtau, in which the primitive belief has been overlaid and almost hidden by a mass of Buddhist mysticism, and I cannot say that I have had time to study it at all. Then we have the Yuwitsu Shiōtau, also consisting mainly of a Buddhist superstructure on a Shiōtau foundation; the Deguchi Shiōtau, in which the ancient belief is explained by means of the Chinese Book of Changes, and the Suwiga Shiōtau, which is a combination of Yuwitsu Shiōtau and the teachings of the Chinese philosopher Choohe. Besides, these there is the real Shiōtau, by which I mean the belief actually held and the rites practised by the Japanese people before the introduction of Buddhism and the Chinese philosophy, to which must further be added the Shiōtau of modern writers, such as Motowori and Hirata, whose views
I have attempted to summarize in a (96) paper entitled the "Revival of Pure Shintō." Of all these kinds, unquestionably the most interesting to students of comparative religion is the Shintō of the primitive Japanese, because if we can separate it from the spurious counterfeits and adulterations which are presented to us as Shintō, we shall probably arrive at a natural religion in a very early stage of development, which perhaps originated quite independently of any other natural religion known to us, and that would certainly be of value, as showing one way in which a natural religion may spring up. The materials for this study consist of certain books belonging to the earliest period of Japanese literature, some of which are older than the introduction of the Chinese art of writing, but in the absence of any native system of writing, have been preserved first by oral tradition and later through the medium of the Chinese characters. As long as these books remain locked up in the original language, they can be accessible, of course, only to the very small number of students who have specially directed their attention to this portion of Japanese literature. There is a wide field for research in Japan, and few if any can hope to find time to explore it thoroughly, because of the difficulties which the language presents. It seems, therefore, most practical to endeavour to remove the principal obstacle which prevents inquirers from learning at first hand what this primitive belief and these early rites were, by making as accurate translations as possible of the most important texts. For thus we shall be contributing towards the stock of material, which must be gathered together for examination by those whose special training fits them to draw the proper inferences from the scattered facts, of which each individual specialist can know only a small portion.

In studying the primitive religion of the Japanese people there are two principal avenues open to us. We may examine the myths which are contained in the
Nihoṣgi, Kozhiki and other early records of tradition, and by analyzing the names of the gods and other supernatural beings who figure in those legends, discover the real relation in which they stand to each other and the true signification of the stories concerning them. In this way we should gain a general idea of the accepted belief concerning the gods, that was current at the time when those records were compiled, that is to say, if the expression be admissible, of the theory of Shiṣtau, and at the same time it would become possible to show how and in what order these myths were evolved. But of not (97) less importance than this inquiry would be an investigation into the practical side of Shiṣtau, by considering the attitude which the worshipper assumed towards the objects of worship, the means which he adopted of conciliating their favour or of averting their anger, and the language in which he addressed them. To describe the ceremonies used in the worship of the gods, the buildings in which it was celebrated, the organization of the priesthood, such as it still is, or can be shown to have been in earlier times, would also be of great interest, but such researches would require more ample leisure than falls to the lot of most foreign residents in this country. It would be necessary to visit the chief temples in different parts of the country, to enter into relations with the priests in charge of them, and to be present at their principal festivals. Tied to one spot almost throughout the year, as most of us are, we must content ourselves with such kinds of information as are to be obtained from books, which though not entitled to be accepted as infallible guides, will yield valuable results when studied with care and patience.

An important part of every performance of Shiṣtau rites, not less so than the presentation of offerings to the god or departed human spirit, is the reading or recitation of a sort of liturgy or ritual addressed for the most part to the object of worship, in which the grounds of this worship are stated and the offerings are enumerated. The Japanese
word for such a liturgy or litual is norito*, frequently pronounced notto, (98) according to a well-known law of phonetic corruption. These norito may be, and often are, composed for a single special occasion, as for instance a funeral conducted according to Shintau rites, and the Government Gazettes of the years immediately succeeding the Mikado's restoration in 1868 contain a large number of these occasional norito. Amongst them are rituals recited to add greater solemnity to the oath by which the sovereign bound himself to govern in accordance with liberal ideas, to celebrate his removal to the eastern metropolis, to obtain military success over his enemies, to give sanctity to the institution of an order of lay-preachers who were intended to spread abroad the teachings of Shintau, in honour of the gods of war, and to confirm the bestowal of posthumous titles on certain predecessors of the Mikado who had hitherto not been recognized as legitimate sovereigns. The norito used in the celebration of the annual service called Chi-noisai (鑼魂祭), the object of which is to pacify the Mikado's soul, or, in other words, to ensure to him continuance in bodily health, is also said to have been from the earliest

* The etymology of norito is not quite certain. It is evident, however, that nori is the verb nori, to say, which occurs in the modern na-nori, to say one's name. Mabuchi thinks the complete expression should be norito-goto, the last element of which is of course koto, word, and he considers to to be a phonetic corruption of te, contracted from tete, to give, so that the whole would mean 'words pronounced and given,' that is, given by the gods to the priests. Motowori disputes this derivation (K. Zh. K. D. VIII. 48, Ohob, Kot. Gosh. II. 11 verso) and shows that there is no evidence that the norito were ever supposed to have been taught to the priests by the gods. He endeavours to prove that the true etymology is nori-tokigoto, and asserts that toki as well as nori means 'to say,' 'to pronounce,' so that it may be used of speech addressed by an inferior to a superior, as well as vice versa. A more modern opinion is that nori-goto was the original form into which a redundant syllable to has been introduced for euphony's sake. It is difficult to accept this last view. Motowori's certainly appears the least open to objection, and the only point against him is that toku properly means 'to unfold,' 'to explain,' and that 'say' is a meaning consequent upon the association of toku with the Chinese character 説.
ages composed afresh on each occasion; but it is evident that there would be a tendency for a regularly recurrent ritual to settle down into a nearly constant form, from which the variations would be insignificant and might finally disappear altogether. This apparently happened in the cases of a considerable proportion of the rituals used in the services celebrated in early times at the court of the Mikado, for out of seventy-five such recognized services which are enumerated in the Yeōgishiki, we find that in the tenth century the precise wording of the rituals is prescribed for nearly thirty, and those undoubtedly the most important of the whole number. Whether they had all been committed to writing before the promulgation of the Ceremonial Laws of the year 927 (Yeōgishiki) is not known, but there seems good ground for supposing that some of them at least had assumed their present form much earlier. Mabuchi ascribes the congratulatory address of the chieftains of Idzumo, which is included among the norito, to the reign of Zhiyomei Teōwau (船舶明天皇, 629-641), the General Purification to that of Teōmu (天武, 673-686) and the Praying for Harvest, which is the subject of this paper, to the reign of Kuwaniin (光仁, 770-782), but his grounds for assuming these dates as the probable age of the norito in question, are chiefly peculiarities in the use of certain Chinese characters to represent certain Japanese words (e.g.  for mikoto, instead of ), from (99) which no trustworthy inferences can be drawn, since the scribes of that age were addicted to numerous irregularities in the use of Chinese ideographs. It is more likely that the norito, as we have received them, had been transmitted orally, without any material alteration, for generations before they came to be written down. A principal reason for holding this opinions is that they contain not a few words, the meaning of which had been so far forgotten, that no Chinese equivalents could then be found for them; and instead of being translated into Chinese characters, they were written down phonetically. Of these words some have been ingeniously interpreted by modern native philologists, but there remain a good number that have hitherto
defied analysis, and the preservation of such unintelligible words, instead of substituting something that could be readily understood, is a powerful argument in favour of the antiquity of the present text of those norito in which they occur.

A few bibliographical notes will be useful to those who wish to study the rituals in the original. The Ye ngishiki, or Ceremonial Law referred to above, had been preceded by two similar codes compiled by authority of the sovereign and published respectively in 820 and 871, which took the titles of Kouni shiki and Jiyaugu wa shiki from the chronological periods in which they were produced. The former is believed to be no longer extant, and the author of the bibliographical work entitled Gu nshyo ichirai condemns as a forgery the twelve sections in MS. which go by its name, but the latter has been preserved, and the first printed edition of it appeared only a few years since. It contains more detailed instructions for the celebration of certain Shi ntau services than even the Ye ngishiki which superseded it, and is on that account esteemed of great value; but the rituals do not seem to have been included in it, probably because there was still sufficient vitality in the Shintau religion to preserve the tradition without the special sanction of an authoritative publication. In 905 a commission of twelve functionaries and scholars, to whom others were afterwards added, was appointed to revise the ceremonial law, and the result of their labours was a collection of regulations in fifty books, to which the title of Ye ngishiki was given from the chronological period in which it was begun (901-23), though it was not promulgated until the year 927. Of these fifty books the first ten are exclusively occupied with matters concerning the practice of the Shi ntau religion, such as the ceremonies observed (100) and the offering made at the fixed annual, and at the occasional, services (bks. 1-3), the organization of the priesthood at the temples of Watarahi in Ise, the ordering of the services at those temples and the ceremonies connected with their maintenance and reconstruction every twenty years (bk. 4), the consecration of two virgin princesses of the Mikado's family, one as priestess of the
temples of Watarahi, the other for the temples of Kamo in
Yamashiro, with the regulations for the management for
their households and the services in which they took part
(bks. 5 and 6), the ceremonies which were performed to
celebrate the accession of the sovereign (bk. 7), a catalogue
of the chief Shinte temples recognized as entitled to state
support (bks. 9 and 10), while in one book, the 8th, were
collected together the norito or rituals to be used at the
chief services.

The first printed edition saw the light in 1647 under the
editorship of Nakahara Mototada. It was complete all but
book 13, a copy of which was known to be in the possession
of the noble family of Kudeu, but Nakahara was unable to
gain access to it. A transcript of this copy was discovered
by the well-known scholar Hayashi Daushiyu in the library
of the prince of Wohari in the following year, and the whole
work was eventually published by a Kiyauto bookseller
named Idzumozhi in 1657. Ten years later the text was
revised by Matsushita Keiri, and new blocks were cut. In
1723, a copy having been ordered by the government, it was
found that the blocks were much worn and worm-eaten, so
that a fresh set had to be engraved. Advantage was taken
of the opportunity to correct the text again, and an edition
was produced which satisfied everybody's wants for the next
hundred years. This is the edition commonly found in the
booksellers' shops.

A much better edition is that known as the Deha-boi, for
which the text has been carefully emended, and supplement-
ed by a collection of various readings. The credit of this is
due to Matsudaira Deha no kami Naritsune, the daimiyau
of Matsuye in Idzumo. It was published in 1828, in sixty-
one volumes, and is a splendid example of good Japanese
block-cutting and printing.

There is also a printed edition of the first ten books only,
omitting the prefatory matter and list of contents usually
given. At the end of volume 10 is the date 1503 and the
signature at full-length of Yoshida Kanetomo, the originator
of the heretical form of the native religion called (101)
Yuwiitsu (唯一) Shita, from which it is supposed that he is responsible for the kana readings given by the side of the Chinese text.

The well-known scholar Mabuchi wrote a commentary in five books on the whole of the rituals contained in the Yeigishiki, to which he gave the name of Norito Kii, but this work has never been published. Just before his death he completed a revised commentary, under the title of Norito Kau, which was printed in 1800 by one of his pupils. It is still the chief guide to the understanding of the Rituals.

Commentaries on the ritual of the General Purification (Ohobarahi) under its more popular name of Nakatomi no harahii, are very numerous, and a list of them is to be found in the Guäshiyo Ichiräi (群書一覧), vol. ii. p. 73. Motowori’s commentary on this ritual, entitled Ohobarahi no kotoba no Goshiyaku (大祓詞後釋), which is an admirable work, has been followed by the Ohobarahi no kotoba gogo shiyaku (大祓詞後解) of Fujiwi Takanaho, the Ohobarahi Shiu-fuchiuseu (大祓執中抄) of Koäiau Yoshiki and the Ohobarahi no kotoba Saädeubeä (大祓詞三條辨) of Nemoto Manahe. Motowori also composed a commentary on the “congratulatory address of the chieftains of Idzumo,” entitled Idzumo no kuni no miyatsu ko no kamu yo-goto goshiyaku (出雲國造神賀詞後譯). Finally, Hirata Atsutane edited a very good text of all the rituals, which has been published by his son under the title of Norito Shiyaku, or Correct Reading of the Rituals (祝詞正訓), and prepared a commentary on the Ohobarahi, which has not yet seen the light. The same scholar published, under the title of Amatsu-norito Kau (天津祝詞考), the texts of several copies of an ancient ritual not contained in the Yeigishiki, which he had discovered.

The rituals are written entirely in Chinese characters, used for the most part as ideographs (mana), which are to be read into the corresponding Japanese words. No internal evidence of the exact manner in which these ideographs are to be read is afforded by the text, the Japanese syllabic characters at the side having been added in modern times,
and disputes have consequently arisen concerning the proper reading of several phrases, the discussion of which may be left until we come to the passages where they occur. The terminations of verbs and particles, called teniwoha by the native grammarians, are written with whole Chinese characters used phonetically, and belong therefore to the kind of signs known as Mañyefu-gana. Further, the Mañyefu-gana not (102) infrequently occur in the bodies of words, of which, as stated already, the meaning had been forgotten or could not be adequately expressed by any combination of ideographs. In several places a note is attached to ideographs showing how they are to be read, which was an alternative expedient for avoiding the difficulties of inadequate expression.

The order in which the ideographs are generally arranged is in accordance with Japanese syntax; and inversion, or following the Chinese order of words, is very rare. The following are all the cases of inversion which I have been able to discover. In writing the negative in zu, 不 is placed before the character which represents the negative base, as ochizu 不落, arazu 不在, ahasetamawasu 不相贈, nasazu 不成, hosazu 不于, mawosasu 不申。The causative termination shime is often represented by 令 before the base, but is also expressed in kana after it, as sasage-motasashime 令捧持, masashime 令在 or 令座, sarashime 令避 and sakayeshime 令楽, but tsutomeshimete 勧之米氏, sakayeshime 佐加敷志氏 and masashime 座志氏。Negatives of such causatives are written with 不 above, as nasashimesu 不令為, arashimesu 不令在。Honorific derivative verbs whose bases end in s are frequently written with suffix, as shirosi 所知, kikoshi 所聞, 所思, amohoshi souahashi 所行, and the causative with their base in s are written in the same manner, as tarahashi 所足, yosashi 所依。In passive forms like yakayete, 被, which denotes the passive, precedes the base yak 焼。Certain prepositions are placed before the substantives to which they belong, as kuchi yori 自口, shita yori 自下, ima yori 自今.
Gotoku 如 is as often placed at the end of the phrase as at the beginning. The adverb kaku, 'thus,' is always represented by 如此, and kakaru, 'to be thus,' by 如是. But mochite 以 always appears after the noun which it governs, with the exception of a single instance, and the same is true of ni yori 依, 'in consequence.' In one place we find the words tsuki hi, 'moon sun,' which is the Japanese order of naming the two luminaries, written 日月, sun moon, according to the Chinese practice. These rare departures from the Japanese syntactical sequence are for saving time in representing certain grammatical forms, and as they do not affect the general character of the compositions in which they occur, it cannot be inferred from their use that the rituals are in any way formed upon a foreign model. In all other cases the usual order of words peculiar to the (103) Japanese language is strictly preserved. It may in fact be fairly claimed for the greater number of the norito that they are the oldest specimens of indigenous Japanese literature extant, excepting only perhaps the poetry contained in the Kozhiki and Nihonki, and this alone would render them of the highest value to students of the language, even apart from the light which they throw upon the practice and origin of the Shintō religion.

The following is a list of the Norito contained in the Yeigishiki.

1. Toshigohi no Matsuri, service of the Praying for Harvest.
2. Kasuga no Matsuri, service of the gods of Kasuga.
3. Hirose oho-imi no Matsuri, service of the goddess of food.
4. Tatsuta kaze no kami no Matsuri, service of the gods of wind.
5. Hiranu no Matsuri, service of the temple of Imaki (dedicated to Yamato-dake no mikoto).
6. Kudo Furuaki. Ritual for the service of the temples of Kudo and Furuaki (dedicated to Chiuai Teawau and Niatoku Teawau respectively).
7. Minadzuki no Tsukinami no Matsuri. Half-yearly service performed in the sixth month (originally a monthly service, the ritual almost identical with that of the Praying for Harvest).


9. Mikado Matsuri, service of the gates.

10. Minadzuki Tsugomori no Ohobarai, General Purification celebrated on the last day of the sixth month.

11. Yamato no Fumi-no-imikibe ga tachi wo tatematsuru toki no Zhiyu, or invocation pronounced by the hereditary scholars of Yamato, in presenting a golden sword to the Mikado before the reading of the Ohobarai.

12. Ho-shidzume no Matsuri, service of the Quieting of Fire.

13. Michiahe no Matsuri, service to propitiate the gods of pestilence.

(More probably this is in reality the service of the Road Gods).

14. Ohonihe no Matsuri, or Harvest Festival.

15. Mitama wo ihahido ni shidzumuru Matsuri, the service of settling the spirits in the sanctuary.

16-24. Services at the Temples of Ise.

(104) 16. Kisaragi no Toshigohi, minadzuki shihasu tsukinami no Matsuri, or form used at the Praying for Harvest in the 2nd month, and at the monthly services in the 6th and 12th months at the sun goddess' temple.

17. Toyuke no miya. The same form, slightly varied, to be used on these three occasions at the temple of the goddess of food. Both were read by the Mikado's envoy.

18. Udzuuki no kamu miso Matsuri, or presentation of sacred clothing at the temple of the sun-goddess in the 4th month.

19. Minadzuki no tsukinami no Matsuri, or form used by the chief priest at the temple of the sun-goddess at the monthly service in the 6th month.

20. Nagatsuki no kamu name no Matsuri, or service of the Divine Tasting (Harvest festival) in the 9th month, at the temple of the sun-goddess.

21. Toyuke no miya no onazhi Matsuri, or, same service
at the temple of the goddess of food. This and No. 20 were read by the Mikado's envoy.

22. Onahziku kamu name no Matsuri, service read on the same occasion by the Chief Priest of the Temples of Ise.


24. Ohomikami no miya wo utsushi-matsuru norito, ritual for the removal of the goddess to her new temple.

25. Tatari-gami wo utsushi-yarafu Matsuri, service for the removal and dismissal of avenging deities. (Considered to be really the Michiahe ritual).

26. Morokoshi ni tsukahi wo tsukahashu toki ni mitegura tatematsuru, offerings made on the occasion of the despatch of envoys to China.

27. Idzumo no kuni no miyasuko no kamu Yogoto, or Congratulatory address of the Chieftains of Idzumo.

The Praying for Harvest, or Toshigohi no Matsuri, was celebrated on the 4th day of the 2nd month of each year, at the capital in the Zhišgikuwañ or office for the Worship of the Shinto gods, and in the provinces by the chiefs of the local administrations. At the Zhišgikuwañ there were assembled the ministers of state, the functionaries of that (105) office, the priests and priestesses of 573 temples, containing 737 shrines, which were kept up at the expense of the Mikado's treasury, while the governors of the provinces superintended in the districts under their administration the performance of rites in honour of 2,395 other shrines. It would not be easy to state the exact number of deities to whom these 3,132 shrines were dedicated. A glance over the list in the 9th and 10th books of the Yešgishiki shows at once that there were many gods who were worshipped in more than half-a-dozen different localities at the same time, but exact calculation is impossible, because in many cases only the names of the temples are given, and we are left quite in the dark as to the individuality of the gods to whom they were sacred. Besides these 3,132 shrines, which are distinguished as shikidai, that is, contained in the catalogue of the Yešgishiki, there were a large number of un-
enumerated shrines in temples scattered all over the country, in very village or hamlet, of which it was impossible to take any account, just as at the present day there are temples of Hachimaši, Košpira, Teizhiši sama, Sašwau sama and Sešgeši sama, as they are popularly called, wherever twenty or thirty houses are collected together. The shrines are classed as great and small, the respective numbers being 492 and 2,640, the distinction being two-fold, firstly in the proportionately larger quantity of offering made at the great shrines, and secondly that the offerings in the one case were arranged upon tables or alters, while in the other they were placed on mats spread upon the earth. In the Yešgishiki the amounts and nature of the offerings are stated with great minuteness, but it will be sufficient if the kinds of articles offered are alone mentioned here. It will be seen, by comparison with the text of the norito, that they had varied somewhat since the date when the ritual was composed. The offerings to a greater shrine consisted of coarse woven silk (ashiginu), thin silk of five different colours, a kind of stuff call shidori or shidzu, which is supposed by some to have been a striped silk, cloth of broussonetia bark or hemp, and a small quantity of the raw materials of which the cloth was made, models of swords, a pair of tables or alters (called yo-kura-oki and ya-kura-oki), a shield or mantlet, a spear-head, a bow, a quiver, a pair of stag’s horns, a hoe, a few measures of sake or rice-beer, some haliotis and bonito, two measures of kitahi (supposed to be salt roe), various kind of edible seaweed, a measure of salt, a sake jar and a few feet of matting for packing. To each of the (106) temples of Watarahi in Ise was presented in addition a horse; to the temple of the Harvest god Mitoshi no kami, a white horse, cock and pig, and a horse to each of nineteen others.

During the fortnight which preceded the celebration of the service, two smiths and their journeymen and two carpenters, together with eight išbe, were employed in preparing the apparatus and getting ready the offerings. It was

* See Note 44 to the translation of the Ritual, infra.
usual to employ for the Praying for Harvest members of this tribe who held office in the Zhišgikuwař, but if the number could not be made up in that office, it was supplied from other departments of state. To the tribe of quiver-makers was entrusted the special duty of weaving the quivers of wistaria tendrils. The service began at twenty minutes to seven in the morning by our reckoning of time. After the governor of the province of Yamashiro had ascertained that everything was in readiness, the officials of the Zhišgikuwař arranged the offering on the tables and below them, according to the rank of the shrines for which they were intended. The large court of the Zhišgikuwař, where the service was held, called the Sai-in, measured 230 ft. by 370. At one end were the offices and on the west side were the shrines of the eight Protective Deities in a row, surrounded by a fence, to the interior of which three sacred archways (toriiwi) gave access. In the centre of the court a temporary shed was erected for the occasion, in which the tables or altars were placed. The final preparations being now complete, the ministers of state, the virgin priestesses and the priests of the temples to which offerings were sent by the Mikado entered in succession, and took the places severally assigned to them. The horses which formed a part of the offerings were next brought in from the Mikado's stable, and all the congregation drew near, while the reader recited or read the norito. This reader was a member of the priestly family or tribe of Nakatomi, who traced their descent back to Amenokoyane, one of the principal advisers attached to the sun-goddess' grandchild when he first descended on earth. It is a remarkable evidence of the persistence of certain ideas, that up to the year 1868 the nominal prime-minister of the Mikado after he came of age, and the regent during his minority, if he had succeeded young to the throne, always belonged to this tribe, which changed its name from (107) Nakatomi to Fujihara in the 7th century, and was subsequently split up into the Five Setsuke or governing families. At the end of each section the priests all responded 'O'
which was no doubt the equivalent of 'Yes' in use in those days. As soon as he had finished, the Nakatomi retired, and the offerings were distributed to the priests for conveyance and presentation to the gods, to whose service they were attached. But a special messenger was despatched with the offerings destined to the temples at Watarahi. This formality having been completed, the President of the Zhīngikuwaṣ gave the signal for breaking up the assembly.

The earliest account of the proceedings on these occasions is contained in the Jiiyauguwaṣ Gishiki (貞観儀式), of the year 871, and repeated with a few alterations in the Yeṣigishiki (927). We find it also almost unchanged in the Hokuzašeṣu (北山抄) of the Dainagoṣ Kištašu (b. 966, d. 1041), and in the Gouka no Shidai (江家次弟) of Ohoye no Masafusa (b. 1041, d. 1111). It may perhaps seem curious that the ceremonies should have been directed by officials organized on a Chinese model, but it can hardly be doubted that the functions which they discharged were older than the introduction of the Chinese system of administration, which merely furnished a convenient means of classifying and arranging what already existed, just as it is evident that even under the Tokugawa Shiyaṣuwa there were organs of government which the new power has merely co-ordinated and defined with greater clearness. The priestly families of Nakatomi and Išbe, and the four tribes of Urabe or diviners certainly date from a prehistoric period, and that the sanctity which antiquity confers attached to the functions with which they were clothed, is clear from their being taken up into the new religious hierarchy instituted in the ninth century, while still preserving their hereditary character.

At some remote period it was the practice to hold a monthly service at every temple or shrine of importance, at which offerings were presented either in recognition of blessings already enjoyed, or as inducements to the gods to confer the favours which were besought from them. These monthly services were afterwards curtailed to two half-yearly services, but still retained their original name of the
Tsukinami no Matsuri, or monthly services. Mabuchi thought that they were celebrated in honour of all the 3,132 shrines mentioned in the Yeìgishiki, but Motowori’s (108) opinion is that only the 304 greater shrines, the charges for whose services were defrayed by the Zhiìgikuwañ, were concerned, and this was probably the case when the most recent ceremonial laws were drawn up, although it seems likely that in the beginning the services were performed at all the recognized shrines. One reason for this view is that the liturgy of the half-yearly (so-called monthly) services is identical, word for word, with that of the Praying for Harvest, with exception of the passage in which the harvest god is directly addressed, and it is more likely that this part was inserted in a general liturgy which already existed for use on other occasions, than that the liturgy of the Tsukinami no Matsuri was borrowed from the Toshigohi, with the omission of the passage from which it was named. It will be seen that in the Praying for Harvest many gods are addressed who have nothing at all to do with the success or failure of the farmer’s toil. It seems to follow, therefore, that the Toshigohi was the less ancient of the two services. Mabuchi is of opinion that the Praying for Harvest dates back to the reign of the Mikado to whom many hundred years later the posthumous title of Suuzhiì Teìwau, or God-honouring Heavenly Sovereign, was given, and whom the fabulous early chronology assigns to the first century B.C. He gives as his grounds for this opinion the received tradition that in the reign of this sovereign all the gods received their due meed of honour, and that the wind and rain consequently came in good season, so that the seed of the field flourished; but his motive probably was the occurrence, in the first paragraph, of the phrase, “heavenly temples and country temples,” for it is recorded of Suuzhiì Teìwau that he divided the shrines of the gods into these two categories. Neither Mabuchi’s alleged reason, nor that which I suppose to have guided him, is satisfactory; but whether this ritual date from the extremely vague epoch to which he ascribes it, there seems sufficient in-
ternal evidence that it owes its origin to a very remote period of antiquity.

The offerings intended for the Temples of Watarahi in Ise were sent by the hands of a special envoy, and the short rituals used in presenting them at the shrines of the sun-goddess and the goddess of food are Nos. 16, 17 and 19 of the preceding list.

In the following translation I have endeavoured to be as literal as possible; that is to say, to use English words which exactly express in (109) their original and etymological meaning the sense of the Japanese. I have also been careful to use the same English equivalents for the same Japanese words wherever they occur. Words in italics have been supplied in order to complete the meaning.

RITUAL.

[TRANSLATION.]

He says: "Hear all of you, assembled kaũnushi and hafuri."\(^2\)

He says: "I declare in the presence of the sovran god, whose praises by the word of the sovran's dear progenitor's progeny's augustness and progenitrix, who divinely remain in the plain of high heaven, are fulfilled as heavenly temples and country temples. I fulfil your praises by setting-up the great offerings of the sovran grandchild's augustness, made with the intention of deigning to begin the harvest in the second month of this year, as the morning-sun rises in glory."\(^3\)

He says: "I declare in the presence of the sovran gods of the harvest. If the sovran gods will bestow in many-bundled ears and in luxuriant ears the late-ripening harvest which they will bestow, the late-ripening harvest which will be produced by the dripping of foam from the arms and by drawing the mud together between the opposing thighs, then I will fulfil their praises by setting-up the first fruits in a thousand ears and many hundred ears,\(^4\)
raising-high the beer-jars, filling and ranging-in-rows the
bellies of the beer-jars, I will present them [i.e. the first-
fruits] in juice and in ear. As to things which grow in
the great-field-plain—sweet herbs and bitter herbs: as to
things which dwell in the blue-sea-plain—things wide of
fin and things narrow of fin, down to the weeds of the offing
and weeds of the shore: and as to CLOTHES—with bright
cloth, glittering cloth, soft cloth and coarse cloth will I
fulfil praises. And having furnished a white horse, a white
boar and a white cock, and the various kinds of things in
the presence of the sovran god of the harvest, I fulfil his
praises by setting up the great offerings of the sovran
GRANDCHILD'S augustness.''

He says: "I declare in the presence of the sovran gods
whose praises the chief PRIESTESS fulfils. I fulfil your
praises, declaring your names—Divine PRODUCER, Lofty
PRODUCER, Vivifying Producer, Fulfilling Producer, Soul-
lodging Producer, Woman of the great House, great (110)
goddess of Food and Events-symbol-lord, thus: Because
you praise the age of the sovran GRANDCHILD'S augustness
as a long age eternally and unchangingly, and bless it as a
luxuriant age, I fulfil your praises as our sovran's dear
progenitor's augustness and progenitrix's augustness by
setting up the great offerings of the sovran GRANDCHILD'S
augustness.''

He says: "I declare in the presence of the sovran gods
whose praises the PRIESTESS of Wigasuri fulfils. I fulfil
your praises, declaring your Names, Vivifying Well, Bless-
ing Well, Long-rope Well, Footplace and Entrance-limit,
thus: Because the builders have made stout the House
pillars on the bottom-most rocks, which the sovran gods
command(s), have made high the cross-beams to the plain-
of-high-heaven, and have constructed the fresh ABODE of the
sovran GRANDCHILD'S augustness; and he hiding therein as
a SHADE from the heavens and as a SHADE from the sun,
tranquilly possesses the countries of the four quarters as a
peaceful country, I fulfil your praises by setting-up the great
offerings of the sovran GRANDCHILD'S augustness."
He says: "I declare in the presence of the sovrn gods whose praises the priestess of the Gate fulfils. I fulfil your praises, declaring your Names, Wonderful-rock-gate's augustness and Powerful-rock-gate's augustness, thus: Because you obstruct like innumerable piles of rock in the Gates of the four quarters, in the morning open the Gates, in the evening shut the Gates, guard the bottom if unfriendly things come from the bottom, guard the top if they come from the top, and guard by nightly guarding and daily guarding, I fulfil your praises by setting up the great offerings of the sovrn grandchild's augustness."

He says: "I declare in the presence of the sovrn gods whose praises the priestess of Ikushima fulfils: I fulfil your praises, declaring your names, Country-vivifier, thus: Because the sovrn gods confer on him the many tens of islands which the sovrn gods command, the many tens of islands of islands, without any falling-short, as far as the limit of the taniguku36 spassing, as far as the bound where the salt-foam35 stops, making the narrow countries wide and the hilly countries plain—I fulfil your praises by setting up the great offerings of the sovrn grandchild's augustness."

He says: "Parting the words,36 I declare in the presence of the From-heaven-shining-great-deity who sits in Ise. Because the sovrn (111) great deity bestows on him the countries of the four quarters over which her glance extends, as far as the limit where heaven stand-up like a wall, as far as the bound where the blue clouds lie flat, as far as the bounds where the white clouds lie away fallen:— the blue-sea-plain as far as the limit whither come the prows of the ships without letting their poles or paddles be dry, the ships which continuously crowd on the great-sea-plain:—the road which men go by land, as far as the limit whither come the horses' hoofs, with the baggage-cords tied tightly, treading the uneven rocks and tree-roots and standing-up continuously in a long path without a break:—making the narrow countries wide and the hilly countries plane, and as it were drawing together the distant countries by throwing many tens of ropes over them, because she does
all this, he will pile-up the first-fruits like a range of hill in the great presence of the sovran great deity, and will tranquilly take to himself the remainder."

"Again, because you praise the age of the sovran grandchild's augustness as a long age eternally and unchangingly and bless it as a luxuriant age, I plunge down the root of the neck cormorant-wise before you as our sovran's dear progenitor and progenitrix's augustness, and fulfil your praises by setting-up the great offerings of the sovran grandchild's augustness."

He says: "I declare in the presence of the sovran gods who sit in the farms. Declaring your names, Takechi, Kadzuraki, Tohochi, Shiki, Yamanobe and Sofu. Because the sweet herbs and bitter herbs which grow in these six farms have been brought, and the sovran grandchild's augustness takes them as his long food and distant food, I fulfilly our praises by setting-up the great offerings of the sovran grandchild's augustness."

He says: "I declare in the presence of the sovran gods who sit in the mouths of the mountains. Declaring your names, Asuka, Ihari, Osaka, Hatsuse Unebi and Mimusashi. Because the builders, having cut the bases and ends of the big trees and little trees which have grown-up in the distant mountains and the near mountains, brought them and constructed the fresh abode of the sovran grandchild's augustness and he, hiding therein as a shade from the heavens and as a shade from the sun, tranquilly possesses the countries of the four quarters as peaceful country, I fulfil your praises by setting-up the great offerings of the sovran grandchild's augustness."

He says: "I declare in the presence of the sovran gods who dwell in the partings of the waters. I fulfil your praises, declaring your names, Yoshinu, Uda, Tsuge and Kadzuraki, thus: If you will bestow in many-bundled ears and luxuriant ears the late-ripening harvest which the sovran gods will bestow, I will fulfil your praises by setting-up the first-fruits in ear and in juice, raising-high the beer-jars, filling and ranging-in-rows the bellies of the beer-jars, and the remainder the
soveran grandchild’s augustness takes with ruddy countenance as the divine grains of morning food, and evening food, as his long food and distant food. Therefore, hear all of you, the fulfilling of praises by the setting-up of the great offerings of the soveran grandchild’s augustness.”

He says: “Parting the words, let the Kannushi and the hafuri receive the offerings which the Imibe,14 hanging thick sashes to their weak shoulders, have reverently prepared, and lifting, bring and set them up without erring.”

NOTES.

11‘He’ is the reader of the ritual, one of the Nakatomi tribe, and the word rendered by ‘says’ signifies that the speaker is supposed to be speaking the words of the Mikado. Mabuchi reads nori-tamafu, and supposes this word to issue from the mouth of the Nakatomi, but his successors Motowori and Hirata read noru, according to which ‘He says’ are a rubric, and the ritual actually begins with ‘Hear all of you.’ I think it probable, however, that in later times, after the rituals were committed to writing, and were read instead of being recited from memory, the word noru was also read, as if it were an integral part of the norito.

21‘Kainuushi’ is the general term for all Shinto priests in the modern language, but it is more correctly restricted to the chief priest in charge of a temple. The priesthood was for the most part hereditary, and in many cases the priests could trace their descent from the chief god to whom the temple was dedicated, a fact which is easily understood when we find that a large number of gods were simply deified ancestors. From this sense of property in the temple sprang the term Kami-nushi, owner of the god, corrupted into Kunu-nushi and Kai-nushi.

3The Hafuri (pronounced hōri) were an inferior class of priests, whose chief functions were to present the offerings and read the prayers. We might translate the word by ‘deacon,’ but for the associations which this rendering would call up. Hafuri is said by some to be derived from ha, wings, and furu, to wave or (113) shake, and to represent the waving of the sleeves in performing sacred dances; but another derivation is from hafuru (pron. hōri), to throw away, which is explained by saying that their special function was originally to bury the dead and to read the funeral service over them. Hafuru is the same as haufuru, modern haumuru, to bury, which suggests the conjecture that in the earliest times the dead were simply exposed to natural decay in the middle of a forest or moor. The Chinese characters 祝部 with which hafuri is written mean literally felicitating section or body, and refer to the recital of the glorious deeds of the dead which formed a part of the ritual or address spoken over his grave.
"Sovran" as an adjective or substantive is a translation of sume (adj.) or sumera (subst.) both written 皇. Most scholars, with the exception of Motowori, consider sume to be the same as sube-, root of suberu, to have power over, to rule, which survives in the spoken language as sube-kukuru, to have the chief control of, and subete, all (adv.), the interchange of b and m being one of the commonest phenomena in Japanese etymology. I have not been able to discover what origin Motowori attributes to the word, but in one place he asserts, without offering any proof, that it is merely an honorific. This is hardly satisfactory, for a word which is now merely honorific must evidently have had some more specific meaning previously. Sumeru is the ancient term used to denote the ruler of the nation, derived from sumeru (perh. like nahe, rope, from nafu, to twist), and 'sovrain' appears to me to be the fittest equivalent in English, on account both of its close correspondence in meaning, and of its double applicability as a substantive and adjective, thus resembling the employment of sumera and sume. By adopting the spelling 'sovrain,' for which Milton is a sufficient authority, all the secondary associations connected with the ordinary spelling 'sovereign' are avoided, while the meaning here intended is made clearer.

Word is a literal rendering of mikoto, compounded of the honorific mi, identified with ma, which is constantly used as an honorific prefix in the old language, and appears in such words as ma-koto, truth (real-words), ma-sugu, perfectly straight, also in the root maru, round, perfect. Mi is prefixed to the names of things which derive their origin from the gods or the Mikado or princes of the royal house, and conveys much the same sense as 'august,' but the perpetual recurrence of this word in translation would be tedious and sometimes even ludicrous, and the purpose which it serves can be equally attained by printing the English of the word to which it is prefixed in capital letters. Mikoto is employed in another sense to form titles of gods and princes, where its fittest rendering would be 'augustness,' used like 'majesty' or 'highness,' as titles of European sovereigns and their children. Thus a son of the Mikado was anciently styled miko no mikoto, literally 'august-child's augustness.' In the names of many gods it was used alternately with kami; thus Izanami no mikoto and Izanami no kami are equally correct as appellations of the All-mother. It must, however, not be supposed that it can be employed by itself as a convertible term for kami, or that, as Kaempfer has erroneously stated, it was used alone as a designation of the (114) Japanese sovereign, in the same way that Mikado, Teišu, Teiši and so forth are applied to him.

Progenitor and Progenitrix are the most convenient renderings of kamurogi and kamuromi, which are written partly with Chinese characters used as ideographs, partly as syllabic signs (神湯支队 and 神湯蹂; in the Ohobarai 賤 and 美 are used for the terminal syllables). Kamu evidently means 'divine,' but the etymology of rogi and romi is by no means so clear. Motowori derives the one from are-oya-gimi (生祖.
君), begetting-parent-prince, by dropping a and ya, contracting re o into ro and cutting off mi from the end, the other from are-oya-me-gimi (生祖女君), begetting-parent-princess, by the same process varied by the contraction of me-gi into mi. This is a bold use of the weapons which Japanese philologists claim to have at their command, but is too far-fetched to be admitted for one moment. I am inclined to accept the explanation given by my friend and teacher Hori Hidenari, that ro is the second syllable of iro, seen in the archaic iroha, mother, iroto, younger brother, irese, husband, and irene, elder brother, where iro apparently indicates a tie of natural affection, and is identified by him with iro, colour, beauty, love, as in the modern iro-oiko, lover. Gi is ki (with the nigori), a root which in one of its significations is equivalent to 'male,' while mi correspondingly means 'female,' as seen in the pairs okina and omina, old man and old woman, in the names Izanagi, the male-who-invites, and Izanami, the female-who-invites. It is probable that ko and me, which appear in wotoko, young man, and wotome, young woman, in hiko and hime (hi=sun), honorific epithets applied respectively to men and women, are variations of the same pair of roots. If this etymology be correct, then the literal equivalents of kamurogi and kamuromi are divine-dear-male and divine-dear-female; and as these titles are sometimes written with the Chinese characters 神祖, divine ancestor, and are applied generally to all the ancestors of the Mikado, the terms used in the translation seem to convey their meaning pretty closely. They occur altogether fourteen times in the rituals contained in the Yeōgishiki. In the congratulatory address of the Chieftains of Izumo they denote the first pair of deities Taka-mi-musubi and Kami-musubi, who, according to the cosmogony of the Kozhiki, came into being next after Ame-no-mi-naka-nushi, 'the lord in the very centre of heaven,' who is called the oldest of the gods. In the same ritual we have kamurogi used of Susanowo, the ancestor of Ohonamuji. In the Praying for Harvest it will be seen that kamurogi and kamuromi are used respectively of Taka-mi-musubi and the sun-goddess, are then applied to a larger group of deities, several of whom were never supposed to be ancestors of the Mikado (unless it be admitted that the five Producers are the sun-goddess under other names), and lastly both epithets are employed in speaking of the sun-goddess herself. Much later, a couple of centuries after the beginning of the strictly historical period, Koutoku Teōwau (孝徳天皇) speaks of Chiual Teōwau (仲哀天皇), more than twenty generations earlier, as his 'dear kamurogi,' and in a poem presented to Niōmiyau Teōwau on the occasion of his fortieth birthday,* the god Sakunabikona, one of those who took the (115) greatest share in the work of civilizing the country, is called his kamirogi. Closely allied to this epithet is the word sumerogi, in which the first element is the root already mentioned, which is rendered by 'sovrán.' We find it in the Mañyeufushifu applied

* Shiyoku Nihoī Kouki, vol. xix,
to Ninigi no mikoto, the grandson of the sun-goddess and first of the Mikado’s ancestors to inhabit the earth, and also to other ancestors of the Mikado, whether gods or human beings. In two places it occurs written in kana: 須賀伎呂 (Riyakuge, v. 18, p. 22 and v. 20, p. 19 verso), where there can be no doubt of the true reading. Other ways of writing it are 皇御神 (v. 18, p. 23) 皇神祖 (v. 18, p. 34) 皇祖神 (v. 19 上, p. 28 v.; v. 7; p. 35 and v. 3 上, p. 15 v.; in the last case kamirogi is an alternative reading proposed by the commentators) and 皇祖 (v. 11 上, p. 34 v.; v. 6, p. 11 v. and v. 3 下, p. 37); in the last two cases kamirogi is suggested as an alternative reading. From these examples it seems not unreasonable to infer the former independent existence of a pair of words ino-gi and ironi which were used to denote ancestors or note-worthy personages of previous generations.

7The insertion of mikoto, rendered ‘augustness’ after progenitor, is probably the act of an ignorant copyist, who thought it was required to correspond to the second mikoto, translated word.

8Mabuchi takes the terms progenitor and progenitrix; to denote in this passage all the gods from Taka-mi-musubi and Kami-musubi down to Izanagi, Izanami and the sun-goddess, while Motowori thinks that only Taka-mi-musubi and the sun-goddess are meant. The passage in the Nihonki, which says that the distinction between ‘heavenly temples’ and ‘country temples’ was made in the reign of Suuzhin Têhwau, represents it as the final act of that Mikado after making a series of arrangements about the worship of certain other gods, but does not give the slightest indication of the ‘progenitor and progenitrix’ being concerned in the settlement. It is safest to conclude that the phrase is vaguely used without any particular significance being attached to it.

9Heavenly temples and country temples. Temple is here a metonymy for god. The only meaning which can possibly be attached to this statement is that some gods were recognized as of heavenly origin, who either remained on high or descended to the earth, and others as of earthly origin, but that any ruler could ever be the arbiter of such a question is inconceivable, and the assertion is only an additional proof of the mythical character of the Mikado concerning whom it is made.

10The word yashiro, rendered ‘temples,’ deserves a passing notice. It is compounded of ya, house, and shiro, which must mean area or enclosure. We find it in naha-shiro, area or inclosure for the young rice-plants (nahe), in mushiro, a mat (nus is mi, body; mu-shiro, area for one body), and the word shiro, usually translated ‘castle,’ is identical with it. Hence yashiro does not signify the buildings themselves, but rather the piece of land on which they are built. Metaphorically employed, shiro came to mean that which was given in ‘place’ of something, that is, price, and hence shiro-mono signifies price-things, merchandise, goods. The idea that shiro, a castle, is the root of the adjective shiro-ki, white, because of the (116) white plaster parapets, is
untenable, because the use of it in that sense dates from a period when shiroki—signified 'conspicuous,' of which 'white' is a derivative meaning.

11 Set up is the literal translation of Tate-matsuri, compounded of Tate-, to stand (t.v.) and matsuri, originally to serve, and hence used as an honorific auxiliary verb, just like haberus, on kaiburu, and safuru or samuru, in the later language. Matsuri, usually translated 'festival,' is the root of this verb, and properly signifies 'service' of a god, and matsuri-goto, government, as we are accustomed to render it, is simply 'service' of the sovereign, corresponding thus in etymology and signification to our word 'administration.' Students of the epistolary style are familiar with the use of Tate-matsuri, written 約, as an honorific auxiliary, but this character properly means matsuri, and 約 would be a more exact equivalent of the compound Tate-matsuri, if any one were to begin over again the labour of assigning correct Chinese equivalents to Japanese words. Words in the translation which are printed in italics have been supplied to complete the sense, but Tate-matsuri does actually occur in the original a little further on.

33 Grandchild, i.e. of Amaterasu o-o-hi-mi kami, the sun-goddess, meant in the first place Ninigi no mikoto, child of Oshi-ho-mi-mi no mikoto, adopted by her as her son. The latter was really the son of Susanowo, according to the myth, and consequently her nephew by birth. The Kojiki (Notices of Ancient Things, 古事記) tells the following story of the miraculous birth of Oshi-ho-mi-mi: Izanagi divided the universe between his three children, assigning the sovereignty of the heavens to the sun-goddess, giving the kingdom of night to the moon, and making Susano no ruler over the sea. Susano no neglected his royal functions, and gave himself up to such a violent fit of petulant weeping, that the land was laid bare and the rivers dried up. On being rebuked by his father, he excused himself by saying that he wanted to go to his mother in the lower regions, and was consequently expelled from the earth. He then ascended to heaven to pay a farewell visit to his sister, who was frightened by the rumbling of the mountains and streams, and by the earthquakes caused by his passing upwards, and doubting the loyalty of his intentions prepared to defend her realm against his attack. Susanowo explained the reasons which led to his visit, and protested that he harboured no evil designs. In order to test his good faith she demanded of him a sign, to which he responded by proposing that they should see which could bring into existence the best children. For this purpose they took up their position on opposite sides of the Milky Way, and the goddess, first breaking the sword which her brother wore into three pieces, plunged it into a well, and then chewing it into minute fragments, blew them from her mouth. Three goddesses sprang from the cloud of spray. Then Susanowo performed a similar series of operations with the chaplets which the goddess wore in her hair, and produced five male gods, the eldest of whom was Masakai-akatsu-kachi-hayabi Ame no Oshi-ho-mi-mi no mikoto. The
sun-goddess claimed the five as her own offspring, and told Susanowo that he might take the three female children born from the fragments of his sword. Susanowo boasted that the purity of his intentions was made clear by the birth of (117) three gentle maidens, and commenced the series of violent actions which ended in the frequently mentioned retirement of the sun-goddess into the 'heavenly rock-cavern.' In this way Oshi-ho-mi was, as it were, adopted by the sun-goddess, and his eldest child was therefore her grandson, the effect of adoption being to place the adopted person in the position which he would have held if he had been legitimately begotten by the adopter. The epithet "sovrn grandchild" having been first applied to the founder on earth of the Mikado's dynasty, came in time to be applied to each and all of his successors on the throne.

31. Deigning' is used of the Mikado, who by this service deigns, as it were, to begin harvest.

32. Beginning the harvest' means soaking the seed and preparing the ground for its reception. It has been suggested that the Chinese character 賞, commencement, may be a copyist's error for 聖, praying for. Toshiki, which exclusively signifies year in its modern acceptation, seems originally to have meant harvest, and is probably from the same root as tōru, to take. The ancient Japanese counted time by harvests, moons and suns; the first term entirely lost its earlier meaning, that of the second was obscured, and a Chinese equivalent being substituted for the third, the real nature of the units of measurement was forgotten.

33. 'As the morning-sun rises in glory,' seems at first sight an allusion to the time of day at which the service was held, i.e. between six and seven o'clock in the morning, but from the use of this phrase it appears to be adverbial to tatake-goto tatamatsu-ra, I fulfil your praises.

34. Who the gods of the Harvest were is unknown. Several temples dedicated to such gods appear in the catalogue of the Yeōgishiki, but the names of the gods themselves are not mentioned. According to the Koybiki, Susanowo begot the Great Harvest god, Ohotoshi no kami, who begot the Harvest god, Mi-toshi no kami, and several other names of deities, supposed to provide the human race with the grains which formed their chief food, occur in various myths. The most famous of these are the goddess worshipped at the Outer Temple (Gekū) at Watara-ishi in Ise, and the deity, Uka no mitama or Sarū of Food, to whom is dedicated the temple of Inari on the road between Kiya-auto and Pushimi. All other temples of Inari, of which there are thousands, are erected in honour of this Spirit of Food, and those worshipped with it, but although common speech uses the term Inari sama, as if Inari were the name of a god, it must be remembered that it is merely the name of a place.

35. The original is yatsuka bo to ikashi no mi, 八束穂能伊加志穂爾. Yā originally signified 'many,' and is no doubt connected with the old word iya, still more, which I believe to be merely an interjection
of astonishment, also used as a negative = No, identical with iya, hateful, and the root of such words as iyashiki, hateful, contemptible, iyashimu, to despise, and iyagaru (= iya ge aru), to dislike. Ya: settled down afterwards as the numeral 'eight' (the ordinary yatsu is ya, with the generic particle tsu), and at the moment when the norito were committed to writing, its original meaning had no doubt been forgotten. Tsuka is the same as (118) tsuka, hilt, and is the root of tsukamu, to grasp with the hand. Ho denotes anything which prominently attracts the attention, as an ear of corn, the spike at the end of a spear, a flame (honoho for hi no ho), in ika-ho, a big rock, also ho, a sail, nami no ho, the crest of a wave, in akami ho, Ruddiness (of countenance), perhaps also in hou, cheek. The so-called genitive particle no is the most interesting portion of this phrase, which is unintelligible if we translate no by 'of.' Students of the Maïyeshufiu (蔵葉集) will have observed that it has a dozen other uses besides this 'of.' In the present case it is most easily interpreted if we look upon it as identical with the verb ni, to be, the existence of which at an early stage of the language has been conjectured, with great appearance of truth, by Mr. Aston. The phrase would then be literally rendered by, 'the luxuriant ears which are many-bundled ears,' which is the same thing as saying 'many bundled and luxuriant ears.' It is not necessary, in order to support this view, to maintain that no was any longer understood to be a variation of the attributive form of a verb ni, to be, at the moment when this phrase was woven into the present norito; on the contrary, the infinitely varied uses of no and also of ni, which in many cases is held by Mr. Aston to be the root of ni, in the earliest extant specimens of Japanese literature, show that the original meaning of these syllables had long been forgotten.

The process of preparing the half-liquid soil of the rice fields for the reception of the young plants is thus described. An early variety of rice called wasse is sown in nurseries in the beginning of April, planted out early in May and harvested about the middle of September. In the west of Japan these several operations are probably carried out a fortnight earlier respectively.

Kaki, here rendered by 'ear,' is more exactly the seed of rice enclosed between the paleae. The same word originally applied to bivalves, which enfold the mollusc just as the paleae do the grain of corn, and it is also supposed that kahi, in the sense of a 'deep valley,' the sides of which appear to open out like the two halves of a bivalve; is identical with kahi, a grain, and kahi, a shell.

Mika no he takashire. Mabuchi explains mika to be an earthenware jar in which sake is brewed, and afterwards offered up to the gods, and he to be the same as uke, top. There are plenty instances of the omission of an initial u after o in the old literature; e. g. sakadsuki no he ni, on the top of the cup (Maïyefa v. 5. p. 27 v., i. r.). But by others mika is said to have signified the liquor itself, mi being the honorific prefix, and ki the same as ke or ki, used to denote the grain in either its solid form
as boiled rice, or its liquid form as rice-beer, and he a flat-bottomed vessel. If Mabuchi's explanation were adopted, the phrase would have to be rendered, 'raising-high the tops of the (beer) jars.'

Taka-shiri and its alternative expression taka-shiki, must not be understood literally; the secondary meaning of both shiri, to know, and shiku, to spread, is 'to govern,' 'to command,' but in the compounds which they form with adjective roots they have merely the force of the English verbal termination 'en' in such words as heighten, widen. A similar change is presented by nafu (or namu), to spin, which (xrg) forms the ending of a large number of derivative verbs, such as tomo-nafu, to accompany, azhinafu to taste, otonafu, to make sound, ni-nafu, to carry as a burden. In ito-nafu, to spin thread, it preserves: its original value, which was lost when, with the change of ō into m, this word came to be employed solely in a figurative sense.

Oho-nu-hara. Both nu (which is the archaic form of the modern no; on the authority of Mânyefu, v. 5, p. 26 v., t. 9, where we find hara no nu ni m atokata) and hara are applied to uncultivated ground, not occupied by trees, but not necessarily flat, as might be inferred from the use of the word 'plain' in the translation, Hara, belly, is no doubt identical. Still, the term no-hara is very frequently applied to wide tracts of uncultivated level ground.

Awo ni haka, the blue sea plain. Awo is evidently connected with awi, the name of the plant (Polygœnum tinctorium) from which the Japanese obtain a dye resembling indigo, and blue is therefore a fair rendering for it, especially when applied to the sea. In the Mânyefushifu, however, it is used as an epithet of horses (in the sense of black, that also being a colour afforded by the awi plant), also to clouds (white), to willow-trees (green), and to mountains (green). Mi for umi, 'sea,' is another example of the elision of an initial -assets after a terminal -ot. Some Japanese etymologists derive mim, the sea, from umu, to give birth to, thus attributing to it the meaning of 'producer,' on account of its furnishing the inhabitants of these islands with a large proportion of their daily food in the shape of fish, shell-fish, and seaweed. Another derivation from awo, blue, and mi, water, has also been proposed, but is not supported by any good authority in such matters.

On the word taka, here rendered by cloth, Mabuchi has the following note: 'As five kinds of silk cloth were offered up, and the terms 'bright' and 'glittering' express their colour, so 'coarse' and 'soft' express the coarseness and fineness of the textures. hâ is a character of which the yomi or kun is used as a kana, and in the Mânyefu we find kâ, which is the proper character to use. Cloth, whether of taka or of hemp, when fine was called nigo-taka, soft cloth, and when coarse was named aro-taka, coarse cloth, but after the date of the foundation of the present capital silk was called 'soft cloth,' and hemp 'rough,' and it is in this sense that the terms are used in the Yêngishiki.' In the earliest ages the materials
used; were the bark of the paper-mulberry (broussonetia papyrifera), wistaria tendrils and hemp, but when the silkworm was introduced the finer fabric naturally took the place of the humber in the offerings to the gods. The use of aratake as a makura-kotoba or 'pillow-word,' to Fujihara, proves that the wistaria was used in making coarse cloth. The wands adorned with strips of white paper which are seen in modern Shintō temples are the survivals of the offerings of cloth fastened to the branches of the sacred tree (masakaki) in ancient times. Yufu, which seems to have strictly meant paper-mulberry bark, also appears in some passages to include the cloth woven from it, and even hemp cloth besides.

24 The horse for the god to ride on, the cock to tell the time, and the boar (a domesticated animal), not the wild boar) for the god's food. Why white was the colour prescribed is unknown, but perhaps its rarity was a sufficient reason.

25 In the preceding sentence the plural kami-tachi occurs and is probably to be understood here also, but as the original has simply kami, deity, I have not considered it justifiable to translate 'gods,' Motowori is of opinion that only one deity is here meant.

26 Ohō mi kamu no ko is the reading given to 大御巫, which is rendered here by 'chief priestess.' These were virgins taken for a time to serve the gods, but there was nothing to prevent their being married after they had quitted the priesthood. There were apparently four such priestesses consecrated to the service of the twenty-three gods worshipped in the chapel of the Ōhi-gi-kuwān, and the chief of them was distinguished from the others by the prefix oho, great.

27 The Japanese names of these deities are Kami-musubī, Taka-mimusubī, Iku-musubī, Taru-musubī, Tama-tsūme musubī, Ohō-miyano-mo, Ohō-ke-tsu-kami and Koto-shiro-nusū. Whether musubī in the first five be compounded of musu, to grow, and hi, applied to everything that is great and glorious, as the sun for instance, according to Motowori's view, or whether it be simply the root of musubī, to tie together, matters very little; as far as the signification is concerned. All agree in giving to it a meaning which is best rendered by 'Producer.' The Kozhiki calls the god who existed before the heavens, and earth and before all other gods, Ame-no-mi-naka-nusū, or the Lord-in-the-very-centre-of-heaven, and the next gods who came into existence were the pair Taka-mi-musubī and Kami-musubī. The first part of each of these appellations is simply honorific, and does not denote any special function; nor is either god to be regarded as superior to the other, for the order in which they are named is a matter of indifference. The other three, Iku-musubī, Taru-musubī, and Tama-tsūme-musubī are not mentioned in the Nihongi or Kozhiki, and in the Kogoshū they are only enumerated together with the others of the eight deities whose worship is performed by the chief priestess. Mabuchi points out that their names closely resemble those of certain precious stones brought from Heaven by one of the gods (Nigihayahi), which in cou-
juncture with several other treasures, had the virtue of healing pain and recalling the dead to life. These stones were called *iku tama*, *taru tama*, *mageru-gaheshi tama* and *chi-gaheshi tama*. In such compounds as these, *iku*, which signifies *to live*, *to breathe*, is to be taken in the sense of *that by which one lives*, as Motowori explains in the case of *iku-tachi*, *iku-yumi* and *iku-ya*, sword, bow and arrows which have the property of giving life to the person who possesses them. So *iku-tama* is a precious stone by which life is ensured, and *iku-musubi* is literally *the producer by whom life is ensured*, which may be rendered more freely by *vivifying producer*. *Taru*, *tama* is the precious stone by which completeness, sufficiency, fulfilment of all requirements are assured, and *Taru-musubi* is the producer through whose influence perfection is attained. By perfection is here meant the perfection of bodily strength and beauty. It is possible, too, that as Motowori thinks, these two gods may have been identical with the Ikugushi and Omodaru of the Kozhiki, but the point is of minor importance, and the only argument in favour of his view is the occurrence of *iku* and *taru* in the names of the two pairs respectively. Tamatsume I take to be a (121) compound of tama, soul (the character 坊 is a karishi), and *tsume* or *tome*, to stop, detain, which is the interpretation hinted at by Mabuchi, when he compares the efficient virtue of this god with that of the stones which *turn back from death* and *from the road* to the region of the dead. These etymological interpretations do not necessarily conflict with a conjecture of mine that the five names are merely epithets of a single deity, probably the sun-goddess, whose modes of action may have thus been distinguished.

In the Yamashiro survey quoted by Motowori we find the name of a deity, 天照御魂命, which must be read Amaterasu (or Amateru) taka-mimusubi no mikoto, and means the *From-Heaven-Shining-Lofty Producer's augustness*, a combination of the ordinary epithet of the sun, From-Heaven-Shining, and the title of one of the pair of creator gods, Mi-musubi, Producer, is often written 御魂, and wherever these two characters are found in the name of a god it seems legitimate to give them that reading. Hence 天照御魂 found in three places in the Catalogue of Temples (Zhišmeichiyau) in vol. 9, pp. 7 v. 14 v. and 15 v. of the Yeishiki, Doha-bō, where the *kana* of the editor is Amateru mitama, may fairly be read Amateru (or Amaterasu): mi-musubi, From-heaven-shining Producer. This, however, is not the only argument for identifying the sun with Taka-mi-musubi. We have seen already that the terms progenitor and progenitrix of the Mikado are sometimes taken to mean both the Divine Producer and the Lofty Producer, that in some places the sun-goddess is substituted for the Divine Producer and in one place both terms are applied to the sun-goddess, who was thus both mother and father of the race. It would almost seem to have been a matter of indifference what epithets were used in speaking of the Mikado's progenitors, which is easily accounted for if we suppose those epithets to have been synonymous and therefore
interchangeable. It is also worthy of notice that, with perhaps the exception of the Soul-lodging Producer, these names of deities do not indicate distinctly separate functions (being combinations of laudatory epithets prefixed to the word ‘producer’), but rather the different effects which the beneficent workings of a single great and powerful deity would produce.

There is still another point that deserves notice. We should naturally expect to find that the first god of all, the Lord-in-the-very-centre-of-heaven, and perhaps the pair which followed him, the Lofty-Producer and Divine-Producer, would play a great part in the early legends of the Japanese; and also that Isanagi, the parent of the sun and moon, would take an important share in ordering events; but as a matter of fact we find that these deities have very little to do, with the exception of the Lofty-Producer, who is usually represented as ruling the world in conjunction with the sun-goddess. Isanagi and his consort disappear from the scene after they have given birth to the land, sea, rivers and the elements, and it is the child of Isanagi who becomes the centre of the mythology and worship of the ancient Japanese. It is difficult to resist the suggestion that the sun was the earliest among the powers of nature to be deified, and that the long series of gods who precede her in the cosmogony of the Kozhiki and Nihonogi, most of whom are (122) shown by their names to have been mere abstractions, were invented to give her a genealogy, into which were inserted two or perhaps more of her own attributes, personified as separate deities.

Oho-mi-ya-no-me is probably, as the meaning of the name suggests, the personification of the successive generations of female attendants of the Mikado. From the earliest times of which we have any record, whether legendary or historical, the sovereign appears to have been surrounded by a large number of women, and during the most recent period, that is, down to the reign of the last Mikado, none but women were admitted to his presence. The statement in the Kogo-Shiui that Oho-mi-ya-no-me was appointed to serve before the sun-goddess, when she issued forth from the cave, simply indicates the great antiquity of the practice. Faithful service was rewarded eventually by the erection of an altar to the memory of the mythical personage who was invented to be the type of all these female attendants.

Oho-mi-ke-tsu-kami, the deity of the great Food, where ‘great’ is merely an honorific term like ma; applied to anything belonging to a god or to the sovereign, is no doubt the same as the goddess of Food worshiped at the ‘Gekun,’ or Outer Temple at Watarahi in Ise. (See my paper on the temples of Ise in vol. 2 of the Transactions.)

Koto-shiro-nushi was a son of Oho-kuni-nushi (who is identical with Oho-nai-mujii), and his name contains a reference to the act by which he symbolized his surrender of the sovereignty over Japan to the descendant of the sun-goddess. When it had been determined by the council of the gods that possession should be taken of the earth in the name of the sun-goddess’ grandson, several messengers were sent in succession
to claim the land from its ruler, but as no tidings were received from them it was finally resolved to despatch Takemikazuchi, to whom was joined in the mission Ame-no-tori-fune. "These two gods descended upon the shore of the province of Idzumo. They drew their sword, ten-hand-breadths long, and planting it on the crest of a wave, hilt downwards, took their seat cross-legged on its point. They then made inquiry of Ohoko-nuni-nushi, saying: The From-heaven-shining great goddess and Takagi no kami (another from of the name Takami-musubi) have sent us to ask saying, I have charged my child to rule over the central region of reed-plains which you possess as chieflain. What is your feeling concerning this matter? He replied: I am unable to say. My child Yahe-keto-shiro-nushi no kami will be able to speak, but he has gone to cape Mibo pursuing birds and taking fish, nor has he yet returned. So Takemikazuchi sent Ame-no-tori-fune no kami to summon Koto-shiro-nushi no kami, and when the question was put to him, he said to the great god his father, I submit. Deliver up this region to the child of the heavenly god. He then trod upon the edge of his boat so as to overturn it, and with his hands crossed back to back (in token of consent), transformed his boat into a green fence of branches, and disappeared.".

The daughter of the god who thus surrendered the land to its new ruler (123) married Iharehiko, who was canonized as Zhibimm-Teiwan, and Koto-shiro-nuchi is therefore an ancestor of the Mikado by the female side; but it is doubtful whether any consideration of that kind led to his being included among the eight gods who were supposed to be in a special sense the protectors of the Mikado. The eight may be classified as follows, five synoymes of the sun-goddess, ancestress of the Mikado and bestower of the Kingdom, one deity representing the female influence that surrounded the sovereign and imparted a gentle smoothness to his relations with his subjects, the goddess of food, and lastly one of the chief gods of the conquered race, who represented the compromise of antagonistic interests.

"Wi-ga-sui is held to be a corruption of Wi-ga-shiri, behind or by the well, and of the five gods enumerated in the Zhibimmehiyam as being served by the priestess of Wi-ga-sui, viz., Iku-wi no kami, Saku-wi no kami, Tsunagu-wi no kami, Hahigi no kami and Ashsa no kami, the first three are the gods of the vivifying well, the blessing-well and the long-rope-well, which are probably synonymous epithets of some well, highly esteemed for the quality of its water and the cool depths where it lay. Ashsa is explained to be ashi-ha, foot-place, that is, the first place where the foot is set down after issuing from the house, and hahi-gi to be derived from hahirigis, entrance limit. Motowori has an elaborate and learned note on the subject of these two names which is worth consulting, in the Koshiki-den, vol. 22, p. 47. It appears from a verse in the Maibufushifu, XX, pt. 1, p. 24, that Ashsa no kami was in ancient times worshipped in the court-yard of every house, which would be easily understood if he was supposed to be the guardian deity of court-yards,
House is *mi-ya*, composed of the honorific *mi* and *ya*, 'house.' It was used indiscriminately for the house of a chieftain, the tombs of the dead and the temples of the gods.

This means that the house protects the Mikado from the weather and the heat of the sun.

Kushi-isha-mado no mikoto and Toyo-isha-mado no mikoto are the names of these two gods. In the Kogo-Shiu they are called by these names in one place, while in another *kami* is used instead of *mikoto*, a common alternation, as I have already observed. The Kozhiki says distinctly that these are simply synonyms of the single god Ihato-wake no kami, who is the 'god of the Gate,' so that we have here another case of alternative titles of a god coming to be looked on as separate gods. In the Kozhiki there is the statement that the three are one, while at the Mikado's court, a century or two later, we find that two separate gods of the gates are worshipped. The Catalogue of Temples says that there were eight shrines to the two gods named in the ritual, one to each at each gate in the four sides of the palace enclosure. Motowori's explanation of the names used in the ritual seems indisputable. *Kushi* and Toyo, wonderful and powerful, are honorific epithets; *mado* is not 'window,' but 'gate,' *ma* being the honorific prefix, so that 奥門 would be the correct equivalent in Chinese characters, and *iha* is rock, used in the (124) sense of strong, enduring, eternal. The genealogy of Ihato-wake is another instance of the confusion between Taka-mi-musubi and Kaminusubi, for while the Kogo-Shiu makes him the grandchild of the former through Futo-dama, the Shiyazuhiko (姓氏錄) speaks of a family of Tame no Murazhi descended from Ihatsu-wake (evidently the same as Ihato-wake) the child of the latter. The Catalogue of Temples contains the names of eight, in Yamato, Afumi, Mutsu, Tsu, Mimasaka, Bizehi (2) and Tosa, dedicated to Ihato-wake, besides the original temple in Taisha, with two shrines, sacred to Kushi-isha-mado. Besides the address to these gods, or to this god, which forms a part of this ritual, there is another whole ritual, called *Mikado Matsuri*, the service of the Gates, which is entirely dedicated to them, or to him.

The Japanese equivalents of these two names are *Iku-kuni* and *Taru-kuni*, the origin of which is not very clear. Perhaps they are synonyms of a single deity. From the Catalogue of Temples we learn of a temple in Yamato called Iku-kuni no Zhiizhiya, of another in Shinano called Ikushima Tarushima no Zhiizhiya, and of a temple to Iku-kuni Mitama, with two altars to a pair of gods. The last of these is probably the full title. It means the 'spirit by which the country, or region, lives.' In old Japanese, *shina* can scarcely have differed in meaning from *kuni*, and the signification common to both was more nearly that of the words 'region,' or 'country,' in such expressions as the 'Black country,' 'the west country' amongst ourselves. It is found frequently forming part of the names of places which are far inland, as for instance Hiruko-jima in Idzu. This explains the occurrence of both *shina* and *kuni* in the names of these gods and temples. The god or 'spirit who
vivifies’ or ‘completes,’ ‘fulfils’ the country, is the principal god of the locality, and is represented in later times by the Ichi-no-miya, or chief Shintō temple, in each of the provinces into which the country came to be formally divided for administrative convenience.

33In the original the expression here rendered by ‘Sovran gods’ is in the singular number, while just above (below in the Japanese) it is plural. But every student knows how commonly the singular number is used when plurality is intended.

34I have not been able to learn what species is meant by taniguku, but it is certainly a large kind of frog, which, as its name ‘valley-creeper’ indicates, is found in damp shady places.

35Salt’ is probably not the primary meaning of shihō, but rather sea-water, from which salt, properly yaki-shihō, is obtained by desiccation.

36Koto wakete, parting the words, i.e. taking up a fresh and special theme.

37As already pointed out, the Japanese language generally makes no difference between god and goddess, but we know that Amaterasu is a goddess. Hence the use of the feminine pronoun here, which, it must be noted, has no representative in the original. Like the articles, relative and nearly all other pronouns, it has to be supplied by the translator.

38This is a simile descriptive of bowing the head. In the Manyefu vol. 3 F p. (125) 12, v.) we have a similar expression shishi zhi mono kisa wori fuse, bending the knees like the deer.

39Agata originally meant ‘upper fields’ (ageta), that is to say, arable land, such as is now called hata. Mi agata were therefore the ‘august fields’ of the sovereign. The Nihon-gi speaks of officials having to be sent to the six Farms in the province of Yamato to take a census and to measure the rice-fields and arable lands. When the country was parcelled out into provinces (kuni) and departments (kohori), what had previously been called agata were renamed kohori. The six farms here spoken of are the modern departments of the same name, Kadzuraki, Shiki and Soto having been each divided into two, so that there are nine instead of six. These were no doubt selected to form the household domain of the Mikado at an early period, when the capital was still in Yamato. It will be seen by looking at the map of Yamato that they form nearly the whole of the northern half of the province, with the exception of Heguri, Hirose and Oshinomi. For further details see the long note in the Kozhiki-den vol. 29, pp. 59 et infra.

40Naga mi ke no toka mi ke in the Japanese. Here no places the two terms of the phrase in apposition, and has the force of ‘which is,’ i.e. literally rendered, distant Foon which is (at the same time) long Foon. Both words, toho and naga, have reference here to time. In the Manyefu they are thus employed over and over again; e.g.

hōfu kuyu no
iya toho nagaku
yorodasu yo ni
tayeshi ka omokite;
"thinking that it would last for a myriad ages, ever longer and more
distant, like the creeping pueraria." The idea is that the Mikado is to
partake of this food during a long life, and the whole phrase might more
freely be rendered 'perpetual Food' without its meaning being at all
sacrificed.

We know nothing more about these gods than that they were
supposed to inhabit the mountains here named, whence timber was
brought for the palace buildings. All six are situated within three
departments of the province of Yamato, where most of the ancient
Mikados had their capitals, and the expression 'distant mountains' is
consequently not to be taken literally, but rather coupled with 'near
mountains,' as a poetical way of speaking of mountains in general, just
like the taka yama and hiki yama, high mountains and low mountains,
of the Ohobarahi no Kotoba.

Mikumari is the reading of the two characters 水分, translated
'parting of the waters.' This rests on the authority of the text of the
Kozhiki Den. vol. 5. p. 38), where Ame no mikumari no kami and Kuni
no mikumari no kami are enumerated amongst the children of Izanagi and
Izanami. Kumari is the more familiar kubari, 'to part' or 'apportion.'
The four names in the text are those of localities where temples to such
gods of streams were raised. Several others are enumerated in the
Catalogue of Temples. They were supposed to be able to control the
supply of water for irrigation; and it was necessary to propitiate them
lest they should withhold it altogether or send such floods as would
destroy the crops. 'Parting of the waters' might be rendered by
'watershed,' if that expression were not slightly technical.

i.e. the gods who are here addressed.

Imibe, corrupted later into Inube and Inbe, were a class of
hereditary priests, belonging to several families, whose duties were to
prepare the more durable articles offered to the gods at the principal
services, to cut down timber required for building the temples, and
further, to construct the temples. This appears from several passages
in the Kogo-Shiui. There were families of Imibe in Awa, Sanuki, Kii,
Tsukushi (i.e. Chikuzen and Chikugo) and Ise. We learn from the few
lines of introduction to the Rituals in vol. VIII of the Yengishiki, that
the Imibe, besides these functions, were allowed to read the liturgies at
the two services of the Luck-wishing of the Great Palace (Ohotono hogahi)
and Gates (mikado matsuri). It is not easy to see why this was the
case. Perhaps the fact of their being the builders of the palace was
considered a reason for their being allowed to recite the ritual in which
the Wood Spirit and Spirit of Rice are besought to watch over the
building and to protect its occupant. Mabuchi observes that Oho-miya-no-me, who is also addressed by name in the Luck-wishing of the
Great Palace, and Kushi-ija-ma-do and Toyo-ija-ma-do, to whom the
ritual of the Gates is addressed, were children of Futodama no nikotop,
from whom the Imibe were also supposed to be descended, and he
suggests that the collateral relationship between them and these three
gods, entitled them to perform the services in which these gods were concerned. It was Futodama who held the mitegura or tree adorned with beads, the famous mirror and the offerings of cloth before the door of the cavern into which the sun-goddess had retired, on that great occasion which has so often to be recalled in speaking of the myths, and his descendants naturally performed a similar function, says Mabuchi. 

Imibs is compounded of imi-, to dislike or avoid, because it was particularly necessary that these priests should avoid all uncleanness, especially when performing their duties, and in is said to be identical with me, a contraction of mura, flock or body of persons, with which are connected mura, village, and muragaru, to flock together.
ON A KAREN INSCRIPTION.

BY THE REV. DR. NATHAN BROWN.

YOKOHAMA, August 29, 1878.

MY DEAR DR. SYLE:

The Karen traditions to which you refer are found in the Proceedings of the American Oriental Society for October, 1886. They were communicated by the Rev. Dr. Cross, of Toungoo, Burmah.

The Karen account is as follows: "In the earliest and most ancient times we came from the West. We came in company with the Chinese. The Chinese were our elder brothers. Our brothers, the Chinese, went in a company in advance, and we in a company followed them. The Chinese company advanced more rapidly than we did, and thus left us behind, and we became separated; and the separation gradually increased between us."

After lingering for some time near a river where there was an abundance of shell-fish, the Karens followed on after their companions, but failed to overtake them. "We continued," says the narrative, "to follow until we came upon the place where our Chinese brothers had left us an bridle-bit, and a sickle to cut food for a horse, and a book written on a plate of brass and gold, which was shining black. It was only a part of the plate. We therefore said among ourselves,—Now our elder brothers have determined not to wait for us any longer. They have given us up and left for us our inheritance, that which we were to receive. When this was done, we made no more
"(128) attempts to follow our brothers. We stopped and
made us cities and villages, and our palace, in the country
and place where the city of Ava now is. The name of the
city, in which was our King's palace, was Hotailai, or
Gold and Silver city. After we had been there a long
time, a Burmese people called Kathai, who were in the
West, came after us and fought with us, and utterly de-
stroyed our palace and our cities and our villages. We
then fled and built again our villages and cities and
palace in the land of Kyeelya, where we now are, and
where, we have ever since remained."

Is it not somewhat singular that the number of sacred
relics, or more properly, regal insignia, of so many eastern
kingdoms (generally regarded as having come down from
heaven) should be exactly three? Thus the Japanese have
their Sacred Mirror, their crystal ball, Tama, and their
wonderful sword, Tsurugi.

In an old history of the Shans, which I found in Assam,
it was stated that the imperial insignia brought down from
heaven by the two brothers, Khunlung and Khunlai, were
(1) the great Shield; (2) the wonderful sword, Khorga; (3)
a pair of fowls for the purpose of divination.

My impression is that there are several other countries
which have similar traditions. This of the Karens may,
or may not, have the same origin as the rest.

Dr. Cross gave me a copy of the Karen plate, taken by,
Rev. J. B. Vinton, while on a visit to the Red Karen chief,
at the beginning of 1869. The custodians of this relic
would not allow their foreign visitors to trace the characters,
or take an impression in wax, so that this copy cannot be
regarded as a perfectly exact transcript. Another copy,
taken by Rev. A. Bunker, was published in the Oriental
Society's Journal for 1871. The characters bear considerable
resemblance to the Burmese, also to the Canarese, and
others in Southern India, but not a word has thus far been
deciphered, and the Karens themselves know nothing of
its meaning. It is conjectured that the small star-like
crosses in the plate may be used to separate sentences, or
parts of sentences, and that the text, written at the bottom of the inscription, reads: the skull, spoken of in the tradition. The plate is shaped like a quarter inches long by two and one-eighth inches broad, and of somewhat unequal thickness about one-fourth of an inch. It is considerably worn, and has an ornament, or crest, not corresponding to the native belief of the remote period.

Dr. Cross has also published a fragment of a "the Red Karen King, Ahoa" on a piece of skin, this plate, has also in his possession five other plates, a square, but size about like the ordinary Brannan jade used for, that is to say, each plate is about two feet in length, and two and a half inches in width. These four plates are covered with the same characters as the metal plates already mentioned.

I hope some of the members of this society may be able to decipher a part of the inscription, and may be able to decipher a part of the inscription. Although this seems a mere curiosity, the existence of the four jade plates, so important, and yet unexplained, is sufficient to open the minds of those who examine them to the idea of explanation.

Sincerely,

M. BROWN.
parts of sentences, and that the rude figures at the bottom of the inscription represent the shell-fish, spoken of in the tradition. The plate is six and a quarter inches long by two and one-eighth inches broad, and of somewhat unequal thickness about one-fourth of an inch. It is considerably worn, and has an appearance of great age, corresponding to the native belief of its remote origin.

Dr. Cross has learned from reliable Karens that "the Red Karen King, Khai-peho-gyee, who holds this plate, has also in his possession five ivory plates, in shape and size about like the ordinary Burmese palm-leaf, that is to say, each plate is about two feet in length, and two and a half inches in width. These ivory plates are covered with the same characters as the metal plate already mentioned."

I hope some of the members of your Society may be able to discover a clue to the interpretation of this singular inscription. Although there seems to be no doubt of the existence of the five ivory plates also, no inducements have as yet been found sufficient to open the casket that contains them to the gaze of foreign eyes.

Yours sincerely,

N. BROWN.
A General Meeting was held at the Shōheikwan, Seidō, Tōkiyō, on November 12th, 1878, Dr. Murray, President of the Society, in the chair.

The minutes of the previous general meeting were read and approved.

The Recording Secretary reported the election of the Rev. Jas. L. Amerman as a member of Council in room of Mr. Augustus H. Mouncey, who had left the country. He also announced that at last meeting of Council it had been agreed that the Society's Library should be open for the lending and returning of books a short time before and after each General and each Council meeting in Tōkiyō.

The Librarian reported the receipt of various magazines.

The President announced the death of Mr. Van Casteel, a member of the Society. Mr. Van Casteel was a very estimable and hard-working man, who, during a long residence in Japan, had acquired an excellent knowledge of the Japanese tongue, which he had used in assisting to translate various foreign works for the Japanese people.

Dr. Syle read a communication by the Rev. N. Brown, D.D., "On an Inscription of an ancient Karen Plate."

Mr. E. M. Satow read his paper entitled, "Ancient Japanese Rituals; No. 1, Praying for Harvest."

The President testified to the pleasure with which he had listened to Mr. Satow's paper, and hoped that some of the scholars who had turned their attention to this class of subjects might have something to say.

Dr. Syle felt that probably no one present was competent to make remarks upon a paper of this kind. It was the best thing he had listened to of the kind since Mr. Satow's last contribution to the Society. He mentioned the temple ceremonies which he had witnessed at Nikkō. On the 17th and 20th of each month, the birth-day of Iyeyasu, a long prayer was then used, the words of which he regretted he had been unable to obtain. These services were full of exceedingly interesting symbolical meaning.

Mr. Chamberlain observed that as had just been remarked by the Vice-President, it was difficult to say much with reference to a paper whose subject was so completely a new one to most of the members, but that one thing had especially struck him, viz., the great likeness of the style of the "norito" to that of the most ancient Japanese poetry. One passage, in particular, seemed, as far as one could judge from a translation, to be almost word for word identical with a portion of one of the odes contained in vol. xvi. of the "Riyakuge" edition of the Mañyefushifu collection.

The President said they were indebted to Mr. Satow for his permitting the Society to be the medium by which such a scholarly production was given to the world. He was pleased to know that it was the first of a series. Nothing could be more valuable in contributing to a knowledge of Japanese religions than work of this kind. The question of the affiliations of the Japanese was most interesting and pressing, and Mr. Satow was doing something towards throwing light on it.

The meeting was then adjourned.
VICISSITUDES OF THE CHURCH AT YAMA-
GUCHI FROM 1550 TO 1586.

BY ERNEST SATSW.

(131) (Read November 27, 1878.)

The part of Japanese history most fraught with personal interest for Europeans is the period, almost amounting to a century, which commenced with the discovery of the country by the Portuguese in 1542 and ended with their final expulsion in the year 1640. During this time an active commerce sprung up between Japan and the foremost of European states, which was the cause of the Japanese themselves, becoming more enterprising in their foreign relations than at any previous epoch, and which also favoured in an eminent degree the introduction of Christianity. It must be a matter of profound regret to every one who is interested in the welfare of Japan, that the conversion of the inhabitants to the religion of Europe encountered such powerful hostile influences, that after an extraordinary success had been achieved during the first half century, the tide turned back, and excluded the nation from the pale of Christendom up to this day. Some hasty persons have said that Japan, falling under authority of the Jesuits, might have become another Paraguay; but such an opinion can hardly be entertained by any one acquainted with the national character of the Japanese, and their proud impatience of anything which bears the slightest approach to foreign control. Their religion, if they had become Roman Catholics, would not have affected their political conduct,
except where the superior tenderness for suffering humanity and recognition of equality which characterize Christianity, had obtained their legitimate influence. It must not be forgotten, too, by those who (132) deny the beneficent effect of Christian ethics upon the progress of civilizing ideas, that the men who brought Christian dogmas and precepts belonged to races which directly inherited the Greek love of knowledge, and the Roman devotion to liberty and respect for law. Not the Portuguese and Spaniards alone, but the English and Dutch also would have been the teachers of the Japanese people; and who can doubt that the principles of constitutional freedom, derived from Protestant races, must have overcome the repressive tendencies of Roman Catholic ideas? Is it fair to throw all the blame of their ultimate failure upon the missionaries themselves, or what other causes were also at work to bring about the disastrous ending to so much noble zeal and self-sacrificing devotion? The question is scarcely ripe for solution, for all the evidence has not yet been taken. We know the story from the side of the missionaries, variously interpreted by prejudiced adherents and enemies, but the Japanese tale has still to be told and impartially explained. It is of prime importance that we should become acquainted with the Japanese history of that period so far as it bears upon the rise and fall of Christianity, and in doing so we may perhaps learn some lessons that will be of use to us even at the present day; for it must not be forgotten that, though the religious intercourse of Japan with the west in the 16th and 17th centuries has been abundantly written about, the commercial relations, of which little has been recorded, at one time flourished quite as vigorously as in our own day. To trace the story from its beginning to the end requires that we shall transport ourselves from one part of the country to another in succession, beginning in Kiushiu and ending far away north in Aushiu. In Kiushiu there were two principal seats of missions, one in Bungo, the other in Hizen, while on the mainland of Japan there were three chief centres, Yama-
guchi, the Home Province round Kiyanto, and at a later period the town of Seidai in Mutsu. Putting aside Kiushiu or the present, though it ought properly to be treated first, If propose to sketch as briefly as possible, and omitting all names except those of the principal persons, the vicissitudes that befell the Church at Yamaguchi and the Japanese persons of influence in that part of the country during the first period of the progress of Christianity in Japan... The history of the general persecution has been so well narrated by M. Léon Pagès from the European sources, that its illustration from (133) Japanese records will be comparatively easy when any one finds leisure to undertake the task. My authorities have been principally the letters of the missionaries, on the one hand, in Latin and Italian translations, and for the Japanese part of the subject such works by native annalists as are easy of access and generally accepted as trustworthy. I have preferred in most cases that the missionaries should speak for themselves, a course which, though giving a patchwork appearance to the narrative, renders it less open to cavil, while I have found it more expedient to summarize than to translate the Japanese writers. In quoting from or translating the letters I have preserved the spelling of Japanese names which are there given, but in other cases I have followed what appears to me to approach most nearly to a correct orthography.

In looking over a copy of an old book entitled "Rerum a Societate Jesu in Orient, gestarum volumen," printed at Cologne in 1574 "apud Geruinum Calenium et haeredes Johannis Quentel," I lighted upon a curious transcript, or supposed facsimile of what purports to be a copy of a Japanese grant made in 1552 to the Jesuit missionaries at Yamaguchi in Suhau of a monastery or Buddhist Temple. An interlinear Latin version is given, but as it does not exactly convey the meaning of the original document, and the latter itself is not easy to decipher, I have thought that it might be worth while to make a correct translation and also to reproduce in a legible form the text of this old and undoubtedly genuine document.
The Mission at Yamaguchi was originally founded by St. Francis Xavier, whose first letter from there is dated on the 20th November 1550, and addressed to the Society of Jesus at Goa. He relates therein that after passing a year at Kagoshima, where he had arrived on the 15th August, 1549, making more than a hundred converts with the aid of Brother Paul (a converted Japanese who had been instructed in the Christian faith at the College of St. Paul in Goa), and studying the language, he left that city about the beginning of July, 1550, and (134) proceeded to Hirado, then ruled by a prince named Matsura Takanobu. Here he and his companions made nearly a hundred more converts in a few days. Leaving Cosmo Torrez to take charge of the neophytes, he went on to Yamaguchi, with Joam Fernandez, a layman, but meeting there with very little success, he judged it better to continue his journey to the capital. But on arriving there, he found the city full of armed men, and in a state bordering on anarchy, which did not appear likely to favour his attempts to make proselytes, and the two missionaries therefore retraced their steps to Yamaguchi.

The King, as Xavier calls him, of Yamaguchi, at that time was Ohochi Yoshitaka, the descendant of a Korean prince, who settled in Japan about the end of the 6th or beginning of the 7th century. The family first rose into prominence in the time of Yoritomo, who made its then representative vice-governor of Suhau. During the wars of 1331-34, when the Houdeu family, who for the last hundred and thirty

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1 Bartoli (lib. 3. c. 13) says Xavier left Kagoshima about the beginning of September, but this date is hardly reconcilable with what Xavier tells us in his letter above quoted. He there says that between leaving Kagoshima and the date of his letter he had spent ten days at Hirado, the same time at Yamaguchi, had made a journey to Kiyauto and back, which took two months, and that in two other months he had made five hundred converts. Allowing a fortnight for the two journeys from Kagoshima to Hirado, and from Hirado to Yamaguchi, five months at least must have elapsed since his departure from Kagoshima. Torrez in one of his letters says that Xavier had spent nearly a year at Kagoshima (annum ferme), and that would agree well enough with my calculation.
years had ruled the whole country from Kamakura in the name of the Shiyaugufi, were overthrown, the Ohochi clan made themselves masters of the two provinces of Suhau and Nagato, and sided for a while with the imperial party. When it afterwards became apparent that the Restoration was not destined to last, their chief ranged himself under the banner of Yoshinori, the first Sei-i-tai-Shiyaugufi of the Ashikaga dynasty, and was rewarded for this piece of treachery with the office of High-Constable in the two provinces, to which was afterwards added the adjoining province of Ihami. About the end of the 14th century the family also acquired possession of Buzefi and nearly the whole of Chikuzei, which two provinces still owned allegiance to Ohochi Yoshitaka, when Xavier found him ruling at Yamaguchi. One of the most important local chiefs who held lands from the Ohochi, was Suwe Takafusa, a general of great experience and renown, whose only rival of importance was Mouri Motonari, who had lately joined the fortunes of the Ohochi family. I am inclined to believe that it was principally by the intervention of Takafusa (135) that Xavier obtained leave for the missionaries to preach and reside in the capital from Yoshitaka, because after Takafusa had been driven by unjust suspicions and threats of confiscation to overthrow Yoshitaka, the Christians continued to enjoy their privileges under the new 'King' whom Takafusa set up in the place of his former lord.

Xavier says that on returning to Yamaguchi he presented letters of credence and presents from the Portuguese Viceroy of India and the Bishop of Goa. Amongst these presents were a clock and a harpsichord, which though of little value, were highly appreciated by the King, as nothing of the kind had ever before been seen in his province.

¹Takauji, who founded the Ashikaga power, was only Sei-i-Shiyaugufi.

²It is more convenient to use the nanori or historical names of these chieftains than to use the family name. A list of those which occur in this paper is added at the end for reference.
considerable sum of money in silver and gold was offered in return for the presents, but Xavier declined to receive it, and begged instead for permission to preach Christianity, which was readily granted. A proclamation was published, declaring that the King approved of the introduction of the new religion, and granting to the people perfect liberty to embrace it, and an empty Buddhist monastery was assigned to the missionaries as a residence. Their operations were attended with great success. Five hundred converts were made in a couple of months, and further adhesions were being received every day at the time when Xavier wrote. We find him still at Yamaguchi on the 1st September, 1551, where he was joined by Cosmo Torrez about the 10th of that month, and leaving Torrez and Joam Fernandez in charge, he started shortly afterwards for Bungo, whither he had been invited by the ruler Ohotomo Yoshishige. A few days after the departure of Xavier occurred the revolution at Yamaguchi to which I have alluded. Among the favourites of Yoshitaka was a man named Sagara Taketafu, a cunning and clever fellow, according to the Japanese chronicler, who presumed very much upon the influence which he possessed with the King, and was constantly engaged in intrigues for his own advantage. Among other projects, he conceived the idea of marrying his daughter to the son of Takafusa, already named as the most powerful vassal in all Yoshitaka's dominions, (136) but the proposal, though backed up by Yoshitaka himself, was scornfully rejected by the young man's father.

Taketafu took his revenge by persuading Yoshitaka to confiscate 3000 kowai of land (about 2500 acres) belonging to Takafusa, under the pretext that certain Buddhist monks were really entitled to the property. At the same time that he thus added a positive injury to the proposal of marriage which Takafusa considered so insulting, he managed to offend two of Yoshitaka's nearest relatives, one his cousin,

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the other the husband of his maternal aunt, by inducing Yoshitaka to forbid them to use certain umbrella-bags and saddle-cloths, which had been granted to them as signs of distinction by the Shiyaugeji. The three angry samurahis allied themselves for the purpose of removing the favourite from the vicinity of their lord. Taketafu tried to make it appear that they were conspiring against Yoshitaka himself, but his accusations were not believed, and he was compelled to seek safety in flight, thus leaving the field clear to the confederates. This took place between October 10th and November 8th of 1550, and consequently shortly before the date of Xavier's letter of November 20th of that year. He must have been in Yamaguchi, but makes no mention of this event, which is narrated by all the Japanese historians of the period. Takafusa and his confederates began to think that they had gone too far ever to be frankly forgiven by Yoshitaka, though the latter professed himself entirely satisfied with their explanations. They resolved therefore to make preparations to forestall any attack from his side, and left the town for their own fiefs about the end of the year, between December 8th and January 6th. Everything remained quiet for some months, until the end of September, 1551. On the 27th of that month, in the midst of a banquet given by Yoshitaka in honour of envoys from the Shiyaugeji and the head of the house of Ohotomo, the ruler of Buñgo, the alarm was given that Takafusa was advancing on the town at the head of an armed host. Yoshitaka at once sent for his uncle and cousin to come to his aid, but they did not make their appearance. Some of his officers proposed to attack and kill these two leaders, who were evidently disloyal, but Yoshitaka, believing that such near relations, whom he had trusted and enriched in no small degree, would never turn against him, refused to take their advice. The more courageous of his officers then offered to march out and meet the enemy, so that in case of defeat a road for (137) escape might be left open to their lord, but he still continued to waver. At last he was induced by a traitorous favourite to abandon the castle, and betake himself to a
neighbouring Buddhist monastery, accompanied by about three thousand followers. Most of these deserted during the night, and when day broke he found himself with barely a thousand men, surrounded by the three confederate leaders, who commanded a force five times as great. Seeing that resistance was hopeless, he offered to make terms, but his enemies were implacable, and refused to grant any conditions. Flight was the only resource left, and taking advantage of the darkness, he slipped out of the monastery, intending to make his way across the sea to Chikuzen, but on reaching the shore, he found the wind against him, and was compelled to turn back and take refuge in another monastery. Here he was again surrounded, and seeing that all hope was now over, he disembowelled himself, after confiding his two sons to the care of the chief monk. This happened on the 30th September, 1551. Most of his followers committed suicide or died sword in hand. According to the received account, the monk escaped with the two boys, but the party was overtaken by the foe, when the elder was stabbed at his own request by a trusty attendant, who immediately afterwards destroyed himself, and the younger also met his death, in what precise manner is not stated. Another version of the disastrous tale is that Oochi and his son died in company, and this agrees with the account given by the missionaries.\(^3\)

In a letter written by Joam Fernandez, dated October 20th, to Xavier, who was then at the capital of Bungo there is an account of the revolution, and of the perils incurred by Torrez and himself. He says: "A war broke out in the city, which was brought to an end by the death of the King, so destructive and deadly that the town was on fire and overflowed with blood for the space of eight days; for with the laws in abeyance, victorious wickedness raged everywhere with impunity. Murder and plunder in all directions, and during the whole time diligent inquiry was made for us with a view to slay us, partly by those who hated us, partly

by those who coveted our poor baggage. Thus we were
often in great danger of our lives, but the most merciful
mother of the Lord, who protects her servants with special
care, (138) snatched us out of all our perils. While affairs
thus stood, Cosimo sent Antonio to the wife of Naitou's
dono, to ask for her advice, and she bade him bring back word
that we should come to her at once. On the way there we
fell in with many bands of armed men, who said to each
other as we passed through the ranks, 'Let us rid our-
selves of these men from Cengecu' (for thus they call
Europeans), since it is by their fault, denying that either
wooden or stone images can help themselves or others, that
the angry gods, by stirring up discord, have brought such
slaughter upon this people.' They said this because many
monasteries with their images had been consumed by fire
in this very war, to the great diminution of the influence
of the idols and the deceivers, or because it proved that the
superstition had been of no avail to the King, one of the most
superstitious, as thou knowest. Having escaped from these
dangers, we reached the house of Naitou dono, whose wife
gave us a boy to attend us, and sent us away to a monastery of
Bonzes, who were supported by her. But they being sorely
incensed against us, rejected us; they called us demons,
and said that they had no room to receive such a wicked
race of men. Why should not God, who dwells in the
heavens, and whose law we teach, snatch us up into heaven
out of those perils? However, at last, induced either by
the fear of the lady, or by the entreaties of the servant, they
allotted to us a small part of the temple as a lodging. After
we had remained there two whole days, the woman sum-
moned us again to her house, and assigned to us a certain

(138) Said to have been the governor of Yamaguchi. Two persons of
this surname are mentioned by contemporary writers, Naitou Okimori,
a partizan of Takaasu, and Naitou Takaharu, who later on surrendered
the town to Motonari. I incline to think it was the latter.

(139) Probably a corruption of Tenjiku (天竺), India.

(140) A corruption of the Japanese word bonsu, a monk, pronounced in the
western fashion of those days bonsu.
passage at the back part of the buildings for our accommoda-
tion. I will say nothing for the present about the perils
and hardships which we have undergone, lest I should
become tedious." The letter is dated Amangutio (in the
Latin version), i.e. from Yamaguchi; perhaps the initial Y
was omitted in the local pronunciation. Mention is also
made of this revolution at Yamaguchi in a letter of Torrez
to the Society of Jesus in Portugal, to which I shall refer
later on.

(139) Although he had been strong enough to overturn the
ancient lords of Yamaguchi, and to destroy all the members
of the family on whom he could lay his hands, Takafusa
did not venture to set up as ruler in their place. He therefore
threw the blame of the whole affair upon Sugi Shigenori,
one of his own confederates, and put him to death, after
which, in order to disarm all hostility on the part of possible
rivals, he became a monk. He had changed his name to
Harukata immediately after the revolt, and now changed it
again to Zëñkìkyu. It was a common practice in the middle
ages of Japan for an unsuccessful soldier of fortune to adopt
the garb of the Buddhist monk, as a sign that he renounced
henceforth all connection with worldly affairs, and thus to
escape the fate which he would as a layman have received
from the hands of a victorious rival. Nevertheless Haru-
kata, as he is still called by Japanese writers, in spite of his
change of name, still held in reality all his power as chief
councillor of the Ohochi family, and in that capacity sent
an envoy to Buõgo to ask Ohotomo Yoshishige to allow his
younger brother Hachirau to accept the succession of the
Ohochi family and reign at Yamaguchi. According to the
account given by a contemporary chronicler of the Ohotomo
family,9 Yoshishige did not wish to send his brother over to
Suhau, because he felt certain that Mouri Motonari, Haru-
kata's powerful rival, would be too strong for him, and
would eventually endeavour to make himself master of the

9Ohotomo-ki (大友記) in the Gûššiyo Ruwizhiyuu of Hanawa Kešgeu.
inheritance of the Ohochi family, and he therefore at first refused his consent. But Hachirau insisted on going. To decline would be interpreted as fear of Mouri, and would bring contempt upon the family name. Yoshishige reconsidered his decision, and finally allowed his brother to accept the offer. Xavier, as we learn from one of his own letters, was still at Funai when the matter was decided, and obtained a promise from Yoshishige that he would request the new King of Yamaguchi to take Cosmo Torrez and Joam Fernandez under his special protection. This was just before Xavier's departure from Bungo, about the end of November of that year.

It was no doubt in consequence of this promise that the formal grant of a building was subsequently made to the Jesuit missionaries. Their letters speak, indeed, of a Buddhist temple, and also of building (140) lands assigned to them, on the occasion of Xavier's visit to Yamaguchi, but they say nothing of title-deeds being given them. A facsimile, and a legible copy of the document by which the grant was made, with kana at the side of the Chinese characters to show how they are to be read, is annexed. Its date is the 28th day of the 8th month of the 21st year of Teiho, which corresponds to the 16th September, 1552, O.S., when Hachirau, who adopted the name of Ohochi Yoshinaga on his succession, had already taken possession of his dominions. The Latin translator attributed, the charter to the King of Suhau, Nagato, Buzei, Chikuzei, Aki, Ihami, Bungo and Bitchu, apparently supposing the grant to have been made by Yoshishige, but there is nothing of all this in the original, which simply states that permission is given to build a monastery and house, and is signed Suhau no suke, the title borne by the young 'King' of Yamaguchi.

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10 Vol. 2. of M. Léon Pagès' translation, P. 231.
11 For the printed comparative tables of the Japanese and European calendars, going back as far as the year 1500, which have been used in ascertaining the exact equivalents of the dates given by Japanese authors, I am indebted to Mr. William Bramsen, a member of this society. But it must be recollected that the New Style began only
Latin Version.
Dux Regni de Zuor, Regni Nangati, Regni Bugen, Regni Chicugen caquius, Regni Iuani, Regni Buagi, Regni Bichiyi, concessit Day i, magnum dogie i, aditum coeli patribus Occidentis qui venerunt ad declarandam legem faciendi sanctos iuxta ipsorum voluntatem ad finem vsq.; mundi. is est locus positus intra Angustium magnam urbem, cum preulgelis vt nemo posit occidi nec apprehendi in illo. Atque vt sit testatum meis successoribus do illis hoc diploma, vt nullo tempore eos deturbent ex hac possessione. Regni de Teybum, anno 21 ipsius octaui mensis vigesimo octauo die.

Smicriptio
Dvx Daidiqui bozat
Forma sigilli

Translation from the Original Japanese.
With respect to Daidauzhi (i.e. monastery of the great way) in Yamaguchi Agata, Yoshiki department, province of Suhau. This deed witnesses that I have given permission to the priests who have come to this country from the western regions, in accordance with their request and desire, that they may found and erect a monastery and house in order to develope the law of Buddha.
28th day of the 8th month of the 21st year of Tefibu. Suhau no suke. August Seal.

(141) To this version in Latin is appended a note that the words which these 'Japanese letters' represent are wanting in the Spanish copy, Portuguese words having been substituted for them, which the translator (Maffei) has turned into Latin in the same order, to the best of his power. A comparison of my translation with the Latin version shows that the latter contains a great deal that is not in the original Japanese document, as, for instance, the clause about the privilege of asylum conferred upon the missionary establishment, and the words 'iuxta ipsorum voluntatem ad finem usque on October 5, 1582, and a deduction of 10 days must be made on all dates given by these tables, before that change was made.
mundi,' and 'Atque ut sit testatum meis successoribus do illis hoc diploma ut nullo tempore eos deturbent ex hac possessione' are a very loose translation of *shiyou kudan no gotoshi* (状如件). 'Ad declarandam legem faciendi sanctos' means, I suppose, 'in order to teach the law of sanctification,' and is intended as the equivalent of *butsu- pofu seu riyou no tame* (為佛法隆), 'for the purpose of developing the law of Buddha.' It would appear from this and also from the application of the term *sou* (僧) to the missionaries, that the doctrines taught by Xavier and Torrez were looked upon by the grantor as merely a superior kind of Buddhism. The square which encloses the character with which the document begins, no doubt marks a place where a seal had been impressed on the original. With regard to the words 'Daidiqui bozat' in the signature attached to the Latin version, I am unable to give any explanations. It seems to be the name of some Buddhist saint, and may possibly have crept in through mistake. The attribution of the sovereignty over all the dominions of both Yoshishige and his brother, the new King of Yamaguchi, to the grantor of the character, though erroneous, goes to confirm the statement that the permission to build a mission at Yamaguchi was obtained through the influence of the elder over the younger brother.

This document is evidently the same as that of which Bartoli speaks in chapter 13 of book viii. of l'Asia, part i, when he says that the king of Bufo gave the missionaries land at Hakata in Chikuzen and at Yamaguchi, to build churches and colleges. He gives a translation in Italian, which he says is word for word from the Japanese, but (142) it is evidently merely a literal rendering of the Latin, or perhaps of the Portuguese. "Il duca de' regni di Zuvo, di Nangato, di Bugen, d'Achi, d'Ivami, di Bingo, di Bicio. Concede il gran Day, cammino del cielo, a' Padri di ponente, venuti a dichiarar la legge che fa santi, secondo il loro piacere, di qua sino alla fin del mondo, un campo nella gran città d' Amangucci; con privilegio, che niuno fossa essere ucciso,
nè preso in esso. E affinchè ciò sia manifesto a' miei successori, do loro questa patente, per cui virtù mai in niun tempo non li tòlgano di possesso." ("The duke of the Kingdoms of Zuvo, Nangato, Bugen, Achi, Ivami, Bingo and Bicio, grants the great Day, road to heaven, to the Fathers of the west come to make known the law which makes saints, according to their pleasure, henceforth until the end of the world, a piece of ground in the great city of Amangucci, with the privilege that no one may be killed or arrested in it. And that this may be made clear to my successors, I give them this patent by virtue of which they shall not be deprived of it at any time.") Bartoli has evidently been misled by the incorrect translation which lay before him, to place the grant of this character at least five years later than its real date, and thus posterior to the death of Yoshinaga, whose signature was attached to it.

The next mention of the church at Yamaguchi is in a letter of Pedro Alcaceva to the Society of Jesus in Portugal, dated from Goa in 1554, on his return from a visit to Japan. In company with two other missionaries named Duartes da Sylva and Balthazar Gago, he reached Japan on the 13th August, 1552, and disembarked at Kagoshima, where they were well treated during their short stay. Proceeding on their journey they came to Funai on the 21st September, where they were immediately received in audience by the King, and delivered the presents with which they were charged by the Viceroy of India. As soon as Cosmo Torrez, who was at Yamaguchi, heard of their arrival, he despatched Joam Fernandez to their aid to act as interpreter. In October they set out for Yamaguchi, where they were received with great rejoicings both by Torrez and the whole congregation of Christians. After celebrating Christmas day with great pomp, and organizing the church there, Alcaceva returned to Funai with Gago and Fernandez, leaving Duartes da Sylva behind to help Torrez.12

12 De rebus Indicis et Japonicis, p. 278; Crasset, vol. i, 274.
For two years after the installation of Yoshishige's brother under (143) the name of Oohchi Yoshinaga, peace seems to have reigned at Yamaguchi, but in 1554 the standard of revolt was raised by Yoshimi Masayori, commander of the fortress of Tsuwano in Ihami, an hereditary enemy of the Suwe family, who was supported by Mouri Motonari, lord of the fortress of Yoshida in Aki. The Mouri family, descended from Ohoye no Hiromoto, one of the chief pillars of the first dynasty of Shiyauguni, had settled in that province in the 14th century, but had occupied a very unimportant position amongst the local chieftains until a few years previously. Motonari was the second son of a family which possessed about 2500 acres, and as no provision for him could be carved out of the hereditary domain, he was given in adoption to a samurai who owned a little over 60 acres of land. To this small fief Motonari added about 6600 acres more, the property of the High Constable of Aki, who had rebelled against the Shiyauguni, and who was overthrown chiefly by Motonari's efforts. By the death of another relation without heirs, he came into a third property of about 8000 acres. In 1523, on the failure of heirs in the direct line of the Mouri family, he was chosen by the chief retainers to succeed to the headship, and thus obtained a larger field for the development of his talents as a soldier and statesman. It is he whom the missionaries so frequently speak of as Morindono. Various interesting anecdotes are told of his childhood, from which it appear that he early gave promise of his future greatness. During the first few years after he obtained possession of the hereditary fief of his family, he was a dependent of the Amako, then lords of the province of Idzumo, but he subsequently quarrelled with them, and went over to the side of the Oohchi, whose chief, Yoshitaka, had given him aid in an unequal contest against his former suzerain. In that period of Japanese history, the holders of small fiefs were nominally vassals of the Shiyauguni, but they usually found it convenient to attach themselves to some local chief of greater power than themselves, who was also in theory a vassal of the
Shiyaugu. There were instances of this also in Chikuzen, where some of the less powerful samurahi acknowledged fealty to the Ohtomo, lords of Fujiwara, though the whole of the province was nominally under the sway of the Ohochi of Yamaguchi.\(^{13}\)

Just before he committed suicide, Yoshitaka wrote a letter to Motonari, entrusting to him the task of avenging his death. MOTONARI (144) shed tears on reading it, and vowed to punish Harukata’s treason, but for the moment was afraid to attack the successful rebel, then at the height of his power. By the advice of his officers he turned his attention to increasing his own military resources, whilst contriving to let it appear as if he were too weak for an enterprise of any importance. In 1553 he began to lay his plans for an attack on Harukata, and called a council of his chief adherents. His son Kobayakaha Takakage advised that the Mikado should be requested to issue a commission for the punishment of the traitor, because that would justify the war and conciliate public opinion. A memorial was therefore addressed to the court, dwelling upon the services of the Ohochi family during successive generations, and its unswerving loyalty to the throne, declaring Motonari’s desire to punish the rebel who had murdered his lord, and begging that a commission might be granted to strengthen the avenger’s arm. This was exactly what the court desired. It had already, upon hearing of Yoshitaka’s death, given orders to the Shiyaugu and his lieutenants to march against Harukata, but they had either refused or neglected to execute the mandate, and Motonari’s petition was therefore granted with readiness.

On receiving his commission, Motonari circulated copies of it far and wide, and the first to respond to the summons was Yoshimi Masayori of Tsuwano in Ihami, who at once took up arms and marched against Harukata, supported by Motonari. In the 5th month of 1554 (May 31—June 29, O. S.), Motonari and his sons put their forces in motion, and commenced their operations by capturing several fortresses.

\(^{13}\)Nihon Guwaishi, bk. xii. Ohtomo-ki; Guwaishi ho, bk. ii.
学べば学びよ
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in the west of Aki, which still belonged to the Ohochi family. In the first engagement with a detachment of Harukata's troops Motonari was victorious, but soon saw himself out-numbered by his opponent, who took the field with all the men he could muster in the five provinces under his sway, amounting to 30,000 men, to whom Motonari could oppose only 5000. Seeing that he must assuredly be beaten in the open field, he resolved to try what stratagem would do, and, much against the advice of his officers, began to fortify the island of Miya-zhima off the coast of Aki. The fortress with its redoubts placed on the neighbouring coast and on the little island of Niho, were completed and manned in the 6th month of 1555 (May 21—June 18, O. S.). Motonari then pretended to regret that he had wasted his time in fortifying a place that could be (145) so easily taken, the fall of which must immediately be followed by the loss of all his other fortresses; and he took care to spread about a report to this effect, in such a manner that it came to the ears of the enemy. Harukata fell into the trap. He marched down to Ihakuni with 20,000 men in the 9th month (Sept 16—Oct 15, O. S.), and embarking his army in junks, easily made himself master of the island. He then despatched a defiant message to Motonari, who responded by at once occupying Kusatsu on the mainland just over against Miya-zhima, thus cutting off Harukata's retreat. Most of the samurahi of the province believed that Motonari's defeat was certain, and refused to join him, but he received the unhesitating aid of two chiefs from the province of Iyo in Shikoku, who placed their fighting vassals, numbering 300, at his disposal. On the last night of the month his preparations were complete, and taking advantage of a tempest, he embarked his men and stood over to the island. Once landed there, he sent back his boats, so that the only hope for his soldiers was in complete victory. Harukata's officers, not supposing that an attack was possible in the face of such a storm, had neglected to post any sentries, and were taken by surprise. Just as day broke, the conches of Motonari's men sounded the signal for the assault, and they rushed upon the
fortifications, which were carried with ease, owing to the confusion among too numerous defenders. Harukata in vain endeavoured to rally the fugitives; they rushed to their junks, and thousands were drowned in trying to get on board. Harukata is said to have been extremely corpulent, and consequently unable to walk fast. Accompanied by a few followers, he made his way to the shore at a short distance from the battle field, hoping to find the means of reaching the mainland, but there was not a boat to be had, and he finally performed harakiri according to custom. A long and circumstantial description of his last hours is given by a Japanese author, which would be extremely valuable as illustrative of national manners, if it were the narrative of an eye witness; but as it is not pretended that any of his companions survived to tell the tale, it is only interesting as an example of what popular historians, one might almost say writers of romance, think ought to take place on such an occasion.

In the 12th month (January 13 to February 10 O. S. 1556) Motonari took Ihakuni, and was preparing to overrun the whole of Suhau, (146) when he heard that his former master and subsequent enemy Amako was threatening his rear in Bi\-go, but he speedily provided against this danger, and pursued his march upon Yamaguchi. The remainder of Harukata's partisans, about 10,000 in number, opposed the progress of his troops at the fortress of Susuma, which he captured by stratagem in the 3rd month (April 10 to May 8, 1556, O. S.). The town of Yamaguchi now became the scene of disorder. All the fighting men marched forth to bar his advance at Nigita hill, but he speedily dispersed them, and proceeded on his way. Yoshinaga, the unfortunate younger brother of Ohotomo, fled to Kachiyama in the next province, and Motonari entered Yamaguchi in triumph. Naitou Taka-haru, the governor, and other leading persons came to offer their submission. Troops were despatched to Chiyaufu and Shimionoseki to cut off Yoshinaga's retreat into Kiushiu. Another detachment laid siege to Kachiyama, and Yoshinaga

14 Nihon Guwaishi, bk, xii.
was killed, together with the only surviving son of Harukata.\textsuperscript{15}

In a letter of Torrez to the Society of Jesus in Portugal, dated the 8th September, 1557, he says that the first troubles at Yamaguchi had not interrupted the labours of himself and his companion, which were so successful that by the year 1559 they had made two thousand converts. In that year, however, some of the leading men, joining together against the new king and his adherents, set the town on fire, with such thoroughness that the dwellings of more than 10,000 families were destroyed by the flames in the space of an hour. The mission-house and church did not escape. With great difficulty the converts persuaded him to leave the town three weeks later, though the enemy was reported to be advancing again to the attack. It appears that Torrez at this time was alone, Duartes da Sylva having left him to take Gago's place in B堇go. Crossing the sea, he sought refuge in B堇go, where letters from Yoshinaga and the leading men shortly afterwards reached him, inviting him to return, but Ohotomo Yoshishige, to whom he addressed himself for an escort, advised him to wait until it was seen how matters turned out. The missionaries suspected that some conspiracy, the existence of which was known to Yoshishige, was hatching against the King of Yamaguchi, for no long time elapsed before a certain powerful chieftain attacked Yamaguchi, just risen from its ashes, (147) destroyed the town, carried off a large portion of the inhabitants into slavery, and killed the King with all his followers.\textsuperscript{17}

From this account it seems that Motonari's advance upon Yamaguchi had been preceded by dissensions among the samurai of the town itself, and it is not improbable that some of them, who were not bound by special ties either to the new King of B堇go or to the Suwe family, wished to make terms with Motonari, whilst the others were determined to hold out to the last. A tumult would be the natural consequence, and the partizans of Suwe must have gained the upper hand, for the resistance

\textsuperscript{15}Intoku-Taiheiki 陰徳太平記.  \textsuperscript{16}Nippon Guwaishi, bk. xii. 
to Motonari could not otherwise have continued. It was owing no doubt to the temporary success thus gained by the Suwe party, who protected the missionaries, that Torrez was enabled to stay in the town after the disturbances. The speed with which the wooden houses of a Japanese town may be rebuilt is well-known, and it is not surprising therefore that Torrez should speak of Yamaguchi as being ‘almost restored after the fire’ (Jam ex incendio ferme instauratum) when Motonari captured it. Torrez says indeed that he destroyed the town (diruit), but it must be recollected that he was not an eye-witness of what took place, and on the other hand the Japanese account is that it was surrendered peaceably.

Torrez concludes his account of what had happened at Yamaguchi by saying that Yoshishige, on hearing of his brother’s fate, despatched troops to avenge his death, but I do not find any mention of this in the Japanese sources. It was not until thirteen years had elapsed, namely in 1569, that Ohochi Teruhiro, the uncle of Yoshitaka, who had long been a fugitive from his native province, was entrusted by Yoshishige (then called Souriri) with the command of a body of troops, with which he invaded Nagato, and pushed on as far as Yamaguchi. He held the town for a short time, until Motonari’s forces, returning from the invasion of Kiushiu, compelled him to retreat. Abandoned by his men, and unable to find a junk to convey him back to Buïgo, he committed suicide. This Ohochi Teruhiro is the person whom Bartoli calls Tirofinir,18 and speaks of as the legitimate King of Yamaguchi.

For eighteen years after the flight of Torrez from Yamaguchi, the Christians in that place were left without any resident priest to maintain (148) them in the orthodox practice of their religion. A letter of Francesco Carrion of the year 1579 says that “there were two churches, one in the town of Yamaguchi itself, and another not far off, with 500 Christians, who had been deprived of the ministrations either of priests or lay-brothers, during a period of twenty-

17De Rebus Indicis et Japonicis, p. 229. 181’Asia, bk. viii. ch. 44.
four or twenty-five years, with the exception of a passing visit from father Cabral, some five years before the date of the letter. He remained with them a few days, confessing them and animating them to perseverance, and he also baptized a few new converts. Of the older converts, many had been baptized by Xavier, and others shortly afterwards by Torrez. Since the death of the younger brother of the King of Buñgo, the tyrants who ruled over the province had refused to allow any missionaries to reside there, but nevertheless, the Christians had not only adhered to their religion, but had even multiplied, bringing up their children in the same belief.¹⁹

The tyrants here alluded to are Motonari and his two sons Takakage, given in adoption to the house of Kobayakaha, and Motoharu, who succeeded to the headship of the Kitsukaha family. Having successfully got rid of Harukata and his puppet-king, Motonari proceeded to make himself possessor of all the dominions of the Oohochi, with the exception of Chikuzenni and Buzen, which after some fighting remained in the hands of the Ohotomo and their vassals. He still continued to claim them as his own, and in the meantime made up for this loss by his acquisitions in the east and north, by which Bitsuchiu, Idzumo, Ihami, Hauki, Mimasaki, Biño, Bizen, and Inaba were added to the three provinces of which he had previously made himself master, thus bringing the number of provinces over which he actually exercised or claimed authority up to thirteen. His eldest son, Takamoto, having died in 1563, shortly after his unsuccessful campaign in Buzen, he divided all his dominions between his two other sons, Motoharu and Takakage, giving the provinces of the Saffidao, or north coast, to the former, and those of the Sañyaudao bordering on the Inland Sea to the latter, while to himself he reserved a voice in the general direction of war and diplomacy. In 1569 Motoharu and Takakage again invaded Kiushiu, and took the castle of Tachibana in Chikuzenni, from which the 'king' of Buñgo in vain endea-

¹⁹ Lettera Annuale del P. Francesco Carrion, p. 77.
voured to expel them. It was during this war that Ohochi Teruhiro was sent to (149) invade Suhau and Nagato, so as to cut off the enemy’s supplies of men and provisions, and it was owing to the absence of nearly all the Mouri troops in Kiushiu that he was at first so successful, and was able to capture Yamaguchi. Finding himself in danger of losing his own dominions, in the attempt to conquer those of others, Motonari recalled his sons to expel the invader. Two years later he died, at the advanced age of seventy-five, having maintained his faculties to the last almost undiminished.

Motonari was succeeded by his grandson Terumoto, who, himself a brave and skilful young soldier, was powerfully supported by his two uncles. Before long they came into collision with the partizans of Nobunaga, and the advancing fortunes of the house of Mouri received a check at the hands of Hideyoshi, who was then Nobunaga’s principal lieutenant. In 1582 they met face to face before the castle of Takamatsu in Bitsuchiu, which was defended by an ally of the Mouri against Hideyoshi. They endeavoured by strategy to relieve it, but were afraid to join battle with the most redoubtable soldier in the empire. It was on this occasion that a man who is frequently mentioned in the letters of the missionaries as one of their best friends, first came prominently into notice by the share which he took in concluding a peace between the contending parties. Nothing but the assassination of Nobunaga would have induced Hideyoshi to make terms, and the Mouri were greatly indebted to the influence which the missionaries’ friend possessed with him for the favourable conditions by which they were left in possession of eight provinces and a revenue of 1,200,000 hoku of rice.10

In a letter of Froes dated “Cocinozcû,” 13 February 1583, mention is made again of the church at Yamaguchi. “After our arrival in Arima, the Christians of Amanguci sent a letter thither on purpose, in truth worthy of compas-
sion, saying: We are the first fruits of the Christians in Japan, and mostly old men who were baptized by the chief father Francesco Xavier and father Cosmo di Torrez, and yet for our sins and scanty deserts it is nearly twenty-five years since we groan under the yoke of a tyrant, and this little flock, entirely surrounded by Gentiles, is deprived of all the sacraments, masses, sermons and all protection and help of Fathers and Brothers. Two old Christians of (150) great faith and virtue, by whose teaching and example we have been in some measure sustained hitherto, to our great ill-luck, have both died lately in the same month. Wherefore we pray your Reverence from here humbly and with prayers, to deign to remember our solitariness, in order that these souls may not perish that cost so much to the Redeemer of the world.”

Speaking of the Mouri, Froes says that they had formerly been masters of fourteen or fifteen kingdoms, but that Nobu-naga had deprived them of eight or nine. “And in spite of his being a great idolater, he (Mouri) has three times preferred a request to the visiting Father, and has since repeated it to the Father Vice-Provincial, to send him some of our people. And we desired it no less, but for want of workers, as well as for other important reasons, and in particular on account of his being an enemy of Nobunaga, the matter cannot be arranged for the present.”

Though I have not found anything in the Japanese annals to corroborate this statement, there is no reason to discredit it on the ground of a priori improbability. Christianity at this moment was in a very flourishing condition, and the missionaries were received with open arms in most parts of Japan from the capital westwards, and tolerated in several others. As the Christian faith was evidently not openly persecuted, it is possible that even the Mouri may have thought it worth while to cultivate the friendship of the Europeans, who would be useful as teachers of various arts of which the Japanese were at that time ignorant. Besides, Froes was a very careful and exact writer, and the correct accounts which he gave of the political events of the period
show that he was not in the habit of either inventing, extenuating, or exaggerating.

In another letter dated January 2, 1584, he says: "The king of Amanguci, by the beginning of the year 1583, had sent to Faxiba (i.e. Hashiba, which was the surname borne by Hideyoshi at this period) an ambassador concerning the matters which were in dispute between them, and Faxiba kept him always close to himself on purpose that he might afterwards recount to his King the successes which he had seen. And thereupon he gave him a letter, which he first had read aloud before many cavaliers, and it was of the following tenor: 'Last year, not (151) being well armed, I sent to say that you must let me have five of the nine kingdoms that remained to you, because you had so promised to Nobunaga. You pretended not to understand, imagining that my affairs would not get on well. Now I will leave it to your ambassador to tell how they have turned out. I am not very hungry for your kingdoms, but I wish you to keep your word, and if you satisfy me in this matter we shall remain in peace, but if not, then we will see it with arms in our hands. Success will be for him who has the better luck. And if you resolve upon that alternative, I will take care to come and look for you.' The king of Amanguci, frightened by this letter, and by the report of the ambassador, has found it best to accept the bargain, giving him the kingdoms and hostages. And so peace has been preserved." The letter reads remarkably like one of Hideyoshi's missives to his enemies, and the discovery of it in the original Japanese is much to be desired. As regards the despatch of an ambassador by Mouri Terumoto to Hideyoshi, who detained him for some time at Ohosaka, we have the confirmatory testimony of Japanese writers.

It has already been said that the Mouri obtained favorable terms from Hideyoshi by the mediation of a friend of the missionaries. This was Kuroda Noritaka, usually called Condera Combioiendono in the letters of the Jesuit fathers. It was only after a course of reading in Japanese histories

21 Nuovi Avvisi del Giapone, p. 27.
of the period and in European accounts of the progress of the missions that I discovered the identity of the two names Condera and Kuroda. This mistake has been repeated by nearly every European writer on Japanese history who has occupied himself with relating the introduction of Christianity into Japan from the end of the 16th century down to the present time. I find the name first in Froes' letter dated Shimonoseki, October 15, 1586.22 The communications which the missionaries had held from time to time with the little band of Christians at Yamaguchi had made them very desirous of getting a footing again in that town, not only on account of the already existing converts, but also because they hoped that once re-established in the capital of the Mouri's dominions, they would be able to extend their operations throughout the seven and a half provinces still ruled from that centre. Froes says that a good opportunity was given by "Conderas Combixious, (152) who had become a Christian three years earlier, a noble and illustrious retainer of Quabucundo at Vosaka (Kuwaibakudono, his lordship the Grand Vizier, i.e. Hideyoshi, at Ohosaka), who had employed his excellent judgement in important affairs which he had with the King of the Amangucini (people of Yamaguchi). The vice-provincial (father Coelho) called on him, and he promised to do all in his power to help the propagation of the faith, and whatever else pertained to the worship of God. He was shortly about to be sent to the king of Amangucuni on a mission. The vice-provincial then earnestly besought him to obtain from the King of the Amangucuni leave for the fathers of our society to have a residence among the Christians of his kingdom. He undertook to do this, and eventually, God inclining the mind of the King thereto, he obtained letters for the Father vice-provincial, by which a free residence for the fathers in the province of the Amangucini was granted." This permission to live at Yamaguchi was of great value to the missionaries, for it

22In Hay's Collection, p. 92. The letters in this collection are translated into Latin.
was their only place of refuge when they shortly afterwards had to flee from Bungo before the invading armies of Satsuma. During this war with Satsuma, in which the regent of Yamaguchi (Kitsukahana Motonaga) took part, Father Coelho profited by a visit to Shimonoseki to obtain from Motonaga an order confirming these privileges, addressed to the administrators of the dominions of the Mouri.

Mention is again made of this same person by Froes in a letter of February 20, 1588 addressed to the General of the Society of Jesus. He says: “At that time several lords of much importance became Christians, as, a son of Nobunaga and a cousin of his, and other nobles and chief personages in the household of Quabacundono, and a nephew of his, who expected to be his heir; and also another lord called Condara Combiondono, who now has the name of Simone, a great favourite of Quabacundono, a person of rare nature and promise, and much esteemed by Quabacundono.”

We next find that when the ‘king’ of Bungo (Ohotomo Yoshishige) solicited the aid of Hideyoshi against the Satsuma chieftain, who threatened to deprive him of all his possessions, Hideyoshi sent to his aid “a Gentile named Xengoca, lord of the kingdom of Sanoqui (i.e. Seigoku Hidehisa, lord of Sanuki in Shikoku) and Condara Combioendono, a Christian lord, of whom we have already made mention, in order that (153) he might march by way of Bungo and Chicugen (Chikuzethi) against Achensuchi (Akidzuki), commanding also Lorindo (Mouri) King of Maguccia (Yamaguchi), and of eight other kingdoms, to send all the men he could to Quâ, baicundono, in order that he might thereby make war on Achensuki, declaring Quâbaicundono (a mistake for Cambioendono) commander-in-chief of the army, until he himself should come.” Further on Froes relates again how ‘this valorous captain,’ arriving at Shimonoseki after his first victories over Satsuma and Akidzuki, found there father Coelho, who had been negotiating with Morindo and Cobaiçauandono (either Mouri Terumoto or his uncle Kitsukahana Motonaga, and Kobayakaha Takakage, lord of Iyo at that time)
for some days without any result, and speedily arranged matters for him. "For Cambioindono having been the mediator of the peace and compacts, that some years previously were made between Quubacundono, lord of the Tenza,\textsuperscript{23} and Morindono, lord of the kingdom of Amangucci, was greatly esteemed and loved by the said Morindono and Cambiaucondono his uncle, and as he now came, sent by Quubacundono with so much power, and the people of Morindono had to serve him in this war, he gave what commands he pleased to the King of Amangucci." After the war was over and Satsuma had been reduced to obedience, Hideyoshi gave "the kingdom of Bugen to Quambilondono," as Froes says, which was nearly correct, and further on he amends this statement, by speaking of "Cambioindono (who, as we said above, is lord of nearly all the kingdom of Bugen)."

Again, when Hideyoshi was making preparations to invade Korea, Froes says, in a letter dated October 1, 1592,\textsuperscript{44} that amongst the four generals appointed from the island of Kiushiu to command divisions of the army was "Cainocami, son of Quambilindono, lord of the greater part of the kingdom of Bugen."

From a letter of Valentino Carvaglio, dated 25th February 1601,\textsuperscript{25} we learn that during the contest between Iheyasu and the partizans of Hideyoshi in 1600, "Cainocami, who was with Daifusama (Iheyasu), contrived that one of his servants should be sent by ship to his father Quambilindono, a Christian prince, to inform him of what had taken (154) place up to that moment in the parts where he himself was. Quambilindono, who had 8000 soldiers with him in the kingdom of Bugen, received the messenger, and after he had made confession to a priest of the sins of his whole life, he led these toward the kingdom of Bungo, which was held by the enemies of Daifusama. The administrators (i.e. the guardians of Hideyoshi) sent down to the said kingdom of Bungo the son of Francisco, the previous King, who (i.e. the son) had been detained at Meaco for several years by the

\textsuperscript{23}Perhaps a misprint for Tenka 天下, the empire or supreme power.
\textsuperscript{24}Hay's collection p. 169.
\textsuperscript{25}Ibid. p. 548.
order of Taicosama, so that he, as legitimate lord of that kingdom, might more easily repel with his retainers the attack of Quambioiendo. This new King of Bungo had scarcely arrived in Bungo with 4,000 soldiers, when he received information of the approach of Quambioiendo. An engagement at once ensued, the King was captured and carried off prisoner to the fortress of Bugen (Buzeß).

We also learn from the same letter that "Cainocami obtained the kingdom of Cicugen (Chikuzeß), larger than the kingdom of Bugen, of which he had previously owned two-thirds."

All this agrees closely with what is to be learnt about a certain Kuroda, known at different times by different names, in the Nihoß Guwaishi and the continuation of that work as Noritaka, but in the Kurodaki, a MS. life preserved in the Asakusa public library, chiefly as Kuvabiayuwe (pronounced Kambidye) and Kageyu, which are respectively his familiar name (soku-miyau) and the first title which he bore. Cambioiendo and Quambioiendo, or however else the Jesuit missionaries may have spelt the name, is evidently nothing else but Kuvabiayuwe with the title doko, about equivalent to 'lord,' suffixed. Condera is a corruption of Kuroda, which we may feel sure was pronounced Kuronda at that time in the west of Japan, just as Adzuchi, the name of Nobunaga's castle-city by the Biha lake, is written Anzui, and Hirado is spelt Firando, to say nothing of the other numerous cases which may be found throughout the Annual Letters. How Kuronda or Curonda came to be transformed into Condera is not quite clear. Perhaps it is a mere printer's or copyist's mistake, but at any rate it was made at a very early period, for Condera is the spelling in the Italian translation of Froes' letter of 1588, published at Milan in 1590. The original was no doubt written in Portuguese, but I have no (155) copy in that language to refer to. Crasset, Bartoli and Charlevoix, who are the principal historians of the church during the two centuries that preceded our own, all call him Condera, and so does M. Léon Pagès in his unfinished 'Histoire de la Religion
Chrétienne au Japan. Of the identity of Simon Condera Cambioiendono with Kuroda Kuwašbiyauwe there can be no doubt. I have traced the career of this person in the letters of the Jesuit missionaries, and a similar search in the Japanese records of the time ascribes exactly the same actions to Kuroda Kuwašbiyauwe. It appears from them that Kuroda was a great favourite of Hideyoshi, that he was the principal negotiator of the truce with the Mouri, when the assassination of Nobunaga suddenly rendered it necessary for Hideyoshi to come to terms with his foe, and to return from the siege of Takamatsu to punish the traitor Akechi Mitsuhide. It was also this Kuroda whom Hideyoshi sent down to summon the heads of the Mouri family to join the expedition against Satsuma, and who afterwards freed the unfortunate inhabitants of Buzigo from their invaders. This Kuroda was then rewarded with six out of the eight departments into which Buzi is divided, and was consequently called 'King' of that province by the missionaries. He had a son, named Kaš no kami, who was a leader in Hideyoshi's first expedition against Korea, and afterwards took the side of Iheyasu in the struggle for empire and peace with the guardians of Hideyoshi's weak and unfortunate son. Kuroda Kuwašbiyauwe (then bearing the name of Jiyosuwi) invaded Buzo and took prisoner Yoshiotofu, the son of the former 'king' of that province, who had been sent down to Kiusiu by Hideyoshi's guardians to create a diversion in their favour. Finally, Kuroda Jiyosuwi is known to have been a Christian. It may perhaps seem that I have devoted too much space to establishing the identity of a single individual, but as this identity has been hitherto overlooked by every one who has written on the subject of the Roman Catholic missions in Japan, during nearly three centuries, the accumulation of a sufficient amount of proof to counteract the effect of so persistent an error is indispensable.

There is little more to add concerning the fortunes of the Church at Yamaguchi. After the readmission of the Jesuits to the dominions of the Mouri in 1586 it flourished
exceedingly, but from the time when Christianity was proscribed by Hideyoshi, and the missionaries were all ordered to withdraw from Japan, it became involved in the general persecution, (155) and its subsequent history, not being affected by the disposition of the ruler of Yamaguchi, ceases to derive any light from a study of the internal political affairs of the Japanese people.

HACHIRAU: Ohotomo Hachirau, younger brother of the 'king' of Buñgo. Became ‘king’ of Yamaguchi, and was overthrown by Mouri.

HARUKATA: Suwe Harukata, originally called Takafusa. Murdered his lord Ohochi Yoshimasa; defeated at Miyazhima by Mouri, and committed suicide.

MOTOHARU: Kitsukaha Motoharu, son of Mouri Motonari.

MOTONARI: Mouri Motonari, founder of the fortunes of that family, and ancestor of the daimiyau of Chiyauishiu.

TAKAFUSA: See Harukata.

TAKAKAGE: Kobayakaha Takakage, son of Mouri Motonari.

TAKETAFU: Sagara Taketafu, favourite of Ohochi Yoshinaga and enemy of Suwe Harukata.

YOSHINAGA: Ohochi Yoshinaga, same as Ohotomo Hachirau.

YOSHISHIGE: Ohotomo Yoshishige, ‘King’ of Buñgo, a great friend of the missionaries. Subsequently took the name of Sourin. Baptized as Francesco.

YOSHITAKA: Ohochi Yoshitaka, lord of Yamaguchi, last of his line. Murdered by his traitorous vassal Suwe Harukata.

ZEUKIYAU: Another name of Suwe Harukata.
THE FEUDAL MANSIONS OF YEDO.

By Thomas R. H. McClatchie.

[Read 10th December, 1878.]

In passing through the streets of the city of Yedo, and more especially in what is commonly termed the 'official quarter' lying inside the Castle moats, the attention of the visitor is particularly attracted by long continuous buildings lining the roadway on either side. These present towards the street an almost unbroken frontage, save where a few large gateways, composed of heavy timbers strengthened with iron clamps, interpose to relieve the monotony of the general style of architecture. These buildings mostly stand upon low stone foundations, surrounded by small ditches; the windows are barred, and the general aspect gloomy in the extreme. They often differ widely as regards size, shape, mode of ornamentation, etc.; but there is yet manifest a general likeness, there are still noticeable many common attributes which at once serve to stamp them, to the observant eye, as structures of one and the same type. These are the nagaya, or barracks for retainers, which formed the outer defences of the yashiki or fortified mansions, wherein dwelt the feudal nobles of Japan until the era of the recent Revolution in this country; and though now in many cases deserted, ruined, and fallen into decay, time was when they played a conspicuous and honored part in connection with the pomp and grandeur of the old feudal system which received its death-blow only a half score of years prior to the present date.
The original meaning of the term *yashiki* is a lot of land or site for building purposes, as opposed to rice-fields or land otherwise under cultivation. (158) By degrees, however, as the style of building above mentioned came more into favour, there would appear to have been introduced some modification of the true acceptation of the word; and although, in the country districts, it even now retains its old meaning, in Yedo and other large towns it is at present used almost exclusively to designate the sites occupied by the mansions of the nobles and gentry, together with the buildings thereon, as opposed to the *machī*, or houses of the towns people of lower class, in the ordinary commercial quarter.

The *yashiki* does not appear to have been a very ancient style of building. The houses in which dwelt the old Court nobles at Kiōto were totally different from the mansions of the powerful territorial nobles of later times. The former were, in general, modest and unostentatious buildings, of the ordinary Japanese style, and quite destitute of defences of any kind; they were adapted to the requirements of men of letters who loved to pass their days in ease and quiet, and to whom the turmoil of the camp and the fluctuating fortunes of a military career could offer little or no attraction. But as time passed on, and the feudal system gained ground—particularly in the east of Japan—this peaceful aspect of affairs underwent a change. The rise of the soldier class, and the commencement of the military domination soon caused the whole of the country eastwards from Kiōto to be divided into many districts, often differing widely in extent, but each ruled by some powerful house which had by force of arms acquired the supremacy there. Every one of these influential nobles had his separate following of retainers devoted to his service, and the incessant feuds prevailing between himself and his neighbours forced each one to take precautions for his individual safety by gathering closely around his person his own select band of trusty adherents. In this way it came to pass that a nobleman or general, having constructed a stronghold for his
private residence, surrounded it with barracks for his vassals, in the centre of which he himself could dwell in greater security. These barracks were, for convenience’ sake, built in the style of the modern nagaya, and were thus capable of affording accommodation to large bodies of troops without occupying too wide an area of ground. Of such a fortified stronghold the yashiki of later times was but a modification, adapted to the less exigent requirements of a town life. The wide moats, lofty ramparts, and other defences necessary to a citadel in a (159) wild and remote part of the country were not requisite in the city; but it was nevertheless found advisable, in a period when the hand of every man was familiar with the sword-hilt and an appeal to arms was the ordinary method of deciding a dispute, for each feudal chieftain to possess a mansion which, in case of need, might do service as a post of vantage from which to repel the attacks of besieging foes. The yashiki, with the residence of the lord in the centre and the barracks of the retainers hemming it in on every side, was thus originated, being, as is aptly observed by Mr. Griffis in his work “The Mikado’s Empire,” essentially ‘the growth of the necessities of feudalism.’

The yashiki being, as noted above, merely a modification or adaptation of the ordinary Japanese strongholds, it is impossible to lay down any very definite date of its first construction as a distinct style of building. In the second volume of the small encyclopædia entitled “Wa-fi-shi” (和事始) there is, however, given a note which has some bearing on the subject. The note reads as follows:—“The ‘nagaya (lit. ‘long houses’) outside residences at the pre-
sent age (i.e. in the year 1697, when the work in question
was published) are styled ta-mon (lit. ‘many gates’). One
Matsunaga Danjō Hisahide—a personage of the time of
Yeiroku and Yenshō (1558-70, 1573-92), constructed
above the shrine of Bishamon, at Shiki, in the province
of Yamato, a castle with many gates (ta-mon) and erected
nagaya; and this, in later days, was adopted as a rule, and they (i.e. nagaya) were called ta-mon.” When the
Tokugawa family rose to supremacy in 1590, and Yedo was selected as the metropolis of feudalism, Ieyasu portioned out to his vassals and the nobles who owned allegiance to him plots of land in the immediate vicinity of the Castle, whereon to erect yashiki for their accommodation. This was the first occasion of their erection in this city, and although they are mentioned as having existed at Osaka for a few years earlier, it may fairly be said that the yashiki, as a separate building, dates from the close of the 16th century. Prior to that time hardly any reference is made to the subject in Japanese works, but from that period onward constant allusions may be noticed in histories, public notifications, and official records of all kinds. In particular, a small manual called "Awo-biō-shi" (宵標紙) published in the year 1840 for the use and guidance of the Castle guards, etc., and another work (160) entitled "Ochiboshiu" (夜籍集) published in 1728, furnish many items of interest, and it is chiefly from these two sources that these notes have been compiled.

With regard to the first allotment of yashiki sites in Yedo, the "Ochiboshiu" gives the following information: — "In the 5th year of the period Keichō (1600 A.D.), after the crowning victory of Sekigahara, Tōdō Takatora (lord of Tsu, in the province of Ise) and Date Masamune (lord of Sendai, in Ōshiu), acting on behalf of the Western and Eastern daimiō respectively, made a petition to the effect that they were all desirous of having sites granted to them near the Castle of Yedo. Ieyasu replied that as each one of them already possessed a yashiki in Osaka, it was not necessary for them to have fresh ones in Yedo, "As, however, they still persisted in their request, sites were eventually granted, in the neighbourhood of outer Sakurada, in the locality now styled Daimiō-kōji, to the Eastern and Western Tōzama (daimiō outside of the Tokugawa family) according to their own fancy. * * *

"At that time the district of Daimiō-kōji was a plain covered with reeds, so the sites were raised by means of the earth dug out in excavating the moats."
A certain degree of method seems to have been followed by Ieyasu in portioning out these grants of land for *yashiki* sites to his vassals and feudatories. In the immediate vicinity of his own citadel, and within the line of the Castle’s inner moat, large plots were marked off for the more powerful nobles; within the outer moat were stationed the chieftains of lower rank; while to the *hatamoto*, or petty nobility of the Shōgunate, and the *goke-nin*, or inferior vassals of the house of Tokugawa, were granted smaller lots to the west and north of the Castle. The extent of each lot was in proportion to the rank or services of the individual upon whom it was conferred. Very few sites were altogether detached; they were for the most part arranged in rectangular blocks of from four to six, so that when the buildings were erected thereon each *yashiki* had, on an average, only two sides facing the street. The boundaries were very carefully marked in the case of the larger *yashiki*, but in the district called Banchō, and in other quarters of the town where the *hatamoto* and *goke-nin* dwelt, the streets were by no means so regularly laid out. Banchō, in particular, was densely crowded, the streets narrow, and the *yashiki* small and packed closely together; (161) the result being that that locality, with its tortuous lanes and thickly clustered buildings, presented such a labyrinth as afterwards to give rise to the proverb that even a person born in Banchō might yet not thoroughly know Banchō.

As to the original system on which the land was portioned out, there are not extant any very definite regulations. In the year 1689, however, under Tsunayoshi, the 5th Shōgun of the Tokugawa line, it was notified by one of his ministers, named Ōkubo Kaga no Kami, that for the future grants of from 150 to 500 *tsubo* (*1 tsubo = 6 feet square*) would be conferred, in the district of Honjō on the eastern bank of the river Sumida, upon *hatamoto* holding certain official appointments. Palace attendants received 150 *tsubo*; but by the year 1840 this allowance had been reduced to 100 *tsubo*, as noted in the “Awo-hiō-shi.” A minute scale was
afterwards drawn up, and published in the year 1693 by Abe Bungo no Kami, a member of the *Gorōjin*, or the Shōgun's Council of State. This scale is shown in the following table, from which it may be noticed that the size of the site was in each case to be in proportion to the estimated total yield of the fief of the individual upon whom conferred:—

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<tr>
<th><strong>ASSESSMENT.</strong></th>
<th><strong>GRANT OF LAND.</strong></th>
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<tr>
<td>From 300 to 900 <em>koku</em></td>
<td>500 <em>tsubo</em>.</td>
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<td>&quot; 1,000 &quot;</td>
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<td>&quot; 100,000 &quot;</td>
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(162) The Japanese *tsubo* being equivalent to 36 square feet, it may thus be seen that in the year 1693, in the case of a *hatamoto* or other immediate vassal of the Shōgunate (assessment under 10,000 *koku*) the smallest grant was 18,000 square feet, and the largest 82,800 square feet; and in that of a *daimiō* (assessment from 10,000 *koku* upwards) 90,000 square feet for the lowest, and 252,000 square feet for the highest. To this notification was appended a note to the effect that "for the future, *yashiki* sites would be "granted, as a general rule, in accordance with the scale "given, but that in view of any special circumstances the "same might be increased or modified, according to the "rank of the recipient or the physical nature of the locality."
In 1701, certain grants were made to hatamoto holding various official appointments, for so long a period as they might be in office, as follows:

**Assessment.**

| 150 bags of rice (=75 koku) | 200 tsubo. |
| 200 “ “ “ (=100 “) | 300 “ |
| 900 koku | 600 “ |
| 1,000 “ | 700 “ |
| 1,700 “ | 900 “ |

To certain other officials (named).................... 500 “

And again, in 1725, under Yoshimune, the 8th Tokugawa Shōgun, it was specially notified that sites varying from 70 to 200 tsubo would be granted to certain petty officials and household servants employed at the Castle—all other grants to be still regulated according to the scale of 1693, as given above. Those persons upon whom the lowest lots, measuring 70 tsubo (=2,520 square feet) each, were bestowed, are enumerated below:

- The Shōgun's sandal-bearers.
- Pages.
- Palanquin bearers.
- Petty officers of the Bureau of Works.
- Cleaners of apartments.
- Serving men.
- Out-door attendants.
- Lower men-servants.
- Grooms.
- Porters of the Takabeya (hawks' mews).
- Petty building officers attached to the Fukiage gardens.
- Cleaners of the Fukiage gardens.
- Inferior foot-soldiers.
- Clerks to the heads of the kobushin (apparently a body of pensioners of the Shōgunate).

In the earlier days of the Tokugawa rule, the district called Yedo was not very densely populated, and the town itself was of such limited extent that it was no doubt easy to find in the immediate vicinity wide uncultivated tracts of ground available for yashiki sites. In later years, however,
as the town increased in size and importance, such sites became more difficult to find, and the rule then followed was that any noble who might be desirous of erecting a yashiki should petition the Shōgun's government for a grant of land, naming, if possible, the exact locality he might prefer. But here, again, abuses seem to have crept in, and it was a not uncommon occurrence for requests to be made for pieces of land actually under cultivation at the time. Great hardship being thereby caused to the agricultural classes, the attention of the Shōgun's ministers was called to the fact, and in the year 1738 the following notification was issued by Honda Nakazukasa no taiyu, a member of the Gorōjiu:

"Those persons upon whom yashiki have not as yet been "bestowed by the Government have, up to the present "time, upon their applications for leave to build being sanc-"tioned, petitioned for grants even of tax-paying lands as "sites; but it is hereby announced that for the future it is "not permitted that application be made for lands upon "which taxes are levied."

By this regulation it was at last definitely laid down that rice-fields, etc., were not to be destroyed in order to provide yashiki sites.

It seems that originally only one site was granted to each individual; but this rule was afterwards altered, and most of the great daimio received three lots, the mansions erected upon these being styled respectively 'Chief,' 'Middle,' and 'Lower' (kami-yashiki, naka-yashiki, and shimo-yashiki). Attached to the notification already mentioned as having been issued in 1725 is a special clause conferring grants of 1,500 tsubo and 2,000 tsubo respectively upon hatamoto holding certain rank, for the express purpose of erecting shimo-yashiki. There were also (164) occasionally conferred sites for bessō, or summer residences, within which charming gardens were laid out and clumps of trees planted, the defences surrounding them being generally very slight as compared with those of the larger mansions. Many of these bessō are still to be seen in the suburbs of
Yedo, particularly on the eastern bank of the river Sumida. Last of all may be mentioned what were termed *kakae-yashiki*, which may be briefly described as smaller editions of the *bessō*, being minor suburban residences in the country round Yedo. These could be purchased at will by any noble or official, and were not granted from the Government direct: the only formality necessary was the forwarding of a report to the Shōgun's Ministers upon the occasion of such purchase.

So much for the *yashiki* sites; the next point demanding attention is the structures ordinarily erected thereon. All round the now existing *yashiki*, and immediately below the outer buildings, runs a ditch or trench, faced with stone, and often varying considerably in size; in some cases, indeed, it might almost be termed a moat, being very broad and deep. Perhaps one of the largest in Yedo is that surrounding the *yashiki* formerly belonging to the *daimiō* Tōdō Idzumi no Kami, lord of Tsu, in the province of Ise. This mansion (now converted into a poor-house) is situated just outside of the Idzumi Bridge of the Castle—to which in fact, it gave its name—and the moat is no less than 14 or 15 feet wide. The average width of these ditches, however, is from 3 to 8 feet; but in many instances they are little more than mere drains, and some of the very small *yashiki* of the *hatamoto*, etc., do not possess any ditch at all. At the gateways they are crossed by small stone platforms, but where they are very wide they are sometimes partially filled in by miniature causeways. On the inner side of the ditch rises a low stone foundation, generally of unhewn blocks roughly fitted together after the style of the Castle defences. In the case, however, of many of the great *yashiki*, and notably that of Matsudaira Mino no Kami (of Fukuoka, in Chikuzen), which is situated in the Sakurada avenue, these foundations are built of well cut stones, regularly fitted, and rising to a considerable height, often to as much as eight or ten feet. On the foundation thus laid stand the *nagaya*, forming the whole of the street frontage, except where at intervals a fire-proof store-
house, with thick mud sides, or a short strip of fencing or ordinary wall is to be seen.

(165) The nagaya consist of long and narrow barrack-like buildings, with tiled roofs and barred windows. In the larger yashiki they are nearly always two-storied, but in the smaller ones have merely a single story. They are formed of stout upright beams, supporting the roof, the walls between being built of planks; the upper third portion is ordinarily coated with white plaster, and the lower two-thirds painted black. In the yashiki of the kokushi daimio (those who ruled over a whole province; also styled kunimochi daimio) the lower portion of the nagaya is, however, nearly always faced with square tiles of dark colour, fastened either upright or diagonally, the joints being secured by small rounded ridges of white plaster; and at the corners of the building small portions of the roof are sometimes elevated, so as to rise to a height of a few feet above the level of the other roofs. The windows of the nagaya are of rectangular shape, the breadth slightly exceeding the height, and these are barred by wooden posts (sometimes upright and sometimes horizontal) measuring about two or three inches square, and often coated with plaster. In some cases they project from the wall, at intervals, small sills on which are erected narrow roofed grills, enabling the inmates to look down the whole length of the building. The roofs are covered with tiles, though in very small yashiki they are sometimes merely shingled; the tiles are laid in regular rows from the high central roof-ridge downwards. At each end of the roof-ridge is a very large tile, of trefoil shape, serving as a cap to the rest, and on this the badge of the owner of the mansion used to be marked. The hips of the roof, or end beams supporting the roof-ridge, used also to be ornamented in similar fashion. In the case of yashiki belonging to hatamoto, etc., these hips are always perfectly straight, and the roof terminates with them; but in those of daimio, there is at the end of each nagaya a broad curved piece of roof, resembling a gable-end, which projects far out beyond the hips, from beneath which it issues. This is the principal distinctive
mark by which the rank of the owner can be determined. The smaller cap tiles along the edges of the roofs used often to bear the second badge of the owner. Where the enclosure is marked by a simple wall, instead of by a continuous nagaya, such wall is from six to ten feet high, and formed of mud and plaster, with large pieces of tile inserted therein to give strength to the whole, a miniature roof running along the summit. That side of the nagaya which faces (166) the interior of the yashiki is built like the frontage of ordinary Japanese houses or shops, and closed with sliding wooden screens running in a groove on a narrow verandah. In the case of a retainer of superior rank a small entrance-porch is often added. To screen these rooms from the nobleman's own mansion in the centre of the enclosure, a tall wooden fence is erected, distant only a few paces from the nagaya, the whole of the inner face of which is thus as completely shut in as is the street frontage. Occasionally there may be noticed a yashiki in which the nagaya is closed in on the outer frontage by a wall built only two or three feet away from its very windows, quite shutting out all view except from the upper story. The chief instance of this strange style of building was the yashiki of the Maeda family, commonly known as the Kaga yashiki, in the district called Hongō. This was in consequence dubbed by the name of the "mekura-nagaya," or "blind barracks" of Yedo. Anything more dismal and gloomy than such a style of residence can hardly be conceived, and the retainers of the old feudal nobles certainly could not be congratulated on the score of quarters.

The only government notification mentioned in the "Awo-biō-shi" as having special reference to the size of nagaya was published during the period Jōkiō (1684-88). By it the length of the cross-beams running from side to side of the nagaya (i.e. the breadth of the building between the walls, exclusive of any portion of the roof that might project beyond them) was fixed at 18 feet in the case of kokushiu daimiō, at 15 feet for all other daimiō and for the kōtai hatamoto (those who, like the daimiō, resided for alternate
periods on their fiefs, and in Yedo), and at 12 feet for all other hatamoto and inferior vassals of the Shōgunate. The rooms in the nagaya were usually square in shape, and in the larger yashiki where the nagaya were two-storied, five retainers generally occupied one set of quarters, consisting of an upper and a lower room of identical size, the servants of these retainers living on the ground-floor and their masters above. As one window was the ordinary allowance for each room, it may be seen that by counting the number of windows in a large nagaya, and multiplying that number by five, there may be formed a tolerably fair conjecture as to the total accommodation the building was supposed to afford. But such a calculation would hardly hold good in the case of the smaller yashiki, where the breadth of the nagaya is so much less.

(167) We next come to the gates, which form so noticeable a feature in the whole building. Indeed, these gates, and the porters' lodges attached thereto, have for years been the subject of so many notifications and such minute regulations, that it is not too much to say that more attention has been bestowed on them than on any other portion of the feudal mansions. The number of the gates was eventually determined in proportion to the size of the yashiki and the rank of its owner. They consist of the ō-mon or omote-mon, i.e. the 'Chief' or 'Front Gate,'—the tsū-yō-mon, or 'Gate for ordinary thoroughfare,'—the ura-mon, or 'Back Gate,'—and small posterns, known by the various appellations of hijō-mon ('Gates for extraordinary occasions') yōjin-guchi ('outlets in case of need') and kuguri ('posterns'). The Front, Ordinary, and Back Gates always consist of two large heavy folding doors, fastened inside by a strong wooden bar moving in iron sockets; they are studded on the outside with broad-headed nails, and knobs of metal; the posts on which they swing, and also the beams overhead, are in places sheathed with thin metal plates, and the hinges are strengthened by large iron clamps and bars of considerable weight. The Posterns are small gates, formed of but one single piece of boarding
of diminutive size, often sliding in a groove above and below, and fastened within by a small catch: they were only used in the event of fire, earthquake, or other extraordinary occurrence. In the yashiki of daimio, all these different gates may be noticed; those of the kōtai-hatamoto possessed Front and Ordinary Gates, and a Postern; while those of all other hatamoto were allowed but the Front Gate, and a Postern. The Front Gate sometimes stands alone, under a separate roof, but in other instances is let into the nagaya and stands under one and the same roof with them. The Ordinary and Back Gates are always built in this latter style, and the Posterns are generally cut through the small boundary walls in the rear of the yashiki. The porters' lodges are generally two in number, except in the case of very small yashiki; they are placed one on either side of the Front and often of the Ordinary Gate; at the other entrances they are not built, but a small grilled window occasionally does duty for them. In order to convey a more definite idea of the rules for the construction of the Front Gates and their porters' lodges, it may be as well to call attention to the following detailed list, which has been compiled from numerous notes in the "Awo-biō-shi," and which gives a tolerably (168) clear statement of the usage observed in the later days of the Tokugawa régime:—

1. —Kokushiu daimio:—gate either detached, or else built into the nagaya; two small side-gates or posterns, one on either side, immediately adjoining it; two porters' lodges, situated just beyond the posterns, built on stone foundations jutting out into the roadway for about three or four feet, and furnished with barred windows; roofs of lodges, convex, formed of two slopes descending from a central roof-ridge protruding at right angles from the wall of the nagaya. The above rules were finally notified in the 6th year of the péríod Bunk'wa (1809). A magnificent specimen of this style of gate, detached, is that of the yashiki formerly owned by Matsudaira Inaba no Kami (lord of Tottori, in Inaba), situated between the Babasaki and Kajibashi Gates of the Castle,—now occupied by the War
Department. A similar gateway, undetached, forms the entrance to the old yashiki of Ogasawara Sakiō no Daibu (lord of Kokura, in Buzen), situated within the Kanda-bashi Gate,—lately occupied by the Educational Department.

2.—Tozama daimiō of 100,000 koku and upwards, ranking 'with but after' Kokushiu daimiō:—gate and posterns precisely similar to the above, except that the gateway is never detached, but always built into the nagaya; porters' lodges same as above, only that the slopes of the roofs are straight, not convex. (Notified in 1809). A good example of this style of lodge may be observed in the former yashiki of Nambu Shinano no Kami (lord of Morioka, in Ōshiu), situated a short distance within the Saiwai-bashi Gate; the gateway itself has been walled up to form barracks for troops, but the two lodges are still intact.

3.—Tozama daimiō of less than 100,000 koku, but by courtesy ranking 'with but after' that class:—same as in No. 2.

4.—Daimiō of 50,000 koku and upwards, whether tozama or fudai (direct feudatories of the Tokugawa family):—gate, posterns, and porters' lodges as in No. 2, except that the roof of each lodge is what is termed a 'lean-to roof,' i.e. formed of a single slope descending from the wall of the nagaya outwards. (Notified in 1809). Example: the gate of the former yashiki of Itō Shiuri no Daibu (lord of Obi, in Hiuga), situated in the broad street leading from the Sakurada avenue to the Saiwai-bashi Gate, and facing the Nambu yashiki mentioned above.

(169) 5.—Fudai daimiō who might be appointed members of the Gorōjiu received, for use during their term of office, special residences termed yaku-yashiki, or 'Official Mansions,' the gates of which were as in No. 4. It may here be noted that none but fudai were eligible for the above office.

6.—Any daimiō, whether tozama or fudai, and without reference to the estimated total yield of his fief, who might be appointed to the post of jijiu ('lord in waiting,' an honorary title from the Mikado's Court):—same as in No. 4. (Notified in 1809).
7.—Fudai daimiō of 10,000 koku and upwards:—gate and portars as in No. 2; porters’ lodges not resting on outer stone foundations, but built inside the nagaya; lodge windows projecting, strongly barred, supported by wooden sills jutting out from the wall of the nagaya; roofs to these windows as in No. 4.

8.—Tozama daimiō of less than 50,000 koku; or cadets of kokushiu families, without reference to the estimated total yield of their fiefs:—gate and portars as in No. 2; of the two porters’ lodges, one as in No. 4, the other as in No. 7. Example: the gate of the former yashiki of Nambu Tōtōmi no kami (lord of Hachinohe, in Ōshiu), situated in Ichibei-mashi, in the district of Azabu. This noble was a cadet of the great family of Nambu of Morioka, mentioned above as ranking ‘with but after’ kokushiu daimiō.

9.—Fudai daimiō holding seats in the gan no ma apartment of the Shōgun’s palace (i.e. the very lowest apartment), even though of 100,000 koku:—same as in No. 7. Example: the gate of the former yashiki of Ii Kamon no Kami (lord of Hinone, in Ōmi; 250,000 koku), situated outside the Castle moat above the outer Sakurada Gate. This powerful noble was Chief Minister to the Shōgun, and actually ranked ‘with but after’ the kokushiu daimiō, but nevertheless, being himself a fudai in the gan no ma, he was only permitted to make use of the smaller style of lodge described.

10.—Kōke hatamoto (those sprung from daimiō families):—gate as in the case of daimiō, but with only one postern; two porters’ lodges, as in No. 7. (Notified in 1684-88).

11.—Kōtai hatamoto:—similar gate, with one postern, and only one porters’ lodge, as in No. 7.

12.—All other hatamoto, goke-nin, etc., same as in No. 11. (170) So much importance was deemed to attach to the front gate, that if it were destroyed by fire or any other accident it could not, in the case of a daimiō of 50,000 koku and upwards, be rebuilt in the same style as before. It was then replaced by what was termed kabuki-mon, being
a gateway formed of two large upright posts crossed by a beam of similar dimensions some few feet below the upper extremity of the uprights, the ends of the beam jutting out for an equal distance to the right and left. The two post-erns and two porters' lodges could be added as before, with the sole exception that, in the case of a kokushi daimiō, the slopes of the lodge roofs were to be straight instead of convex. As examples of this may be quoted the gateway to the old yashiki, already mentioned above, of the kokushi daimiō Matsudaira Mino no Kami, situated in the Sakurada avenue; and those of the former yashiki of Niwa Sakio no Daibu (of Nihonmatsu, in Ōshiu), situated in Nagata-chō—lately occupied by the Mining Department,—and of Matsudaira Kai no kami (of Kōriyama, in Yamato), situated just within the Saiwai-bashi Gate,—now occupied by the offices of the Tōkiō Fu. In the first-named gate the cross beam is not added, but in all other respects it resembles those of the two daimiō named afterwards, who ranked 'with but after' kokushi daimiō.

The privilege of affixing heraldic badges to yashiki gates was, by a notification issued during the period Ōkiō (1684-88) limited to kokushi daimiō, to other daimiō entitled to seats in two of the apartments of the Shōgun’s palace named respectively the Teikan no ma and Yanagi no ma, and to the kōtai hatamoto. Even in the case of these favoured individuals, the badge could be affixed to the Front Gate alone, not to any of the others;—but, as has been already remarked, every noble or official was at liberty to place his badge on the roof tiles of his yashiki.

In most of the yashiki gates there may be observed several large rafters jutting out at right angles from the huge beam immediately above the entrance. These rafters are generally from 4 to 8 inches square, and in many cases tipped with metal caps. Whether their number was in any way indicative of the rank of the owner of the mansion does not appear to be clearly known, nor is any mention made of them in the "Awo-biō-shi." Personal observation, however, will prove to any one interested in the matter that as
a general rule, these (171) rafters are 9 in number in the detached Front Gate of a kokushi daimio; 9 or 7 for the same when undetached; and 7, or occasionally 6, for other daimio—the Ordinary Gate, in each of these instances, being surmounted by 5, and the Back Gate rarely having any at all. In the yashiki of ordinary hatamoto, 5 is the common number for the Front Gate, 3 only may sometimes be noticed, and in many instances there are none at all. These remarks, however, must not be taken in any way as a definite rule, for it is probable that in many cases there may be noticed exceptions to what is here stated; and as there do not seem to have been any notifications on the subject, the above may possibly be more of a common usage than a fixed regulation.

Just outside many of the gateways may be noticed rows of stalls for horses, built of timber, with tiled roofs. Sometimes the gate stands a short way back from the road, and in the recess thus formed the stalls are erected; as at the Front Gate of the naka-yashiki of the daimio of Satsuma, situated within the Saiwai-bashi gate,—now occupied by the Hakubutsu-k'wan, or Exhibition Department,—and at the Ordinary Gate in the rear of the yashiki of Ii Kamono Kami, to which allusion has already been made.

Immediately within the main gateway is a courtyard, sometimes of very large size. In the case of the yashiki of a daimio of high rank, it is paved all over with broad flagstones; in some instances it is only partially paved, the remaining space being covered with large pebbles; while in a small yashiki there is often nothing but a narrow paved pathway from the gate to the entrance of the main hall, the rest of the courtyard being entirely bare. Into this yard open the inner rooms of porters' lodges, and here, in former days, there always sat a few guards. Their guard-rooms were ornamented with bows and arrows, lances, fire-arms, and staves with iron heads studded with spikes, serving as grappling irons wherewith to seize and disarm any unwelcome intruder. Whenever a retainer passed out, he hung up in the guard-room the wooden
ticket, inscribed with his name, which he always carried at
his girdle; on his return to the yashiki this ticket was
restored to him. By this means the porters could tell at a
glance how many retainers were absent on leave at any
time. In the larger mansions the courtyard also frequently
contained a row of stalls to serve as stabling for visitors' horses.
In some instances, too, there may yet be noticed a stone-faced (172)
embankment (a miniature edition of the
Castle defences) shutting in the courtyard on the side im-
mediately opposite to the entrance gate, while gradually
ascending causeways to the right and left lead up to the
higher terrace on which is placed the main hall of the
yashiki. This would serve as an inner line of defence,
even though the gate itself should be forced by a besieging
enemy.

Within the yashiki grounds, and immediately between
the nagaya and the main hall or residence of the lord him-
self, there used to stand many other buildings. These
consisted of houses for the officers of the clan,—of what
were termed naka-nagaya, or inner barracks,—and of store-
houses. In the larger yashiki the officers' houses were
those serving as residences for the Councillors (karō), the
Commercial Agent (yōnin), the Representative of the lord
during his absence (rusui), the Financial Officer (kanjō
bugiyō), the Building Officer (sakujī bugiyō), and the
Doctor (isha). In the great clans, the number of these
officers was considerable, but in the yashiki of the lower
daimiō and of the hatamoto there were frequently fewer
officers than those named above. Their houses were in
the ordinary Japanese style, one-storied, with a large
entrance porch (genka); each separate building being
surrounded by a wooden fence, a hedge of shrubs, or a
plastered wall, so as to divide the whole space within the
outer nagaya into numerous small compounds. According
to the extent of ground available, these houses were larger
or smaller in size; and frequently, for convenience sake,
some of the officers were actually lodged in the outer
nagaya; a porch, etc., being added to such quarters to
render them more suited to the rank of the occupant. Interpersed with the officers' houses were the inner nagaya, which in style of structure resembled the outer ones,—and the storehouses, which were fire-proof buildings similar to those already mentioned above. In the centre of all stood the main residence, that of the lord himself, surrounded by a plastered wall or a screen of planks to ensure privacy. The paved way from the Front Gate led directly up to the entrance porch of this building, which was styled the go-den.

The entrance porch, termed genka, as yet to be seen in many of the old mansions, consists of a small square hall, projecting from the main building. It is built of wooden posts and planks, the floor, which is raised to a height of from six to ten inches above the level of the flagstones in the courtyard, being often varnished. This porch is open (173) on one side, and on the inner side immediately facing the entrance are two or more steps, leading up to the raised and matted floor of the house itself. A book called "San-sei-roku" (三省錄), published in 1843, mentions that at the very end of the 17th century the genka was ordinarily 12 feet in breadth, and that a table, 6 feet square, was placed in the centre of the boarding laid down to form the floor below the steps; to the right and left of this table were seated various attendants whose duty it was to receive visitors and usher them into the inner apartments. To the open space left at the summit of the steps adjoined large waiting rooms, known by the name of Sho-in, into which all guests were ushered, and back from these waiting rooms there used to extend numerous other apartments for the use of the nobleman. It is of course impossible here to give any very definite description of the arrangement of these rooms, as they no doubt varied considerably in size, shape, etc., in different mansions. In the extreme rear was generally situated the main hall of audience, a wide and lofty chamber with raised dais at the farther end. Here were received envoys from the Shōgun or visitors of distinction, and here,
too, any matter which the lord might wish to bring to the notice of the whole of his retainers was publicly made known to the latter. The ladies of the household occupied separate suites of rooms, often of exceedingly wide extent. At different spots were small guard-rooms, in which were stationed the retainers who were on guard for the day and night. These guards were ordinarily changed every twenty-four hours, and they were the only vassals (with the exception of a few pages to attend on the lord) who were permitted to pass the night in the go-den. All others, including even the cooks and scullions, had quarters allotted to them in the nagaya, and came over early in the morning to resume their duties. There was always one guard-room immediately alongside of the genka, with a separate entrance, of very small dimensions, from the courtyard; persons of inferior rank, and vassals bearing letters or messages usually transacted their business at this entrance instead of at the main one.

The style of the apartments seems, from all descriptions, to have been in no way different from the ordinary Japanese rule, except in point of size. The posts and beams were generally of finely grained wood, unvarnished, and ornamented at the joints by small pieces of metal marked with the badge of the owner. The paper screens and (174) sliding doors were either plain, or adorned with paintings, according to the rank and wealth of the inmates. Dr. Kämpfer, in writing of his visit to Yedo in 1691, thus briefly describes these mansions:—"There are many stately palaces in this city. * * * * They are separate and distinguished from other houses by large courtyards and stately gates; fine varnished stair-cases, of a few steps, lead up to the door of the house, which is divided into several magnificent apartments, all of a floor, they being not above one story high, nor adorned with towers, as the castles and palaces are where the Princes and Lords of the Empire reside in their hereditary dominions."

The only other point in connection with the internal structure of the yashiki that still remains to be noticed is
the hinomi, or fire look-out station, of which many specimens may still be observed in this city. The hinomi is a small wooden tower containing a fire-bell and striking-beam, erected on the roof of the main hall at the yashiki, and therefore commanding a good view of the immediate neighbourhood. In a city where fires are of constant occurrence, it was of course a positive necessity that a watchman should be posted in the hinomi in order to give timely warning of the approach of danger. Even in this respect, however, the regulations were strict, and it was not permitted to every owner of a yashiki to erect a hinomi thereon. The "Awo-biō-shi" lays down the rule that no one below the degree of a daimiō (i.e. of 10,000 koku and upward) was properly thus privileged, but adds that this rule was in later years frequently transgressed by hatamoto. In the period Höyei (1704-1711), when orders were issued for the organization of the Yedo fire-brigades, no less than fifteen hatamoto, who were appointed to the command of these brigades, constructed hinomi. By special sanction, these officers were allowed to build hinomi of 30 feet in height, those of other persons being only from 25 to 26 feet high. From that time it became the regular custom for any hatamoto appointed to command a fire-brigade at once to erect his own look-out station, and it is told of one Matsudaira Sahiōye no Kami that "having been charged, "in the year 1810, with certain duties as to fires, he for the "first time hung up a bell and striking-beam, and during "his term of office made use of the same." Whenever leave was granted to a noble to visit his country fief, and also during his infancy, the hinomi was always closed. To the daimiō of Echizen, Awa, Tosa, Oki, Sanuki, (175) and Higo there was, however, accorded the privilege of possessing what were known as jō-hinomi, i.e. fixed or perpetual fire-stations where a watchman was always on duty; and three of the above-named nobles, viz., Awa, Tosa, and Sanuki, erected them not only in their kami-yashiki but also in their naka-yashiki. Whenever a new hinomi was erected, or an old one repaired, a special report had to be made to
the Shogun's government detailing the circumstances rendering such procedure necessary.

The foregoing is a general description of the ordinary style of architecture yet to be observed in this city, in the case of those yashiki (now unfortunately very few in number) that still stand as of yore. Some changes have taken place since their first construction in the very early days of Yedo, but these have not been of any great importance. From the observations, however, of the "Ochiboshiu," it would appear that the yashiki of the hatamoto gradually improved in condition, while those of the daimiō deteriorated. To give an idea of the original appearance of some of these mansions, it may prove of interest to quote here the precise words of the writer,—who, it may be remarked, was born in the year 1639 and published his work in 1728. His remarks are as follows:

"The buildings of the yashiki, the townspeople's houses, "and the temples and shrines in this city were, up to the "time of the great fire in the 3rd year of the period Meireki "(1657), precisely the same as when Ieyasu entered Yedo. "* * * * I myself, in my younger days, inspected the "whole of the front rooms of the yashiki of Ii Kamon no "Kami, and can therefore well remember what they were, "like. Both the entrance-porch and the front rooms were "all coated with gold leaf. The length of the front gate "appeared to be about 10 ken (i.e. 60 feet). The gate had "an upper story, and on its doors were carved five rhinoceroses, each one of about the size of a small horse. On the "large end-tiles on the roofs of the outer nagaya were kikiō "badges, of gold, which glittered even at night-time."

It may here be explained that the kikiō, a flower of five petals, was the badge of Katō Kiyomasa, one of the heroes of Hideyoshi's Korean expedition, to whom the yashiki in question had originally belonged.

"Apart from this, too, the yashiki of the kunimochi "daimiō were, for the most part, built with two-storied "gateways, ornamented with (176) various carvings. In "every instance, it was at that time the fixed usage that
"the walls of the yashiki of daimiō possessing fiefs of about "50,000 koku should, from the genka on to the sho-in, be "coated with gold leaf on which pictures were painted. In "particular, the members of the go-san-ke" (or "Three Princely Families" allied to the Tokugawa clan) "possessed what were termed O-nari-mon" (i.e. separate gateways for the special use of the Shōgun himself, whenever he paid his relatives a visit), "built with tiled roofs of convex shape; "and doors completely covered with plates of gold adorned "with carvings, the whole being of exceeding beauty. The "yashiki of my lord of Owari" (one of the go-san-ke) "situated within the Hanzō gate of the Castle, was totally "destroyed by a fire that originated in the mansion itself; "but I well recollect the O-nari-mon at the yashiki of my "lords of Kii and Mito, within the Takebashi gate. It is "said, too, that when the Shōgun was once going to pay a "visit to Matsudaira Iyo no Kami, there were issued to the "latter secret instructions for him also to prepare an O-nari- "mon, in like manner to the members of the go-san-ke, and "that such a gateway was accordingly constructed. The "doors thereof were carved with numerous representations "of sen-nin (genii), and being new, flashed and glittered all "the more; and as the locality, too, was just facing the "Chief Gate of the Castle, there were many passers-by, and "consequently an endless throng of spectators. It is said "that at that period it was commonly called the 'Hi-gurashi "'no go-mon'" (meaning that this gate was so magnificent as to cause the spectator to linger before it from morning until night). "But every single yashiki possessed of such "O-nari-mon was destroyed in the great fire of 1657; and "subsequently to that time, on account of the frequency of "wide-spreading conflagrations, all the residences of the "various daimiō were constructed in less elaborate style. "* * * "Again, in the neighbourhood of Banchō" (where the hatamoto dwelt) "there was not a single residence on "the exterior of which stone foundations were laid or nagaya "erected, or that was even coated with white plaster. "The boundaries of these yashiki sites were for the most
"part marked out by clumps of live bamboos, within which
"were built the dwelling house and nagaya, with thatched
"roofs,—a small gate being also erected. But at the
"present time there is not to be seen a single yashiki
"with outer boundary so marked by live bamboo hedges.
(177) "Thus it would appear that while, as I have stated
"above, the dwellings of the daimiō deteriorated, those, on
"the other hand, of persons of inferior rank ameliorated."

To these remarks may be added a quotation from the
"San-sei-roku," to the following effect:—

"In ancient times, both in Banchō and in other localities,
"none but the daimiō possessed tiled roofs, although, of
"late years, all roofs are covered with tiles, which serves
"as a good preventive measure against fire. In the very
"early period there were not, throughout the whole city of
"Yedo, more than some four or five buildings the roofs
"of which were covered with oyster-shells, but this sub-
"sequently came into common usage, being also of great
"use as a protection against fire. At the present moment,
"however," (i.e. in the years 1772-81) "such roofs laid
"with oyster-shells are no longer to be noticed."

The gardens and pleasure grounds in the yashiki used
to adjoin the main hall. They were in many cases of great
beauty, containing miniature cascades, pools of water,
turfed mounds, trees and shrubs. Those in the old Mito
yashiki, just outside the Suidō Bridge of the Castle, are
stated to have been the finest in the whole city, those of
the Owari yashiki, hard by, being, however, deemed very
slightly inferior. In both of these were miniature repre-
sentations of the Tōkaidō (one of the highroads from Yedo
to Kiōto), with small villages and towns erected thereon,
so as to make up the number of the fifty-three post-towns,
etc., existing upon the actual road. The trees in these
gardens are still standing, forming magnificent groves
which serve as a familiar landmark in that part of the
city.

The points of etiquette, rules, and observances connected
with the yashiki in older days were exceedingly numerous
and intricate. Though want of space here necessitates brevity, it is worth while recording a few of them.

Firstly;—as regards the Etiquette of the Gates. The main entrance-gate was used only by the lord of the yashiki himself, and by persons of rank who came to visit him. The karō, or Councillors, as a rule made use of the Ordinary Gate, while the inferior clansmen either passed through it or through the two small posterns immediately adjoining the main gateway. If a retainer from another yashiki desired admittance, he gave his name to the porters and stated his business. (178) If he bore a message to the lord, he was escorted to the entrance-porch of the go-den; if, on the contrary, his visit were to one of the vassals, he was directed to the quarters of his friend in the nagaya. The rules observed in this respect at the Kaga yashiki at Hongō are said to have been more strict than anywhere else: whenever any one went thither to see a friend among the retainers, he was either sent under escort to that friend’s quarters, or else was kept waiting at the gate until the person named by him were summoned. Upon being properly vouched for he was then, and then only, suffered to enter. The yashiki gates were sometimes shut and sometimes thrown open during the daytime, according to convenience, but at night they were always carefully closed; when, however, the owner of the mansion was away at his country fief, they were shut by day and night alike. The number of porters or guards on duty at each gate was usually from four to six men, but others were of course within easy hail if needed. The writer of the “Ochiboshiu,” whose words have been quoted above, gives a further reminiscence of his own touching upon this point. He says:—“The household arrangements of the daimiō in this city were formerly on a very small scale in every respect. * * * I will here quote one instance with which I was myself well acquainted. There lived at that time one Asano Inaba no Kami, to whom was entrusted by the Shōgun’s Government the superintendence of the two departments of Yeso and Mitsugi, both in the pro-
"vince of Bingo. This person possessed a fief of 50,000 "koku, but having been from the first a Councillor of "Matsudaira Aki no Kami, the lord of the province of "Geishiu, his status was far superior to that of other "daimiō of like assessment. The porter of his front gate "was one Yanosuke, who had a wife and family, and who, "single-handed, not only looked after the opening and "closing of the gate, but all other duties, even down to the "cleaning of the premises. It chanced one day, at the "very moment when Yanosuke was absent from the por-
"ter's lodge, that my lord Koide Yamato no Kami came "on a visit, so the wife of Yanosuke ran forth in haste and "opened the gate. Hereupon my lord Yamato no Kami "laughingly exclaimed, 'What! Has Yanosuke gone "abroad? I much regret putting his lady to such great in-
"convenience.' As he spoke, I, a mere child at the time, "was standing close by and distinctly heard the words. "After this, upon the (179) grounds that a porter who was "encumbered with a wife and family was unsuited to the "post, Yanosuke was dismissed, and his duties were per-
"formed by one foot-soldier and one inferior attendant. In "the great fire of 1657, however, the yashiki of Inaba no "Kami was also destroyed, and after the re-building was "completed and the nobleman again took up his residence "there, it was decided that there should always be three "porters and three foot-soldiers on duty at the gate. On "the occasion of any reception of guests, an officer was also "stationed there as captain of the guard."

When a visitor of high rank arrived, he was carried in his norimono or palanquin through the main gate, across the court-yard and up to the entrance porch of the go-den. If of rank inferior to that of the lord of the yashiki, he de-
scended from his norimono at this spot, but if his position were either superior or precisely equal to that of the noble whom he came to visit, he was carried up into the entrance porch and only descended at the steps immediately leading into the body of the building. During his stay within, his retainers waited about the entrance, and prior to his depar-
ture due notice was invariably given, so as to allow them to reassemble and form their ranks.

2ndly;—Exchange of yashiki. The "Awo-biō-shi" mentions that in the year 1793, in consequence of an enquiry addressed to the government on this matter, it was notified that yashiki could be exchanged by mutual consent of the owners, provided that the application for such exchange were made to the proper authorities after the lapse of three years from the original date of the bestowal of the mansions from the government. To this was added a further notification, in the period Bunsei (1818-30), to the effect that whenever a part only of a yashiki had thus been transferred to another owner, the remaining portion could also be handed over at any moment. In 1809 was made known a regulation regarding the porters' lodges of yashiki thus exchanged. By this regulation, any noble who, by exchange, might come into possession of porters' lodges of a style of architecture superior to that to which he was by his own rank entitled, was permitted to make use of them as they then stood; but if they fell into decay and needed repair, he was not allowed to rebuild them in the same style, but had to erect fresh ones suited to his own inferior rank. Whenever such exchange (180) was effected, the badges of the former owner on the roof-tiles, etc., were always scrupulously erased, their place being refilled by that of the new inmate.

3rdly;—Rules relating to Fires. Owing to the frequency of great fires in the city of Yedo, more than ordinary attention was given to this subject. Constant precaution was taken, watchmen were stationed, firemen engaged, and buckets and other utensils kept in readiness. Indeed, on the occasion of any festival or ceremony, such utensils formed a noticeable part of the gala dress of the yashiki. In olden times, if a fire broke out from a 'Chief yashiki,' the owner was obliged to send in a report at once, detailing the circumstances; and he was then forced, as a punishment, to keep within doors for a certain number of days. Later on, this rule was made applicable likewise to 'Middle' and 'Lower yashiki,' and also to the smaller suburban
residences to which allusion has been made above. In the year 1723, the following Notification was issued:—“Orders "are to be given to the various persons concerned, to the "effect that should a fire originate from a *naka-yashiki*, "*shimo-yashiki*, or *kakae-yashiki*, there must for the future "be sent into the Government, in like manner as in the "case of a Chief Residence, an enquiry as to whether the "owner is to confine himself within doors.” Twenty days later it was notified by Midzuno Iki no Kami, a member of the *Gorōjiu*, that although the report must always be sent in, the punishment might on occasion be remitted if the mansion were other than the ‘Chief *yashiki*.’ Thus if the damage caused by the flames were confined solely to the *yashiki* in which the fire originated, no confinement was necessary; but if, on the other hand, the conflagration spread to any other building, even in the slightest degree, the punishment was to be inflicted. This, however, was not proclaimed, but was made known verbally to the parties concerned. The “*Awo-biô-shi*” here gives the following instance:—

“In the 12th year of the period *Kwansei* (1800) there “stood at Gembei-mura, Takata” (to the west of Yedo) “a “*kakae-yashiki* belonging to Itô Kawachi no Kami. A fire “broke out from the *nagaya* of this *yashiki*, and the whole “of the buildings were burned to the ground. Kawachi no “Kami therefore reported the matter to the government, “which report was forwarded to the Shôgun, accompanied “by an enquiry as to confinement within doors; the docu- “ment was, however, (181) handed back with a slip at- “tached, on which it was written that such a course was “not necessary. Upon this, Kawachi no Kami visited “Uneme no Kami, an officer of the government, in order “to express his acknowledgments,”

4thly;—*Death of a noble outside his own yashiki*. The rule in such case was that the estates of the deceased were confiscated. In 1860, when *Ii Kamon no Kami*, the Chief Minister of the Shôgun, was murdered near the outer Sakurada gate of the castle, by a legal fiction it was given
out that he had died inside his own yashiki, in order that his heir might succeed to his fief. In this instance it was no doubt the high rank of the murdered noble, and the influence of the family to which he belonged, that caused to be remitted the penalty which would have been enforced in the case of any one of less degree.

5thly;—Confinement in yashiki as a punishment. Mention has already been made of this mode of punishment, in the case of fires; but it seems to have been the one commonly inflicted whenever a noble incurred the displeasure of the Shōgun. The term of such imprisonment varied from ten days to several months. The "Kindai Geppio" (近代月表), a narrative of events from 1844 to 1863, states that the daimio of Mito was on one occasion condemned to seclusion in his yashiki from the 5th day of the 5th month to the 16th day of the 11th month of the same year. This occurred in 1844, and throughout the work in question are recorded numberless instances of similar punishment having been meted out to others of the most influential daimio. It was customary also for political and other offenders to be placed under the charge of noblemen, in whose yashiki they were imprisoned. While a daimio was confined to his own mansion the gates were always fast closed, instead of standing open during the daytime as under ordinary circumstances.

Apart from the above, there existed many other regulations of minor importance. The ceremony of suicide by disembowelment (hara-kiri) was not allowed in 'Chief yashiki,' their proximity to the Shōgun's palace forbidding their being thus made places of execution: this ceremony was therefore performed in the smaller mansions, when it took place at night, either in the main building or in the garden, according to the rank of the condemned person. The discharge of fire-arms within yashiki grounds was prohibited in olden times, but in (182) 1861 a notification was issued by which permission was granted for the discharge of blank cartridge for purposes of drill in any yashiki, whether within or without the Castle moats.
The feudal system having come to an end in this country, the old *yashiki* are fast disappearing. Many have been destroyed by fire, others removed to afford sites for buildings in European style; some few are still retained as barracks for the soldiery, and in numerous instances the former *nagaya* have been portioned out into rows of small shops, etc., to be let to the townspeople. Ere many more years have elapsed, this style of architecture will doubtless no longer be seen; the *yashiki* have already fully played their part in connection with Japanese history, and being now of no further use, will shortly disappear from the scene. But for the foreign visitor at least these ruined mansions will always possess a special interest, recalling, as they do, so many a reminiscence of olden days, and affording so clear an evidence of the utter decay of the ancient pomp and state of this metropolis of feudalism.
(183) A General Meeting was held at the Shōheikuwan, Seidō, Tōkiō, on the 10th December, 1878, at 4 p.m. Dr Murray, the President, occupied the chair.

The minutes of the preceding General Meeting were read and approved.

The Librarian announced the receipt of the following:—The Celestial Empire, Vol. II, No. 20; The Chinese Recorder, July-August, 1878; Bulletin of the Imperial Russian Society of Geography, Part 1. He also reported that the library contained 18 complete sets of the Society's Transactions. He congratulated the Society on having secured the Chinese Repository, together with the Chinese and Japanese Repository.

The President said that this was a most valuable collection of material in reference to China and that it also contained valuable information on Japan.

Mr. Thomas R. H. McClatchie then read his paper entitled "The Feudal Mansions of Yedo."

The President expressed deep interest in the paper just read, especially as the yashiki were now fast disappearing.

Mr. Satow observed that the demolition of most of the yashiki and the conversion of many nagaya into rows of shops had very much changed the physiognomy of the streets of the city during the last ten years. Without the aid of a map of Yedo as it formerly existed, it would be difficult to convey to those who had not known the city when it was still Yedo, an idea of the extent of the yashiki. Starting for a walk round the castle from the top of Kudanzaka, one passed a narrow strip of ground unoccupied by houses, but behind it the whole space between Kōjimachi and the outer moat from the Yotsuya gate backwards to the Shōheibashi was occupied by yashiki. Where the English Legation now stands was a line of nagaya, which was continued on beyond Kōjimachi down the hill. Next came the yashiki of I Kamon no Kami and the daimiō of Geishū. Passing this and its neighbour the Kuroda yashiki, one issued through the Toranomon gate into the region called Atagoshita, completely occupied by yashiki. On the other side of the high street, where the railway terminus now is, were yashiki belonging to the daimiō of Aidzu, Sendai, and of Tatsumo in Hanshiu. Returning to the Sakurada gate and following the moat, what now is called the Hibiya drill-ground was occupied entirely by yashiki, memorable amongst which was that of Chōshū, destroyed by the Shōgun's government in 1864, in consequence of the attack on the Mikado's palace at Kijō made by the retainers of that daimiō. Passing through the Hibiya gate and turning to the left, where now are the artillery drill-ground, the courts of justice, and the bureau of police, were nothing but daimiōs' yashiki, and so on all the way up to Kudanzaka again. This was without taking into account the enormous yashiki outside the moat, one of which has been converted into a palace for the Mikado, while on the sites of two others have been built the military (184) school
and the arsenal. In the time of the Shōguns few foreigners ever penetrated into the yashiki of daimiō. The Foreign Representatives paid visits to the minister's of the Shōgun at their official residences, but never saw more of the interior than the reception rooms set apart for such interviews. Great jealousy was felt lest strangers should see into the interior of the yashiki, and in former days a notice board posted in a conspicuous place on Atagoyama prohibited the use of telescopes for looking at the yashiki which lay below that hill. But nevertheless one could observe enough to learn that the yashiki were little more than barracks surrounding a living-house of not very durable material and certainly did not deserve to be called 'palaces,' as they so often were by early visitors to Yedo. The real palaces of the daimiō were at the castles away in their own dominions.

The President asked what was the object of the stringent regulation as to the confiscation of a daimiō's property in case of his dying outside his yashiki.

Mr. Satow was of opinion that confiscation took place only in case of his dying a violent death.

Dr. McCartee suggested that perhaps there was something superstitious connected with this custom, and cited a similar practice prevalent in China.

The President having observed that many would like to see a map of a typical yashiki, Mr. McClatchie mentioned that he had ordered one some time ago, but that it was still in the draughtsman's hands.

Mr. House observed that almost every yashiki had its peculiar legends and ghost-stories, which were not always fanciful. All had been scenes of important events, and it was worth almost any person's time to continue this subject of yashiki. As to the number of beams projecting over the gateway of a yashiki, these, he believed, were almost invariably of an odd number, and the number of the great daimiō's beams was eleven.

Mr. McClatchie said that as to the number of beams he had been unable to get a rule; he had judged merely from repeated observation.

Mr. Blanchet remarked that no responsibility for fire attached to a daimiō, unless the gate of his yashiki were destroyed. The number of wells in a yashiki was always marked on the posts of its gate.

Mr. McClatchie was not sure that a daimiō got off scot free if his gate were not destroyed in a conflagration. It was a common thing now to put up the number of wells even on ordinary houses.

The President remarked that the present regulations in regard to fires remained as a relic of those feudal times. Any official through whose carelessness a fire occurred must send in his resignation.

Mr. House asked whether or not it was regular to have a theatre inside a yashiki.

Mr. McClatchie thought it was rather exceptional. It was customary, however, to have nō dances inside.

The President voted the thanks of the society to Mr. McClatchie. His paper had been of great interest to all, and it was to be hoped that ere long he would give the society something further on the feudal times of Japan.

The meeting was then adjourned.
INSCRIPTIONS AT SHIMABARA AND AMAKUSA.

By the Rev. H. Stout.

(Read January 14th, 1879.)

In the history of Christianity in Japan, reference is made to the final struggle and destruction of the Christians in Shimabara, in 1637. The people of the locality retain many traditions of the event, and monuments have been erected where heroes fell, and over the common grave of the slain.

It appears that some sixty years before, the "old Castle," as the place is called, had been abandoned by the petty daimiō for the more eligible location at the thrifty town of Shimabara, some twenty miles farther north, where a new castle had been built. So at the time the persecuted sect made the "old Castle" their rendezvous, nothing remained of the fortifications but the foundation walls, portions of which may still be seen. However, it was a spot well chosen for defence. The promontory of soft rock, now much worn away by the waves, extended at that time eastward several hundred yards into the sea, where it fell off on three sides, quite perpendicularly, at a height of more than a hundred feet. It was therefore quite inaccessible from that quarter. Its defence on the land side was not difficult, for a deep, narrow valley leaves an abrupt ascent on the west. Only on the north-west is the approach at all easy, which is over a ridge that runs by gradual ascent from the valley up to the castle walls. Here the principal fighting occurred, and here stands the monument of the commander-in-chief, and just upon the walls that of the common grave.

Among the various traditions are those of the gathering
of the Christians from different quarters, the encampment of some of them for a time on the islands near at hand, and in the earlier days of the siege, (186) the extension of their lines for more than a mile into the valleys. An excavation, some thirty by fifty feet square, just under the walls, is referred to as having been made for a retreat for Nirada Shirō, and the other chief men with their families. It was covered with bamboos, supported on upright poles, and overspread with turf on a level with the surrounding soil. It is said that when the besieged were finally overpowered, and crowded into the narrow limits of the bluff, they were there slaughtered in crowds, and multitudes of both sexes and all ages pushed from the cliffs into the sea. One other matter of tradition is interesting, as it seems to confirm the statement made by some, but denied by others, to the effect that the Dutch came with a ship from Hirado, and assisted in the siege, making a breach upon the fortifications with their guns, and that several Dutchmen lost their lives in the engagement. It may also be remarked that nothing is known of a monument ever having been erected, bearing an inscription impiously threatening to execute in the same manner with the Christians there slain, any other of the sect, or the Christians' God himself, if he ever dared to come to Japan.

The struggle of the Christians with the government is always spoken of by the people of Shimabara as "The rebellion," and as having been suppressed by "the daimiōs of all Kiushiu."

Four monuments,—if the smaller rough stones may be so designated,—are found on the battle-field. Two of them are over the graves of officers in the attacking party, who must have fallen in the final onset, as they are near the extremity of the bluff, quite within the castle walls. One bears the name Sabunri Kunōjō, of Inshiu. The rest of the inscription merely tells of his fighting and death, and that the stone was set up about fifty years afterwards by visitors to the place. Another, close by,
bears the simple inscription, Sabunri-Ku Dai-shichi. This person was doubtless a retainer of Kunojō.

The third stone has inscribed upon it the Buddhist prayer, "Namu Amida Butsu," and "The tomb of bones." This was set up in 1766. From the inscription it would seem that the remains of the killed were left upon the field for many years, and the bones finally gathered and buried. But there is no other evidence that this was the case.

The larger and more pretentious monument is that of Itakura Shigemasa, the commander-in-chief of the army of the Shōgun. It is a (187) well-dressed stone, together with the base, about eight feet high. The inscription is as follows:—

"The monument of Itakura Shigemasa, Jūgobon Naizen-no-shō. Corrected by Sentonchoku Mimpō."

"The thoughtful, benevolent man in seeking life does not violate benevolence, and in losing his life he is also benevolent. Life and death depend upon heaven, or fate. The man who spares his life and considers his own happiness is a disgrace to the perfect man; but he who, though seeing danger, disregards his life, acts the part of the perfect man. Therefore, if you wish to do what is right, and put instruction into practice, do not choose between what is easy and difficult; if you wish to advance and make a name, do not consider what is your advantage and disadvantage. Itakura Shigemasa, Jūgobon Naizen-no-shō was a brave and eminent man. His father Katsushige, Jūshihon-Jijiu Iga-no-gon-no-kami, and his eldest brother, Shigemune, Jūshihon Shōshō Suwo-no-gon-no-kami were successively, father and son, appointed Shoshidai (Shōgun's resident at Kiōto), and guarded the Emperor's palace. Their honors and praises are spoken of everywhere. In his youth Shigemasa saved Lord Tōshō Daijin (Iyeyasu) and assisted in the government. He had a brave heart, was upright and gentle, but decided. He was in the service in turn both of Taitokukō (Iyetada) and Taikenkō (Iyemitsu), receiving no small honors from them. In Teichiu, the fourteenth year of Kanei (1637), the rebels who had been led astray by
Jesus made their head-quarters at 'The old castle,' of Hara, in the village of Arima, in the district of Kōrai, in the province of Hizen. The gatherings of these multitudes, like bees and ants, was known in Yedo. Taikenkō, in order to destroy them by the aid of the daimiōs and samurai of all Kiushiu, gave special orders to Shigemasa that he should take command of the army, and superintend the whole affair. Shigemasa took his eldest son and set out immediately. When he arrived he went about to view the towers and ramparts, the village and country, and from time to time carried out his deep laid plans. On the first day of the first month of the next year, Shigemasa, in his zeal and courage, rushed impetuously into the midst of the enemy, where his helmet being crushed, and his lance broken, he in the end perished, being fifty-one years old. How deplorable! how sad! Shigenori had followed him, and harassing his soul, had valiantly put forth his strength, but alas! victory and defeat are according to fate. (188) Taigi died in the rebellion, and Yensai perished in the fortress, 'and for thousands of years their patriotic zeal and righteous courage have remained un tarnished.' And the same will be said of Shigemasa. Not long after this the rebellion was suppressed, as it is said, 'One's punishment comes upon him as quick as thunder,' and again, 'Is it not true that the strength of a position is overcome from within?' It must be said that this man lost his life in doing worthy deeds. And does not every one turn up his sleeve to wipe the tears on his account? Genyukō (Iyetsuna) in time of peace appointed Shigenori to office, and he kept the Castle at Ōsaka. After this he was constantly advanced, and was made Shissei (Minister), and had conferred upon him the title of Shōshibon. He was appointed Jijū (Lord in waiting) and became guardian of the Castle of Karašuyama in Yashiu. He received (lit. ate) an income of five thousand koku, so he made his house famous. His son Shigemitsu Jūshihon inherited his position and imitated his good deeds. When the present Shōgun (Tsunayoshi) began to reign, he was employed in the government. His income was in-
creased, and he was transferred to the Castle of Iwaki, in the province of Musashi. Behold how each generation advanced by the abundance of good deeds. Shigemitsu set up this monument for Shigemasa, on the spot where he fought and died, and recording his brilliant deeds, wishes to make them known perpetually. The disposition to remember ancestors, and to make them known is filial piety and a pleasure. Shall we call this the monument of peace at Waisei, or shall we call it the monument of weeping at Kenzan? I was asked to write something, to wit, an abbreviation of the most important events, and some poetry, which poetry is the following: "—(Here follows the poetry, which is of no historical value.)

"The ninth month of the ninth year of Yempō" (1681).

An inscription on the back of the stone is to the effect, that Hayashi Fuminari, apparently by direction of Shigemitsu, the hero's grandson, had prepared the above writing, and intended to erect the monument, but was prevented from doing so. However, Sentonchoku (probably a priest) carried out his design in 1791, one hundred and fifty-four years after the rebellion. This was doubtless done by order of Itakura Shigemasa's descendants, whose names are there recorded with their titles, etc.

(189) Near the village of Tomioka in Amakusa, some twenty miles from the "old Castle," there is another monument, bearing an inscription in some respects more interesting than those on the battle-field. The stone is an undressed, sea-worn one, about seven feet high, standing upon a slightly elevated grassy mound. The tradition of the place is that the Christians of the locality, captured at the "old Castle," were brought back to Tomioka, and having been condemned, were decapitated and buried there. The number, 3,333, is probably a complete number, or used to indicate a great many. Near the top of the stone is inscribed in a circle a Chinese character, used doubtless as a Buddhist mystic symbol. Beneath this is the statement, that "If any one hears (believes?) Buddhism, he will of course become a saint" (hotoke). In
the same line below are two more mystic Chinese characters. The remainder of the inscription is as follows:—

"The principles of Christianity are mainly established in false doctrine, and have no other object than the seizure of the country. In China, not otherwise than in Japan, this sect has been interdicted. It appears evident that Ieyasu formerly used severe measures in order to reform the sect, but with dissimulation they cherished evil inwardly, and neither reverenced Buddhism, nor obeyed the laws of the Emperor. In the end they showed their perverse hearts, as is related below. Therefore, the Shogun sent orders to the daimio's of Kiushiu, and at that time the whole of the sect was destroyed, and the world (Japan) became tranquil. The many ten thousands of their heads were collected, and being divided into three lots, were buried in Nagasaki, Shimabara, and Amakusa. From that time the peace of the whole of Japan was sung, just as 'In the days of Shun, they fanned the breezes of Gio,' Joy! Joy!"

"Nirada Shirō, of the district of Amakusa in Higo, of Japan, was a young rebel. He established the Christian sect and made known the false doctrines everywhere. Those men and women only who were disaffected formed the party. In the winter of 1636 they destroyed Buddhist and Shintō temples, burned villages and farm houses, and passed over to the district of Shimabara in Hizen, where they prepared for siege. There were more than 31,000 of them. Their immediate object was to subvert the country. Therefore all the daimio's of the land hastened to the battle-field, and by night and day, by sea and land, (190) the fighting did not cease. Finally, at the end of the next spring, they made a breach upon the castle, and slew and captured the evil company, great multitudes. But there was a remnant of the sect not destroyed. In this village of this district, there were three thousand three hundred and thirty-three heads collected and buried, making one grave. The honorable Governor Suzuki Shigenari, a distant descendant of Nomi Daijin Shigetoku,
寬永戊寅之役因為佐助分利九蒸奉使二月十六日戰而
死其第二子稱五郎佐衛門此余之高祖池田九蒸次至
明年丁未將百五十年來拜墓為置之
天明六年丙午之冬
因幡銳隊長兼別封
衛門氏
利三郎左
大七
佐分利九
who was the chief of the retainers of Kumano Gongen, being a worthy and estimable person, is, moreover, benevolent and just, and besides skilled in arms and a man of learning. His Excellency seeing the mound grave of these people, and pitying the many thousand evil spirits wandering in pain, performed the meritorious act of setting up this monument. I earnestly pray that by his good works every one of these spirits may forthwith become a saint (kotoke), and prove the benefit of being purified in hades."
(There follow four lines of poetry).

"The twenty-fifth of the seventh month of the fifth year of Seihō" (1648).

"Written by Priest Chinkasō."

In the village graveyards, connected with the temples, are many tomb-stones of the ordinary shape, but bearing no other inscription than that of a simple circle. These are said to mark the graves of Christians. Such stones are found in the graveyards about Nagasaki also. But no positive proof has yet appeared to show that it was the custom of the Christians to mark the graves of their co-religionists in this manner. However, if it were the custom, the circle with the cipher on the Tomioka monument may be very significant.

There is another monument at the village of Ōye in Amakusa, having an inscription that bears upon this subject, but though an effort has been made to secure a copy, it has not yet been obtained.
A SHORT NARRATIVE OF FOREIGN TRAVEL
OF MODERN JAPANESE ADVENTURERS.

By Capt. J. M. James.

(Read January 14th, 1879.)

(191) The following is a translation from a small work entitled Kai-gai-i-den, by Saitō Masakane, of the Tsu Han, in the province of Ise, dated 3rd year of Ka-yei 嘉慶, (A.D. 1850).

Commencing with the preface, the words of the author are as follows:—

Our Great Japan is said to have attained her military prestige through the power of the Sacred Sword. Her people were patriotic and sincere, and strictly revered the truth. Her generals and soldiers were veteran warriors, to whom death caused no fear. The fame of her glorious deeds of arms having spread abroad over the whole world (meaning probably China and Korea), she was feared and respected by all neighbouring nations.

The routing of the Eastern barbarians by Yamato-dake-no-mikoto.

The expedition undertaken to Korea by the Empress Jingō.

The wonderful exploits of Hira-fu.

Tamura Maru's power, which extended over the whole of Yezo, or Inu.

The taking possession and colonizing of Loo Choo (Riu-Kiu) by Minamoto no Tametomo.

(192) The military fame of Minamoto Han-gan Yoshi-tsune, which was known over the whole of Eastern Tartary.

The defeat of the invading Mongolian army, over a hundred thousand strong, by Taira-no-Hōjō, Sagami no Kami.
The expedition to Korea carried out by order of Toyotomi Taikō, and the defeat of the Ming troops who were opposed to his forces at that time: these are well known historical facts. But as to Yamada Nagamasa, one of the most ambitious and successful adventurers of modern times, and Hamada Yahei who fought and defeated the red barbarians (Dutch) in Formosa (Tai-wan), these are interesting facts, which are wanting in the pages of our history, and the desire that these glorious deeds of our countrymen should not be lost to future generations has induced me to record them.

The country of Shamuro 邁羅, or Siam, is situated on the southern boundary of India. A Chinese work entitled Su-shi 南史 (a statistical and topographical work of the Kingdom of Su), states that the name assigned to it was Seki-do 赤土, or Red earth, also that what is now termed Shamuro (Siam), at that period consisted of two distinct kingdoms, Shamu 邁 and Ra-ho 雷勃 (Lao), but that they became united under one sovereign during the Gen 元 period, (A.D. 1280 to 1368). Its circumference was over 10,000 Chinese miles (3000 English), and from being most fertile and productive, together with a dense population, it received the appellation of Zen Koku 善國, or Fortunate Country.

With regard to Yamada Nagamasa (more commonly known as Tenjiku Tokubei), there are various reports. One says that he was a buccaneer, and on one of his incursions arrived in Siam; another that he was the servant of a Shintō priest attached to one of the shrines in Ise.

His own version was, that he was born in Owari, and was a grandson of Ota Nobunaga, the Lord of that province. The latter is the one which is generally believed to be correct.

He was a youth who was no exception to the rule, of the type of individuals who in middle life invariably become distinguished personages.

He bore all the traces of being considerably superior in his traits of character, disposition, and temperament, to other youths of his own years. Although extremely fond of
all the games and pastimes of the day, (193) nothing delight-
ed him more, when the opportunity occurred, than to listen
to the soldiers when relating any of their battle experiences,
and also those of travel.

He was now residing in Fu-chiu, province of Suruga.
From the commencement of the period Gen-na 元和 (A.D.
1614), peace reigned throughout Japan, and the numerous
unattached samurai, and others who had no permanent
means of subsisting, were applying to the various Daimiōs
(provincial Lords) on all sides for employment.

Not so with Nagamasa, who had arrived at the conclusion
that for him, at any rate, there seemed no possibility of
attaining any position of importance in his own country,
and that as soon as possible, whenever the opportunity was
afforded him, he ought to go (where he knew not, but any-
where from Japan) where there would be a probability of his
earning a reputation, and a position of independence as well.
Fortunately the edict interdicting Japanese from leaving
their country had not yet been promulgated.

Having during his residence in Fu-chiu made the ac-
quaintance of two merchants, named respectively Taki and
Ōta, who had already arranged and were on the eve of
starting on a trading expedition to Formosa, he solicited to
be allowed to accompany them, offering his services in any
capacity which might seem fit to them. His offers were
refused, and Nagamasa knew of no means by which he
might induce them to change their mind on his behalf.

Whilst in their company, during conversation, he had
heard the outline of the proposed expedition, also the where-
abouts of the vessel then being equipped (at Ōsaka) in
which they intended embarking.

Immediately on parting company with the merchants, he
lost no time in starting for the above-mentioned place, where
on his arrival, and after due enquiries, he found the vessel,
which was already loaded, and waiting only for the arrival
of the merchants to set sail on their voyage. After learning
all particulars about the vessel, and her intended voyage,
he managed, unobserved by those on board, during the.
night to secrete himself away amongst the cargo. A short time only had elapsed when the merchants arrived on board, and after some enquiries relating to the cargo and the quantity of provisions on board the ship being satisfactorily answered, the vessel's anchor was weighed, and they started on their voyage.

(194) They had scarcely got out of sight of land when Nagamasa came out from his hiding place and discovered himself to the merchants and crew of the ship. At first they were so astonished that they would scarcely credit their eyesight with the fact that the individual was the same they had met at Fu-chiu, and to whom they had positively refused a passage with them. A few moments, however, convinced them that such was the case, and much annoyed were they at it. After a deal of explanations on both sides, it was decided that as nothing could be done now to alter matters for the better, he should from this time forth be considered as one of their party.

Nothing of any special importance took place on the passage, and in due time the vessel arrived safely at her destination, Formosa. After the trading business had been concluded, and the ship loaded with her homeward freight, preparations were made for starting on their return voyage, and Nagamasa was expected to return as well, but on being asked by the merchants, he distinctly told them that now he was there, he intended to remain, and try if possible to win a reputation and a fortune sufficient to give him an independent position, before he should ever think of returning home. He thanked them sincerely for all favours he had received at their hands, and trusted that one day it might be in his power to repay them. The merchants, knowing his character full well, together with the ambitious designs he had previously disclosed to them in conversation during the voyage, knew that persuasion would be of no avail. After providing him with a few articles which might be necessary during his stay there, they bade him God speed, and sailed for home.

At this time there were already many Chinese adventurers
in Formosa, who, the more easily to ingratiate themselves with the native tribes, had assumed the Japanese garb.

Nagamasa had been in Formosa now some short time, and had become fairly conversant with affairs which most interested him, namely, that of his future prospects of power and authority, and seeing no way by which his desires could be fulfilled, owing to Formosa being an island, and divided between so many different tribes, each with its chief, he determined to start for other lands (to him as yet unknown), and soon an opportunity presented itself. He succeeded in obtaining a (195) passage in a foreign ship (what nationality is not mentioned), bound to the West, and eventually reached Siam.

War was being carried on between Rikkon and some states which were friendly to Siam. The King of Siam had already sent assistance to his allies, but, notwithstanding, the forces of Rikkon were victorious.

Nagamasa now hoped a chance might be afforded him of fulfilling his desires. Having gained access to the officials, and hearing of their late defeat, he laid before them a system of military tactics and organization (up to the present they had had no particular tactics in use), and by explaining it in detail, convinced the officials it would be much to their advantage to adopt his system. Within a short time he was sent for to appear in the presence of the King, to explain all his novel idea of warfare in detail. He succeeded in convincing the King to that extent in his favour that an appointment as a general in his army was conferred on him. It was also entrusted to Nagamasa to advise, and to make use of the best means in his power for a defence against Rikkon.

There were many Japanese adventurers settled in Siam at this period, and one of Nagamasa's first steps was to collect several hundred of his countrymen, and enlist them in the Siamese army. In addition, he raised a corps of over 10,000 followers, of different bold enterprising spirits, ready for any sort of service, and having equipped and armed them in the Japanese manner, added them to the
already existing force of Siam. Having settled all preliminaries with regard to the commissariat and transport that would be required for the coming campaign, he caused a false report to be freely circulated in the neighbouring states, that a large army had arrived from Japan to fight on behalf of Siam. This seems to have done him some service. It caused the confidence which the soldiers of Rikkon up to this time had had in themselves to waver on seeing such a formidable force opposed to them, which they supposed were some of Japan’s sturdy warriors. In the first engagement Nagamasa defeated them, with great loss on their side.

The King of Rikkon, nothing daunted by his late defeat, determined to give battle again. Collecting nearly 100,000 of his chosen soldiers, he again made war, intending the overthrow of Siam as a kingdom, and eventually adding it to his own dominions.

Nagamasa, in no way discouraged by the superiority of the enemy (196) in numerical strength, decided on trying what stratagem would accomplish for him in the coming contest.

Being aware of the route by which the invading army intended advancing, he proceeded to divide his forces into three divisions, under their respective commanders, two of which were placed in ambush, one to the rear of a hill, the other near the sea-shore, where there were long reeds growing, so that they were completely hid from view. Both of these positions commanded the road by which the enemy would advance. Taking command, and heading the remaining division, he led them on to oppose and engage the enemy. After a severe engagement, which lasted some time, in which the invading force had the advantage, he feigned a retreat, and succeeded in drawing the enemy within his lines of ambush, when, at a preconcerted signal, his troops fell on the enemy from on all sides (during the heat of the action the shots fell like hail) with an overwhelming and irresistible force. The troops of Rikkon now broke into a confused pell-mell retreat, leaving many
thousands of their comrades dead on the field, the number which escaped being comparatively few. Nagamasa followed up their retreat, pursuing them even to their capital, where he succeeded in taking the King prisoner and bringing him back to Siam.

Nagamasa’s fame now spread with great rapidity over all the adjacent states, each of which sent an embassy bearing tokens of friendship and messages of congratulation to the King of Siam on the success of his army in defeating Rikkon, which had, up to this time, enjoyed the reputation of being a very powerful country, and had been both feared and respected in consequence.

The King, in recognition of the great services Nagamasa had rendered the state, bestowed on him his daughter in marriage, together with the title of Kan-pu-rah (Duke, or Lord), also the conquered states of Rikkon and Ki-hi-ru. The King of Siam was now well advanced in years, and being weary of governing, and his son not being of sufficient years to entrust the government to, he appointed (Kan-pu-rah) Nagamasa to act as Regent, as well as commander-in-chief of the army. The fame of (Kan-pu-rah) Nagamasa was the theme of praise in countries even as far as India, but it is doubtful if it had yet reached Japan, owing to the irregular communication between the two countries.

(197) After an interval of some years, the two merchants Taki and Ōta again started on another trading voyage, and, strange to relate, after some time arrived within Siamese territory. On this being reported to the government, orders were issued and officers specially appointed to look after the welfare of these Japanese merchants. They were provided with an elegant residence, and had all their wants supplied most bountifully, at the expense of the state, as if they had been persons of distinction.

This greatly perplexed them, knowing that they were receiving attentions they were in no way entitled to, and impressed on their minds grave doubts as to their future treatment and security.

Very shortly after their arrival, a message from the court
was sent to them, the purport of which was, that the Regent (Nagamasa) had expressed a wish to see the strangers, and for this purpose they were to be conducted to the palace at a time specified.

The reception at court is related by the merchants thus:—

"On arriving at the palace, after a short interval we were conducted through many halls and finally into the audience chamber, and after passing between the Ministers of State (who were kneeling on the floor, in two lines one on either side of the hall), were placed opposite the Regent, who sat at the end, on the high throne, which was gorgeously decorated with gold and precious stones. The dresses of the Regent and Ministers of State were also of great splendour; in fact the whole ceremony was so imposing, and conducted with such grandeur and dazzling magnificence, to our humble ideas, that we durst not raise our heads to meet the gaze of the Regent, but kept them bowed to the ground, so overcome were we by the magnificence of everything around. After making our obeisance, and replying to some few complimentary questions, we were bid to retire, and conducted back to our own residence, where a sumptuous feast had, during our absence, been prepared for us.

During the night a messenger from the palace informed us the Regent would pay us a private visit, as there was some information he particularly desired, which possibly we might be able to give him, and that we were on no account to make any preparation to inconvenience ourselves for his reception, as he intended coming without any attendants, (198) and in ordinary costume. In due time the Regent was announced, and on salutations being exchanged, desired to go with us into a private apartment, where he soon disclosed that he was none other than Yamada Nagamasa, our fellow-companion to Formosa years ago."

After a series of sincere congratulation on their present meeting, and apologies on both sides for what had happened in former days, Nagamasa expressed to them his deep sense of gratitude for all former favours, and although years
had elapsed, during which, through the smiles of fortune and success, he had attained high rank together with vast wealth, still he had never forgotten the two merchants with whom his first steps in the path of destiny or fortune commenced, and without whose aid and material assistance, he possibly would not have been in his present position. In token of which he now bestowed on them innumerable costly presents, to take with them on their return to Japan.

On the return of the merchants, Nagamasa’s fame and successful career became widely circulated in Japan, and, as a consequence, many adventurers in search of wealth and fortune, and equally as ambitious as he, were not long in finding means of getting to Siam. Nagamasa, although holding high rank, and wealth in proportion, still in secret sighed for the sight once more of his native land, more especially for that of Fu-chiu, where he had resided previous to his departure for Formosa. Whilst there he frequently had offered prayers at the Shintō shrine of Sen-gen-miō-jin (rather a noted shrine in Suruga). Never had he yet gone forth to battle without first invoking the power of the guardian deity of Sen-gen-miō-jin on his behalf, and never having failed to secure the victory at any time, he attributed his success to the efficacy of his prayers.

The most noted artist of the time was now instructed to paint a scene portraying the principal battles in which Nagamasa had been successful. This having been completed in the most graphic and satisfactory manner, it was got ready, together with many other costly presents, to be forwarded, when an opportunity offered, to the above-named shrine, as a token from Nagamasa for all the favours that had been showered on him. He also sent letters to the Government of Japan from time to time, as opportunity offered, affording information which (199) would be beneficial in establishing a friendly intercourse between the two countries, accompanying the same with presents.

A merchant vessel was now about starting for Japan, and this opportunity was taken of forwarding his offerings to the shrine of Sen-gen-miō-jin.
Affairs in the government of Siam were now undergoing a change. The King was dead, and was succeeded by his son, who was favourably inclined towards Nagamasa. One of his first acts, on assuming the reins of government, was to appoint him ruler of the two tributary provinces Rikkon and Ki-hi-ru, which had been bestowed on him by the former king.

Before he was able to take his leave and departure, rumours were spread that the ex-Queen and one of the court nobles were suspected of adulterous intrigue, and to further their ultimate designs had decided to poison the present King. Nagamasa's presence was the only obstacle that required removing, and to hasten his departure, partisans of the intriguing party had given such assurances that all doubt as to the possibility of such designs being contemplated were allayed, and Nagamasa, thinking all was secure, left for his provinces. Very little time had elapsed before news of the King's death reached him. He was determined to avenge this diabolical act of the Queen's, and bring both the guilty parties to justice. In the meantime, anticipating Nagamasa's wrath, and knowing full well what deserts would be in store for them, they secretly despatched envoys to poison him, in which they succeeded, causing his death in the 10th year of Kanyei (A.D. 1633).

His only issue was a daughter named Ayin, who, on the death of her father, collected all their available forces, and heading them herself, led them on against the Siamese troops, but suffering heavy defeat in the first battle, through inferiority in numbers, fled, and eventually reached Japan.

Some years previous to the 10th year of Kanyei (A.D. 1633), a party comprised of Chinese and Japanese had set out with the object of settling, and founding a colony in Formosa. They had not long been established when some Dutch ships arrived, and anchored off the same place. After communicating with the Japanese, and on agreeing to certain stipulations that were imposed on them, they were granted a concession of (200) land on which they might establish themselves for trading purposes. They had no
sooner installed themselves than they commenced levying a series of black-mail on all Japanese vessels arriving, which they had to submit to, not then being in a position to make any retaliation. It became so intolerable, that eventually one Hamada Yahei, collecting a number of his countrymen, equally as desperate and determined as himself, attacked the Dutch settlers, and succeeded in worsening them to that extent that they were only too willing to submit to the terms he imposed, in order to retain their present foothold in Formosa.

They were so restricted, however, that for the future there was no possibility of the Japanese being in any way molested by them.

Tai-wan (Formosa), an island situated in the southern portion of the China Sea, seems to have been little known in ancient times, and not until the commencement of天啓 Ten-kei (A.D. 1621), during the Ming dynasty, does it appear that any people from China or Japan had settled there.

The first settlers mentioned are Gan Shiu-sen, a native of Haiching, and Tei Shi-riō, a native of Sen Shiu (Chin-Chew) two Chinese, who together with a number of Japanese, migrated thither, and founded the first settlement of which there is any record.

Gan Shiu-sen was the head of the party, and assumed the title of Kōra, 甲螺 or chief (probably a corruption of the Japanese word Kashira, head, or most important personage). Not long after they had settled there, the death of Gan Shiu-sen occurred, and Tei Shi-riō now became the head of the party, until finding favour at court in China he received an appointment as a military commander, which post he accepted. The Japanese now elected a chief from amongst themselves, who was termed the Kōra, as usual.

The Dutch now appear to have first arrived, and for the concessions granted them by the Japanese, in allowing them to acquire land for settling on for the purpose of trade, agreed to pay a yearly tribute of 30,000 deer skins. After installing themselves on the land selected, their first act
was to build a fort sufficiently large for all their force to reside in, and this done, they lost no time in assuming an air of superiority and dictation towards their Japanese neighbours. The tribute of deer skins, as agreed to, was never paid, in fact the reverse took place, for all Japanese vessels which arrived had to deliver up (201) whatever was demanded from them by the Dutch, and passing vessels, even those going to India, were plundered on every occasion. The Kōra of the Japanese settlers, having no force at hand, had nothing to do but submit to these breaches of good faith and acts of extortion.

One of the principal and most frequent traders to Formosa (in whose absence the Dutch had installed themselves) at that time, was named Hamada Yahei, a native of Nagasaki. On his next visit, hearing of all the extortions, and the indignities his countrymen had had to submit to at the hands of the Dutch, he resolved, on his return to Nagasaki, to represent the same to the government, and to request the assistance of a force sufficiently strong to coerce the Dutch, and if possible, expel them.

Hamada Yahei, the head of the opposing party, although a merchant, was far from being a peaceable one; there was more of the filibuster element about him than otherwise, and consequently when the task of chastising the Dutch was imposed on him by his countrymen, he assembled his brother Kozayemon, together with his son Shinzō and twenty of the principal settlers, who were all determined men and longed to appease their resentment and to have their revenge on the red-haired barbarians (Dutch). He started for home, and having on his arrival represented the state of affairs in Formosa to the authorities, an order was issued to the Governor of Nagasaki, Suyetsugu Heizō, to fit out ships, and supply men and arms, to assist Hamada Yahei in driving the Dutch out of Formosa, and in their stead to establish their own countrymen there. The expedition, several hundred strong, composed of men who were only too glad to get the opportunity of leaving their own country, and join any enterprise that might lead to their
future advantage, sailed and arrived in safety off the entrance to Taiwan-fu. It had been previously arranged, to prevent the suspicions of the Dutch as to the real object of such a force arriving, that every person (with the exception of the seamen actually engaged in navigating the ships) should attire themselves as farmers, dressed with straw hats and hemp rain-coats, so that the arms which they carried could be in no way visible. Before coming near to the anchorage a few agricultural implements were left here and there about the decks, so as the more easily to deceive the Dutch. No sooner had the vessels anchored than they were boarded by the (soi-disant) Dutch (202) officials, who required to know the object of so many ships arriving, with such a number of men on board. The answer returned was that they were simply emigrants of the agricultural class, who, hearing of the wonderfully productive soil of Formosa, had come there for the purpose of trying to better their condition in life, better prospects having been held out to them than they could foresee in their own country. This report was accordingly made to the Dutch Captain Kitsu, who was in command there, and he, doubting the truth of the statement, sent guard-boats to surround the vessels, and prevent any communication with the shore taking place. A special messenger was sent from the Fort to inform the Japanese that their coming in such force led the Captain to suspect that the object of the mission was other than friendly.

Hamada Yahei explained that there need be no doubt as to their intentions. If Japan had wished to invade and occupy Formosa, it would have sent a properly organized expedition, comprising many ships of war, and well equipped soldiers, whereas with them, it was the case of a few farmers who came with no other object than of bettering their position in this new land. The messenger having thoroughly examined the different ships, and what he saw agreeing with Hamada Yahei's account, returned to the Fort and made his report to the Captain accordingly. His mind being relieved from all further doubt, he allowed the
new-comers to land. On landing, Yahei and a few of his principal followers went to the Fort, and having gained admission to the Captain's presence, expressed a desire that they might be received as his own people, offering to place themselves under his jurisdiction, and to receive in return the same advantages as the Dutch. Their request not being granted, after an interval they wished to be allowed to return to Japan; this was also refused them. However, from time to time they went and pleaded with the Captain to change his mind, to allow them to depart, but without avail. Matters were assuming a serious form for them, and Hamada Yahei and his followers, seeing nothing before them, if they remained as they were, but a life of slavery, and eventually an ignominious death, became desperate, and one and all decided, rather than submit, to sell their lives as dearly as possible, or free themselves. Having prearranged to attack the Fort,* Hamada Yahei, together with his brother and son, and a few followers, (203) leaving the rest of their party outside the Fort, went early one morning, and soon gained admittance to the sleeping apartments of the Captain, who was still in bed. On their announcement, annoyed at the intrusion of his uncalled for visitors, he abused them in rather strong language for their audacity in entering his apartments. Hamada Yahei, without making any apology or observation of any kind, seized him by the throat, and drawing his short sword, told him as far as apologies went, he was the individual from whom they would come for the future, as he did not intend to discuss any points of etiquette with an individual for whom any kind of death would be too good. A scene now ensued, in which the attendants of the Captain tried to seize on Hamada Yahei, but Kozayemon and Shinzō drew their swords, and by showing they intended their immediate use in case of resistance, compelled them to refrain from interfering.

The noise from the inner apartments had aroused the suspicion of the troops within the Fort, who having now got

* With arms concealed on their persons.
under arms, encountered Hamada Yahei's followers outside. A general fight ensued, and there was firing on all sides. During the mêlée, the Captain still in custody of Yahei and his two kinsmen, who had spared his life only on his promising to comply with their demands without delay, proceeded to where the fighting was going on, and on his commanding his men to desist, order was soon restored. The Dutch were completely overpowered and submitted to the terms dictated by Hamada Yahei.

The terms dictated by Yahei, and agreed to by the Dutch, were as follows:—

He was ordered to return two-fold everything he had plundered from the Japanese since the first offence.

No guns of any kind were to be fired from the Fort in the future.

One foreign-built ship and two Japanese vessels were to be loaded full with goods of every description, at Yahei's pleasure, and to sail for Japan, and the Captain was to be taken there as a prisoner; but after pleading and representing to Yahei the influence he had with the native tribes, together with the number that were already under his jurisdiction, and that taking him might cause great trouble amongst the different tribes, he suggested that his son, a youth of twelve years, might be accepted in his stead, which was finally agreed to.

(204) On Hamada Yahei's return to Japan about twenty chiefs (Tō-moku) of different tribes accompanied him, who, together with his kinsmen and other followers, on their arrival at Nagasaki, gave a graphic account to the officials of their adventures in Formosa.

Yahei received great praise and distinction from the Government, and his fame became widespread in Japan.

Some time after, his services were solicited by Katō Kiyomasa, the Lord of Higo, who appointed him to a remunerative post in his province. Kanyei, 5th year (A.D. 1628).
A General Meeting was held at the Shōheikwan, Seidō, Tōkiō, on Tuesday, 14th January, 1879. Dr. David Murray, the President, occupied the chair.

The minutes of the preceding General Meeting were read and approved.

The Recording Secretary announced that at the last Meeting of Council a letter from Dr. Murray had been read, in which that gentleman, on account of his leaving Japan, signified his resignation of the office of President, at the same time expressing a desire to retain his connection with the Society. The Corresponding Secretary had accordingly been instructed to communicate with Dr. Murray, thanking him for his past services as Vice-President and President, and requesting him to represent the Society in any of the cities which he might visit during his approaching journey. Thereafter the Rev. Dr. Syle had been unanimously elected President, Dr. Divers, F. C. S., F.I.C., Vice-President for Tōkiō, in room of Dr. Syle, and Mr. William Anderson, F.R.C.S., a Member of Council, in room of Dr Divers. He also announced that Mr. Thomas Gray, C.E., B.Sc., and Dr. F. Eýkman, had been elected members of the Society.

The Librarian reported the receipt of the following:—Vol. I. to X. with Index, and Vol. XI., part 4., of the Records of the Geological Survey of India from 1868 to 1877; No. I., Journal of Straits Branch of the Royal Asiatic Society, Singapore, 1876; Bulletin of the Russian Imperial Geographical Society; Fourth Annual Report of the Minister of Education, for 1876 (original and translation); Boletín de la Sociedad Geográfica de Madrid.

The President said that, before proceeding with the business of the day, he had the honor to submit his resignation as President, and hand over the duty of presiding to Dr. Syle. From the very beginning of the Society Dr. Syle had been a member, and one of the most active members; indeed, but for his exertions, it was probable not only that the Society would never have reached its present efficiency, but that it would never have been originated at all. He expressed his thanks to the Society for the honour conferred upon him in selecting him to preside over their meetings. He congratulated the Society upon the degree of success that had attended the mission of the Society in this country. The volumes issued by the Society gave a very good indication of the wisdom of those who had established it. No better material could be found for the formation of correct ideas regarding Japan than the Asiatic Society's Transactions. The work was still but begun. Questions demanding elucidation existed on all sides. He hoped to hear of this Society going on in the career of progress on which it had entered. He begged now to transfer the duty of presiding to Dr. Syle.
Dr. Syle then took the chair, briefly thanking the Society for the honor conferred upon him.

(206) Sir Harry Parkes testified to the very great regret with which the Society had heard that their President had resigned the chair. He was sure they all cordially joined in wishing Dr. Murray a pleasant voyage, and hoping that he might return and again fill that chair. He rejoiced that Dr. Murray's post was to be so well filled. Dr. Syle was the founder of the Society. The concluding remarks of Dr. Murray were calculated to stimulate him in the exercise of his presidential duties.

Mr. Satow then read a paper by the Rev. Henry Stout, of Nagasaki, entitled, “Inscriptions at Shimabara and Amakusa.”

The President eulogized this paper on account of its entirely unique character and the authenticity of its information.

Mr. Satow said the question whether the Dutch sent a vessel of war to assist the government troops against the Shimabara insurgents, was conclusively settled in the affirmative by the testimony of Baron Onno-Swier van Haren, who, in a work written by him in defence of the conduct of the Dutch in Japan, and published in London and Paris in 1778, entitled “Recherches Historiques sur l'état de la Religion Chrétienne au Japon relativement à la nation Hollandaise,” quotes from the journals of the Dutch factory at Hirado (Firando) the statement that a Dutch vessel was present at the siege of Shimabara, landed guns, and opened fire from batteries armed with these guns and from the vessel. It has also been disputed whether these insurgents were driven to rebel on account of the oppressive rule of the daimiōs whose subjects they were, or by the hope of obtaining liberty to profess their religion. It is true that the two daimiōs were afterwards punished by the Shōgun’s government on the ground that they had misgoverned their subjects, but this proves nothing. Any daimiōs in whose dominions an insurrection broke out would have been condemned ippo facto for misgovernment. All Japanese accounts agree in stating that the motive of the insurgents was the desire to obtain freedom for the exercise of their faith. De Haren, however, says that the rebels were chiefly oppressed peasants, with a small sprinkling of apostate Christians, ten thousand rōnin and the dissatisfied inhabitants of Amakusa, and this at least seems to have been the account of the matter received by the Dutch residents at Hirado.

A MS. journal kept by some one who took part in the siege, discovered by Mr. Aston, states that on the 24th February, 1638, the garrison offered to surrender, if the lives of all but the ringleaders were spared, but the reply from the besiegers was that not a single one could be allowed to escape. The garrison then prayed that the women and children might be spared, if the men all submitted to lose their heads; but the answer was the same as before, that not a single one should be suffered to escape the edge of the sword. The diarist says in another place that out of the 37,000 people who filled the castle and the lines around it, only 13,000 were fighting men, so that we must suppose that some 24,000 women and children were slaughtered when the place was taken.

Captain J. M. James then read "A Short Narrative of Travel of Modern Japanese Adventurers."

(207) The President remarked that Captain James' paper was most interesting and valuable, and opened quite a new field of inquiry. It
reminded one of an old romance. He hoped it was the first of a series.
The Japanese were a terror on the coast of China to this day.

In answer to a question from Dr. Murray, Captain James said that,
as far as he knew, the expedition to Siam referred to in his paper was
a historical fact.

Mr. Satow contributed the following additional information in
regard to the relations of the Dutch and the Japanese in the island of
Formosa:

M. Pagès, in his work entitled La Religion Chrétienne au Japon, at
page 680, says that Pieter Nuyts, in 1627, visited Yedo on behalf of
the Dutch East India Company, and gave himself out as ambassador of the
King of Holland. This was found out by the Japanese officials, who
-treated him with a certain amount of contempt in consequence.

In 1628, Nuyts being made Governor of the Fort of Zelandia in
Formosa, found an opportunity of wreaking his vengeance upon two
Japanese vessels, which touched there on their way to China. He
seized the sails and yards, and made the junkies miss the monsoon.
The Japanese, under command of their leader, Hamada (Famanda),
attacked Nuyts by surprise and made him prisoner. In the fight six
Dutchmen were killed and 18 wounded; three Japanese lost their lives.
He was further forced to give up 200 piculs of silk, which he had
detained during a whole year, with compensation for loss of market,
to set free 12 Formosans who had been unjustly imprisoned by him,
and to beg pardon. Hamada kept him a prisoner for 12 days more.
On returning to Japan, they reported the affair to the Government, and
the Shōgun claimed the surrender of Nuyts. In 1631 he was brought
to Japan, and handed over to the Shōgun's Government, which kept
him in prison for five years.

A more authentic account of these transactions is given by Meylan in
his Geschiedkundig Overzigt van den Handel der European in Japan
(Historical Review of the Trade of Europeans in Japan), as follows:

"In 1627 Pieter Nuyts was appointed Governor of Formosa. On his
arrival there in the month of June, 1627, he found a report from the
Superintendent, Cornelis van Nuytenrode, informing Nuyts that he had
learnt that the Japanese merchants had determined to obtain by force
of arms the freedom of trade in Formosa, which had been refused them
in spite of all their representations, at the same time cautioning the
servants of the company to be on their guard, if more junkies than usual,
and armed, should arrive from Japan at Formosa.

"It has remained unknown whether the Japanese merchants really
had such a design; but on the appearance of the Japanese junkies, which
arrived that year in Formosa, the Governor took the precaution of
placing them under the surveillance of the Dutch ships which were
there at the time. He next had them strictly searched, and finding
that they were better armed than usual, gave orders that the arms,
without exception, should be brought on shore and taken charge of,
until the (208) time of the departure of the junkies, in the meantime
demanding the same duties as had hitherto been levied upon imported
merchandise.

"The Japanese were utterly enraged at this treatment, and threatened
the Governor that they would not only bring their complaints before
the Imperial Japanese Court, but would also take their own particular
revenge."
Although the Governor disregarded this threat, he discovered only too soon that it was not altogether made in joke, for having also in the same year sailed to Japan, and having travelled to Yedo, in order to acquit himself of his mission, he found himself anticipated there by the new complaints of the Japanese merchants, with the result that an audience of the Emperor was refused to him, so that he found himself obliged to return to his Governorship of Taiwan, without having accomplished the object of his journey.

The Japanese, far from being hereby satisfied with regard to the affront which they considered had been offered to them, returned in 1628 to Formosa, but so slightly equipped that the Governor considered it unnecessary to take precautions against them on this occasion.

It appears, however, that also some natives and Chinese had resisted the levy of import and export duties, and had consequently been thrown into prison, whilst the Governor, P. Nyuys, seems to have had grounds for delaying the departure of the Japanese junks against the will of the Japanese, although I do not find the reasons for this recorded; still if it be permitted to make a guess concerning the matter, it is not improbable that the resistance which the Governor had experienced on the part of the Chinese and natives, was attributed by him to the advice and suggestions of the Japanese, and that he would not consent to this departure until he had assured himself how far his suspicions were correct.

However that may be, on the morning of the 29th June a few Japanese applied for admission to the Governor, who was in a room alone with his little son; they demanded from him immediate consent to their departure, and upon receiving an answer in the negative, fell upon the Governor and his little son, and bound them hand and foot, while another band of Japanese, now numbering in all 150 men, hurried up immediately, made themselves masters of all the approaches to the residence of the Governor, and dispersed at the first onset the sentries stationed there, who, not suspecting any force, were easy to take by surprise.

The garrison assembled with the design of effecting by force the release of the Governor, though they in the first place demanded that he should be delivered to them. The Japanese swore that they were prepared to die, but that the first attack made upon them would be the certain signal for the death of the Governor and his son, whom they guarded with drawn swords.

The Japanese now demanded from the Governor not only their unconditional free departure, but also the release of the natives and Chinese, who, as we have seen above, were kept in confinement, together with the restoration of 150 piculs of silk, which they maintained to have lost through the fault of the Dutchmen.

(209) The negotiations about this affair lasted seven whole days, namely, from the 29th June to the 5th July. The Governor, P. Nyuys, who had remained in fear of his life all this time, agreed at last to everything, subject, however, to the approval of the council, consisting of the principal functionaries of the Factory then present in Formosa, who had assumed the administration during the imprisonment of the Governor, and who were strong enough not to fear a further attack from the Japanese.

The council, considering that with any measures of violence the
lives of the Governor and his son were inevitably lost, together with the fact that such measures might moreover have the most regrettable results for the servants of the Company in Japan and on the interest that the Company had to remain in possession of the trade in these regions, inclined on its own side also to peaceable sentiments, and ratified the agreement which had been concluded between the captured governor and the mutinous Japanese.

"On both sides hostages were given to ensure the faithful fulfilment of this agreement, amongst which hostages, on the side of the Netherlands, was the son of the Governor. After that the Formosan and Chinese prisoners were set at liberty and the 150 piculs of silk were made good to the Japanese, partly in kind partly in money, according to a fixed value, and they thereupon returned in peace to Japan, where the exchange of the hostages took place; though this sad history did not end therewith.

"The Japanese, on returning from Formosa, took care to have the affair represented to the Imperial Court in the most favourable manner; and found means to obtain approval of their behaviour and disapproval of that of the Governor, P. Nuyts. But, however unfavourably the affairs may have been regarded by the Japanese Court, it was no less ill received by the supreme Government at Batavia. When the matter was discussed there, the Governor, General De Carpentier, had been replaced by the Governor-General, Jan Pieterzoon Koen, who had arrived at Batavia with this rank a second time. In the former Herr Nuyts lost a great and powerful protector, whilst it appeared on the other side that the new Governor-General was by no means inclined to give his approval to all the measures of his predecessor in office.

"Some historians have made out that the dissatisfaction of the Supreme Indian Government with Herr Nuyts went even so far that they caused him to be carried back as a prisoner to Japan, in order to be placed at the disposition of the Japanese Government, as a state sacrifice; but this fable, which is taken from the 'Recueil de Voyages au Nord,' is positively contradicted by all genuine information and records of that period. It is true, nevertheless, that Herr Nuyts, recalled from Formosa to Batavia, received a not very honourable dismissal, not only from his office of governor, but also from his rank as Councilor of India; that he afterwards returned to Japan in 1632, not under compulsion, but of his own choice, because his enemies gave out that many things had come to light in Japan to his disadvantage, and he said he was not afraid to go to defend his cause, which he (210) held to be justified in that country also; that he subsequently, upon his arrival at Hirado, was immediately put in prison by order of the Japanese Government, without being granted any trial or hearing; and lastly, that after his arrest the [successive] Superintendents, under repeated instructions from the Supreme Government, left nothing untried to procure his release, sparing neither representations, money or presents, though his release was not obtained until the month of July, 1636. So much expenditure and solicitude on the part of the Supreme Government to effect the release of Herr Nuyts from Japan prove abundantly that he was not sent thither as a political victim, whatever reasons for dissatisfaction the Supreme Government may have had with the said gentleman."
Sir Harry Parkes said that it was very interesting to find from a Japanese quarter information throwing light on history. He hoped that Captain James' example would be followed. The facts revealed accounted for the recent interest taken by the Japanese in Formosa. It would seem that at the time referred to in the story there were very few Chinese in Formosa; now the Chinese population amounted to 3,000,000. The force of the Dutch governor of the island must have been small. To the present day there was flown by Chinese junks in the Formosan channel a little horizontal tricolour flag that was derived from the Dutch. In connection with the expedition to Siam, he remarked that the Japanese, like the Swiss, had been accustomed to enter into the service of various foreign potentates. Until recently, very little had been known of Siam. The inhabitants of that country had a predilection for Japanese swords.

The meeting was then adjourned.
ON THE DRINKING WATER OF YOKOHAMA
AND
THE NECESSITY FOR ITS IMPROVEMENT:

BEING THE RESULT OF A SYSTEMATIC INSPECTION,
AND ANALYSIS OF THE WELLS IN YOKOHAMA.

BY DR. A. T. C. GEERTS,

AND

T. J. R. ONAKA, SANITARY CHEMIST AND ANALYST,
J. S. UMAYABARA,
M. T. YAMASHINA,
T. T. NINOMIYA,
R. S. MATSUZAKA,
K. S. IKUTA,
J. F. KOISO,
M. Y. OGUSHI,
Assistant Chemists and Analysts at the Imperial Laboratory of Benten, Yokohama.


I.—SHORT HISTORY OF FRESH WATER.
The principal source of all drinking or potable water is rain. When rain-water falls on the ground it constitutes a comparatively pure water. It contains then only minute traces of organic matter, ammonia, nitrate of ammonia, and
atmospheric air; which substances have been absorbed during the passage of the rain through the air.

(212) When rain-water penetrates into the ground, it dissolves the more or less soluble substances contained in the latter; such as the chlorides of potassium and sodium, the carbonates of magnesia, and lime and other salts.

After reaching the ground, rain-water may either collect directly and form brooks, rivulets, and at last rivers, or it may completely disappear from the surface of the earth, and be gathered in underground reservoirs, and form what is generally called a well.

The water of brooks and that of rivers, in their upper course, will be free or at least nearly free from animal organic matter, and may therefore be safely used as drinking water by the people living in its neighbourhood. But when such running water has once passed the first inhabited place (village or town) on its banks, it will no longer possess its original purity. For the water which has been used by the people will partly return to the river through gutters, drains, canals, roads and ways in the form of sewage; and as this filthy water contains a great quantity of impurities of animal origin, such as faecal matter, urine, soap, refuse-water that has been used in washing, etc., it will, in mixing with the river-water, deprive the latter of its original purity. In its further course such running water may again be partly freed from the organic impurities in solution, by their being slowly oxidized into nitrous and nitric compounds, and other products of oxidation. The more densely populated the places a river passes in its course, the more will its water become impure and polluted; until at last, in its lower course, the water will have become perfectly unfit to be used as drinking water, and its use may even be dangerous to health.

It is therefore easy to see why the originally pure mountain water, in flowing past densely populated places, must necessarily become more and more polluted and foul.

The rain-water that has penetrated into the earth and that has gathered in underground reservoirs, forms, as we
have said, the water of wells. If a well is very shallow, and if it contains chiefly what is called surface water, it will act also as a reservoir for part of the drain-water and of the sewage of the neighborhood. If such a shallow well is situated in proximity to dwellings, in densely populated streets, or,—what is even worse,—near leaky closets, drains, dung-heaps, cess-pools, stagnant-pools, swamps, etc., its water must necessarily (213) become polluted by animal matter and other organic substances in a state of decomposition, whilst it will also mostly contain nitrates and nitrates as the products of oxidation of a part or of the whole of the nitrogenous organic substances, together with ammonia as a product of decomposition or reduction of the same substances.

After the water of a well has once been used by man, it will—like the river-water—form sewage, or filthy water, and either flow into a river, through gutters, drains and canals, or be again absorbed by the ground. It is evident that the water of shallow wells—surface water—situated in low, densely populated and badly drained places, must become more and more polluted; also shallow wells may sometimes contain pretty pure water, when they are situated in uninhabited highlands and mountain places. The water of the last kind of wells is called upland surface-water, and is often of good quality.

With the so-called deep wells, the case is quite different, for in these wells the surface water is as far as possible excluded. A “deep well” is not always a well of great depth, but it is a well in which the water appears beneath a layer of earth which is wholly or nearly impenetrable for water; the shaft of the deep well must therefore penetrate through that impermeable stratum. The water which such a well contains is not the rain-water that falls in its immediate neighbourhood, but that which falls at the place where the impenetrable stratum appears at the surface of the earth. If this place is uninhabited or mountainous, the water of the well will in all probability be entirely free from organic impurities, or from the products of the decomposi-
tion of organic bodies (ammonia, nitrites, nitrates). As the water of deep wells has in most cases to flow a great distance underground before it reaches the well, and as it has to pass on its way through an extensive filter of layers of earth, it happens very often that, although it contained at its origin some organic substances, it is found to contain in the well only nitrates, without any trace of organic matter, the latter substances having been oxidized during the passage of the water into the inoffensive nitrous compounds, through the different earth-layers.

We thus see that the water of mountain lakes, streams, or rivulets, and of deep wells constitutes the two best natural kinds of drinking water, whilst the water of more or less polluted rivers, and that of shallow wells, especially in densely populated, lowly situated and badly (214) drained places, form the worst and most dangerous kinds of drinking water.

A systematic investigation into the nature of the wells of Yokohama, performed in the year 1877, has shown us that, with the exception of some wells situated on the hills, all the wells of this town belong to the worst sort of shallow wells, containing only surface-water. It has further shown us that the water of the shallow wells, situated in the most densely populated and badly drained parts of the town, must be considered to be of very bad quality; and that those parts of Yokohama where in former times swamps were to be found, contain wells the water of which is so bad that even the common people do not think of using it as a beverage. The water of the wells situated along the seashore or near the canals that intersect Yokohama in many directions, contains a large amount of salt which makes it in most cases unfit to serve as drinking water.

It is certain that the water of even those shallow wells of Yokohama which furnish at present water of tolerable quality will also become polluted within a few years, if none of the following measures of precaution and improvement be immediately taken.

These measures are:—
1st.—The introduction of a better system of disposal of sewage, better constructed open drains, care being taken to keep the drains open and clean.

2nd.—The removal of the closets from the immediate neighbourhood of the wells: these conveniences are in this country generally built quite close to the well. Should it be impossible, from want of space, to remove them, then they ought at least to be rendered perfectly water-tight.

3rd.—The transformation of the present shallow wells into "deep wells," by making the shafts of a water-tight material, in order to prevent the surface-water from mixing directly with the lower layers of pure water.

4th.—The termination, extension and amelioration of the Tamagawa aqueduct by conducting its water, which is wholesome and of great purity, by means of perfectly circulating iron pipes, through the whole town. The present system of aqueducts, which ends here and there in dead points, must be wholly given up.¹

(215) We insist on the fact that shallow wells are always dangerous to public health. Although they may at a certain time of the year contain tolerably good water, their continuing to do so is never to be relied upon. My experience in Yokohama has proved that these wells are subject to great variations in the quality of their water. A sudden rain shower after a long season of drought will carry mechanically a great amount of impurities into the drain-water; the latter will dissolve, besides, part of the filth which has accumulated in the pores of the ground during the period of drought; it will therefore pollute the water of the well just at a time when one would think that its water must have been improved by the great quantity of fresh rain-water that has been added.

In shallow wells a small amount of impurities or organic matter in decomposition must be considered to be of far greater importance than it would be in a deep well, as the

¹ A first necessity is that the water of all parts of the aqueduct is kept constantly in movement. The system must therefore be circulatory, without any dead ends.
former are subject to such great alterations in the quality of their water, whilst the water of the latter remains more constant in its composidon.

II.—THE STANDARD AND THE LIMITS OF PURITY OF DRINKING WATER.

In considering the quality of water in general, the sanitary chemist must keep in mind the different purposes for which it has to serve. The water of a well, for instance, may be good enough to supply a single house with drinking water, whilst it may be unfit to be carried by an aqueduct for the supply of a town. The reason of this is, that the water used in a great town has not only to serve as drinking water, but must also be fit to be employed for a great variety of industrial purposes for which pure water is required, and that the water carried by an aqueduct is always apt to become less pure in passing through the conduits.

Many a water may be safely used for cleansing and washing, whilst its use as drinking water may be dangerous.

It is, however, not to be forgotten that many people are not at all aware of the consequences of the use of bad water, and that they are apt to drink a water which ought only to serve for washing purposes. This is the more the case if the acquisition of a better sort of water offers some difficulties.

(216) If it can be done, it is therefore always far better to supply a town with water of good quality only, and to prevent the use of bad water even for cleansing and washing.

There are as yet no fixed rules according to which the sanitary chemist may decide as to the good or bad quality of a water for drinking. It is easy enough to determine the difference between a very good and a very bad water; but there are many waters which keep just in the middle of these two extremes, and in such cases it is often a difficult task to decide if the water is be to admitted or rejected as potable water. One chemist will be more severe
in his appreciation of facts, *ergo* in his judgment, than another, although they may both have found the same substances in the water. Another difficulty is to be found in the difference of composition that the water of one and the same source shows at different seasons and even on different days of the year.

Before deciding upon the quality of potable water, it is consequently necessary to fix a standard of purity and to ascertain the average condition of the well, and to collect the water which is to be examined at a time when it is in its normal state.

The water of rivers is, as a rule, not to be examined immediately after heavy rain. A sudden rain shower, after a period of drought, will in most cases contribute more to the pollution of the river-water than would a lasting rain under normal conditions of the weather. Besides, the quantity of sewage carried off in great towns is, at the beginning of a rain-storm, extraordinarily great, and, in mixing with the river-water, it communicates to the latter an amount of impurities, which it would not possess under ordinary circumstances.

In judging of a water, the chemist has at the same time to indicate the means by which a water might be improved.

A water, for instance, that contains minute particles or clay in suspension, in consequence of which it appears turbid, may easily be rendered clear, either by slow filtration or by allowing it to stand for a while in a vessel, so that the clay particles may collect at the bottom; it very often happens that such a water turns out to be of a very good quality. Even a water that contains some organic matter in suspension is not always to be rejected, as it has been proved that, in passing through layers of fine sand, animal charcoal or spongy iron, it may become a very clear, colourless, and suitable sort of water.

(217) What contribute the most to make water dangerous to health are the dissolved nitrogenous organic matter of animal origin and in a state of decomposition; and the products of this decomposition, viz., ammonia, nitrites, and
nitrates. Not that the latter substances are in themselves obnoxious to health, but they indicate a former contact of the water with putrefied organic matter of animal origin.

The water of deep wells may in many instances be improved by preventing the drain-water from penetrating into them. This may principally be done by making the walls of the shaft water-tight, or by using an iron cylinder, with a pump placed at its upper end.

The shallow wells, which are so numerous in Yokohama, may partly be improved by rendering the upper part of the shafts impermeable to water, in order to prevent the direct flowing of the drain-water into the well. It would further be necessary to ram the surface of the ground around the well for a space of eight to ten square metres and to cover this space with a thick layer of clay, in order to prevent the vertical penetration of the drain-water.

The condition of the wells of Yokohama may likewise be ameliorated by altering the present system of drains. The drains now in use are leaky in many places, they do not allow a free passage to the sewage, and are usually not kept clean; they ought to be replaced by water-tight open conduits, which allow the water to flow freely through them.

I am of opinion that the bad system of the narrow, wooden drains is the principal reason of the bad quality of the drinking water in many parts of Yokohama. All kinds of stinking liquids and putrid gases are by these drains communicated to the air and to the soil, and by the latter to the water of the wells.

In regard to public health, the system of drains in Yokohama, as well as in all other towns of Japan, ought to attract the particular attention of the local government authorities, because the drains ought not only to keep the ground and the drinking water free from pollution, but they ought, moreover, to provide for pure air, another most important factor in the public health.

The systematic inspection of all bad wells in Yokohama, made by myself on the spot, has completely satisfied me that the defective removal of the sewage, through the
narrow and leaky wooden drains, and through the narrow underground cylinders of pottery, is not only the (218) reason of the bad condition of the drinking water, but may even become the cause of the propagation of zymotic infections and diseases, such as cholera, typhoid fever, diarrhoea, ague and continued fever. For although the nature of most contagia is not yet exactly known, it appears very probable that in all infectious diseases the specific contagious principles are excessively minute, of a solid nature, endowed with an independent life, able to multiply under certain conditions at a prodigious rate, and to be transported by the medium of air and water.

Medical experience has proved that these diseases often arise from swallowing water derived from wells contaminated with sewage or the fluids from filthy drains and stagnant pools.

As the lower situated parts of Yokohama consist nearly exclusively of filled-up ground of a very porous nature (pebble-conglomerate), it will necessarily become impregnated with all kind of organic matter in a state of decomposition, if care is not taken to carry the sewage off by means of water-tight conduits.

The proximity of the wooden drains to the wells and dwellings makes them still more dangerous to public health, and I think, therefore, that I cannot insist enough on the necessity of a radical change in the very imperfect system of draining, not only in Yokohama, but in all Japanese towns.

It is easy to see that stagnant pools and cess-pools ought also to be removed from the immediate neighbourhood of wells; or if this should be impossible, these pools ought to be made at least perfectly water-tight.

Lastly, I desire to draw attention to the bad Japanese practice of building the closets always near to the wells. Few reservoirs of these conveniences are water-tight enough to prevent the excreta from penetrating into the surrounding porous ground and from thus becoming the cause of pollution of the water. To remove these closets
from the wells is of the first necessity for the public health, and in such few cases as the removal may be impossible, the walls of the reservoirs must be made perfectly watertight by covering them with cement, so that no liquids may by any means pass through them.

In judging of the quality of the water of the different wells of Yokohama, they have been divided into three classes, viz.:—

1st, Good Water.—When the water is clear, and is free, or at least nearly free from organic matter, either in solution or in (219) suspension, and from nitric acid; and when it contains no, or only traces of, ammonia. Besides, it must be without smell and colour and of an agreeable fresh taste.

2nd, Water of Medium Quality.—When, although not being very pure, it may still be used as drinking-water, and when it stands above the under-mentioned limits of purity.

3rd, Bad Water—Unfit for Drinking.—When the use of it is dangerous to health, and when it stands below the admitted limits of purity.

The following limits of purity have been adopted by us in judging of the quality of the water:—

1.—Colour.

When poured into a tube of colourless glass of two decimeters' length, and the tube placed vertically on a white sheet of paper, the water viewed through the height of the column must not appear yellowish, brownish, or greyish.

2.—Smell.

Neither in its normal state nor when heated in a boiling-flask to 30 or 35° C, and shaken, must it evolve a bad smell (presence of hydrosulphuric acid or other gases of putrefaction).
3.—Clearness.

The water must be clear, and after being filtered it must not show a yellowish or brownish colour. If a trifling, milky turbidity is present, due only to minute clay particles and not to floating organic matter or living organized beings, the water may, after filtration or clarification, still serve as drinking water if it possesses the other qualities required for good water.

4.—Taste.

The water must possess a good, fresh, and agreeable taste. Water having a disagreeable, soapy, nasty, or earthy taste is to be rejected, as well as water which has a prominent saline taste.

5.—Chlorides.

The water must not contain more than five parts of chlorine \((Cl = 35, \, 46)\) in 100,000 parts of water. (Good water seldom contains more than two or three parts of chlorine in 100,000 parts of water.)

6.—Hardness.

The water must not be too hard, and not show more than 20 (220) degrees of hardness (equal to 20 parts of lime, \(CaO\)) in the 100,000 parts of water.

7.—Nitrites.

The water must not contain more than the maximum of 0.5 of nitrous acid \((NO_2 = 38)\) in 100,000 parts of water. (Good water contains no nitrous acid at all.)

8.—Nitrates.

The water must not contain more than the maximum of one part of nitric acid \((NO_3 = 54)\) in the 100,000 parts of water. (Good water contains no nitric acid.)
9.—Ammonia.

The water must not contain more than the maximum of 0.06 of ammonia \((\text{NH}_3 = 17)\) in the 100,000 parts of water. (Good water contains no ammonia at all or only traces of it.)

10.—Organic Matter and Living Microscopic Beings.

The water must be free from dissolved organic matter, or at least contain only traces of it. It must not contain suspended organic bodies in a state of putrefaction, nor such living microscopic beings as annelids \((\text{Nats})\), Cyclops, Macrobiotus, bacteria, infusoria, caelenterata, scolecida, turbellaria, Entomostraca, Malacostraca, Acarina, Larva of insects and ova of entosoa. When heated to near the boiling point with diluted sulphuric acid and mineral chameleon, the water must not discolour more than 0.8 parts (eight-tenths) of mineral chameleon in 100,000 parts of water. (Correction for nitrous acid, see later.)

II.—Total Amount of Solid Matter.

The total amount of solid matter, contained in the water after evaporating and drying at 120° C., must not exceed 50 parts of solid matter in 100,000 parts of water.

12.—Nature of Sediment.

The particles kept in suspension by the water, or the sediment which is formed by water standing for a time, must not, on examination under the microscope, with a magnifying power of 400 to 600 diameters, show any of the above-mentioned living microscopic beings, nor the ova of entosoa or of insects. [A small amount of fresh water algae, desmidiaceae, etc., is harmless.]

A water, although its other qualities may be good, if it contain living microscopic animals, is to be rejected for drinking purposes, (221) not because it is proved that the latter are all without exception obnoxious to health—which in fact has not yet been proved—but from an aesthetic point of view and because some of them are dangerous.
GEERTS: ON THE DRINKING WATER OF YOKOHAMA. 229

GENERAL REVIEW OF THE RESULTS OF THE SANITARY INSPECTION OF THE WELLS IN YOKOHAMA.

<table>
<thead>
<tr>
<th>DISTRICT OF THE CITY</th>
<th>GOOD</th>
<th>MEDIUM QUALITY</th>
<th>BAD: UNFIT FOR DRINKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>First District</td>
<td>142</td>
<td>14</td>
<td>45</td>
</tr>
<tr>
<td>Second District</td>
<td>762</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Third District</td>
<td>1107</td>
<td>56</td>
<td>76</td>
</tr>
<tr>
<td>Total</td>
<td>2011</td>
<td>136</td>
<td>177</td>
</tr>
<tr>
<td>Percentage-numbers of all wells</td>
<td>86.5%</td>
<td>6%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Total number of wells for drinking purposes analyzed in all districts</td>
<td>2324</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note.—In these tables, only those wells the water of which is used as drinking water are mentioned. If the very numerous bad wells in the swamp and in the lower filled-up parts of Yokohama (the water of which is never drunk by the people) had been taken into account, the percentage-numbers of bad wells would have been very much larger.

THE TAMAGAWA AQUEDUCT TO YOKOHAMA.

The Tamagawa is the chief river of the Kanagawa Ken, and after the Sumida-gawa, the largest river of the province of Musashi. It has its sources at the mountain-range which forms the limits of the two provinces, Kai and Musashi. The river flows over a distance of about 25 ri, in the direction from W.N.W. to E.S.E., and discharges into the sea at Kawasaki. Remarkable for the purity of its water, this river has very justly been used as the "prise d'eau" for the aqueducts both of Tōkiō and Yokohama.

The water destined for the Yokohama aqueduct is, however, not taken directly from the river, but from an open canal, artificially made, which obtains its water from the upper Tamagawa. Near the village of Nakanoshima, in the district of Tachibana-gōri, in the province of Musashi, a first branch canal commences, and a little lower at Yado-kawara-mura, another branch canal is taken from the river.
Tamagawa. These two branches unite at Hisashi-mura, after which village the canal runs, nearly parallel with the river, to the village of Kashimada. At the latter place there is a reservoir, and it is here (222) that the wooden tubes of the aqueduct proper commence. Kashimada is therefore the "prise d'eau" for Yokohama. The distance from this place to Yokohama (Minato-chō, Roku-chōme), thus the whole length of the wooden aqueduct, is 8,650 ken or 15,725 meters, i.e. nearly 16 kilometers.

In 1877, before the local authorities had commenced the repair of the existing aqueduct, I examined the water taken from different places in Yokohama, and I then found the water so much mixed with salt water and impurities, of both an organic and an inorganic nature, that it was not fit for drinking. The common people did not even think of using it as drink, on account of its bad taste and brackish nature. The water had become impure by reason of the tubes which lay under the canal near the railway station being very leaky, and permitting the sea-water from the canal to enter in large quantities. Besides, many other parts of the aqueduct and the vertical tubes in the town placed over the wooden tubes were in a bad and more or less rotten state.

The whole aqueduct had become, in fact, useless as a supply for drinking water. In 1878, I took water from the "prise d'eau" at Kashimada-mura and subjected it to a careful analysis. I found that the water was at that point of exceptionally good quality, as may be seen from the following results.

**ANALYSIS OF THE TAMAGAWA-WATER AT KASHIMADA-MURA, BEFORE IT ENTERS THE AQUEDUCT TO YOKOHAMA.**

<table>
<thead>
<tr>
<th>QUALITATIVE EXAMINATION</th>
<th>QUANTITATIVE ESTIMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearness ............clear.</td>
<td>Parts by weight in 100,000 water.</td>
</tr>
<tr>
<td>Colour ...............none.</td>
<td>Total solid matter .... 4.10.</td>
</tr>
<tr>
<td>Smell .................none.</td>
<td>Chlorine ........... 0.67.</td>
</tr>
<tr>
<td>Taste ...............agreeable.</td>
<td>Calcium-oxide .... 2.78.</td>
</tr>
<tr>
<td>Carbonic acid .......medium quant.</td>
<td></td>
</tr>
<tr>
<td>Sulphates</td>
<td>very faint trace.</td>
</tr>
<tr>
<td>Chlorides</td>
<td>few.</td>
</tr>
<tr>
<td>Sulphuretted hydrogen or other obnoxious gases</td>
<td>none</td>
</tr>
<tr>
<td>Hardness</td>
<td>2.3 Dutch degrees.</td>
</tr>
<tr>
<td>Nitrates</td>
<td>very faint trace after evaporation.</td>
</tr>
<tr>
<td>Nitrites</td>
<td>none.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>very faint trace.</td>
</tr>
<tr>
<td>Oxidizability</td>
<td>very little.</td>
</tr>
<tr>
<td>Total solid matter</td>
<td>4.10 in 100.00 parts.</td>
</tr>
<tr>
<td>Nature of suspended matter</td>
<td>only a few <em>Diatomaceae, Acomia vitrea</em> and a few clay and sand particles.</td>
</tr>
<tr>
<td>Sulphuric acid</td>
<td>very faint trace only.</td>
</tr>
<tr>
<td>Nitric acid</td>
<td>0.007.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>0.005.</td>
</tr>
<tr>
<td>Albumenoid Ammonia</td>
<td>0.011.</td>
</tr>
<tr>
<td>Suspended matter, as examined by microscope</td>
<td>only a few <em>Diatomaceae, Acomia vitrea</em> and a few clay and sand particles.</td>
</tr>
</tbody>
</table>

(223) This result, compared with the ordinary degree of purity of good drinking water derived from wells, shows that the Tamagawa water is, at the village of Kashimada-mura, of superior quality, as its previous contact with sewage is evidently very small. As the repairs at the Yokohama aqueduct are not yet finished, I have had up to this time no occasion to compare the quality of the water at different parts of the aqueduct with that of the water at the "prise d'eau." But Messrs. Atkinson (Transactions of the Asiatic Society of Japan, Vol. VI., Part 1, pages 94-95) and Martin (Mittheilungen der Deutsch. Ost. Asiat. Gesellschaft, Heft. 11, page 19) have already shewn the fact with perfect certitude, that the water of the Tōkīō wooden aqueduct loses relatively much of its original purity by passage through wooden pipes, and there seems to be no reason why this should not be the case with the Yokohama aqueduct when completed. It is true that the authorities at Yokohama have taken a great deal of care to make tight iron pipes at places where the aqueduct has to pass under salt water canals, but I fear that even the more or less brackish
and impure surface ground-water in other places will mix up by diffusion or by leakage with the water inside the wooden tubes, unless the water should have a great velocity of movement, which is impossible with the present arrangement, on account of the small difference of height and consequently the slight pressure under which the water flows through the pipes.

For these reasons I have been advocating the use of tight iron pipes instead of wooden ones, the more so as the pressure could then be easily augmented and special arrangements for fire-cocks and for watering the streets in summer could easily be made. But the costs of such a more thorough construction seem to have been the great obstacle, and thus considerable care has been bestowed on repairing the old wooden aqueduct.

(224) Porcelain or earthenware tubes, as suggested by some people, I consider far worse than wooden ones, as a single crack, caused either by mechanical force, difference of temperature, or occasional fault in the baking, would necessitate long and difficult repairs.

The wooden pipes have, since the year 1878, been extensively repaired from Kashimada-mura down to the neighbourhood of Yokohama. As the last work in Yokohama has not yet begun, I should earnestly recommend the disuse of the system of round wooden tubs, placed upon the aqueduct at certain distances, for the purpose of drawing the water for daily use. The water rises naturally into these tubs and stands there as in dead ends, whilst only the water below flows further. Besides, the dust of the streets and other impurities may occasionally enter these cylinders and spoil the purity of the water. Instead of using the latter, I deem it far better to fix at certain distances hand-pumps of different sizes in the wooden pipes, in such a manner that the under-end of the pump-tube is only 2.3 decimeters from the bottom of the wooden pipes. Thus the water will constantly be kept running, and no outside impurities from the streets will be able to enter the pipes.
### Form of Drinking Water Register Used

<table>
<thead>
<tr>
<th>No. on the well</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>21st District, Moto-Hamacho, Nichinan, No. 30</td>
<td>21st District, Moto-Hamacho, Nichinan, No. 24</td>
<td>21st District, Moto-Hamacho, Nichinan, No. 16</td>
<td>21st District, Moto-Hamacho, Nichinan, No. 10</td>
<td>21st District, Moto-Hamacho, Nichinan, No. 12</td>
<td>21st District, Kitanaka dori, Nichinan, No. 8</td>
</tr>
<tr>
<td>Situation</td>
<td>Dirty drains.</td>
<td>Badly constructed drains.</td>
<td>Water-closet near the well.</td>
<td>Water-closet near the well.</td>
<td>Water-closet near the well.</td>
<td>Water-closet near the well.</td>
</tr>
<tr>
<td>Odor</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
</tr>
<tr>
<td>Sulphuretted Hydrogen</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
</tr>
<tr>
<td>Ammonia</td>
<td>0.45 in 100,000.</td>
<td>0.075 in 100,000.</td>
<td>0.35 in 100,000.</td>
<td>0.035 in 100,000.</td>
<td>0.035 in 100,000.</td>
<td>0.035 in 100,000.</td>
</tr>
<tr>
<td>Total Solid Matter</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
</tr>
<tr>
<td>Nature of Sediment or Suspended Matter</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
</tr>
<tr>
<td>Name of Analyst</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
<td>None.</td>
</tr>
</tbody>
</table>
THE EPIDEMIC CHOLERAIC DISEASE

AT

YOKOHAMA in the YEAR 1877,
or the 11th year MEIJI.

<table>
<thead>
<tr>
<th>Persons</th>
<th>Attacked</th>
<th>Died</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infantile</td>
<td>781</td>
<td>404</td>
</tr>
<tr>
<td>Traveling</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>792</td>
<td>416</td>
</tr>
</tbody>
</table>
UNITARY INSPECTION
OF THE
WELLS
IN
YOKOHAMA AND ENVIRONS
BY
A. J. C. GEIST,
J.B. HAYASHI, M.I. KUNISHI, T. H. YOKOHAMA,
AND K. K. KO, OF THE
GOVERNMENT BOARD OF HEALTH.
(225) A General Meeting was held at the Grand Hotel, Yokohama, on Thursday, the 31st January. Neither the President nor either of the Vice-Presidents being present, Mr. Walsh was elected by the meeting as Chairman for the evening.

In the absence of any Recording Secretary for Yokohama, Mr. Dallas read the minutes of the General Meeting held in Tōkio on the 14th January, and announced the election of the Rev. J. H. Quimby as a member of the Society.

Dr. Geerts then read a paper on "The Drinking water of Yokohama and the Necessity for its Improvement."

At the conclusion of the paper some general conversation took place between the Chairman, Dr. Geerts, Mr. Smedley, and Mr. Hodges, but without eliciting any information that was not contained in the paper.

The Chairman expressed to Dr. Geerts the thanks of the Society for his valuable paper, and the meeting then adjourned.
ON THE TRANSLITERATION OF THE JAPANESE SYLLABARY.

By Ernest Satow.

[Read February 11th, 1879.]

(226) It seems a remarkable instance of acute appreciation of what may be called a metaphysical fact on the part of an uneducated community, that the Japanese people, when they first became acquainted with the Chinese ideographs signs, should have at once called them na, or name. James Mill has devoted a chapter to the subject of "Naming," at the end of which he pertinently summarizes the matter by saying that "spoken language is the use of immediate marks of the ideas; written language is the use of secondary marks of the ideas." It is evident, however, that in the case of a deaf and dumb people, if such existed, a written language, being the only one possible to them, would constitute 'primary marks,' and the signs of which it consisted would be the names of their ideas. In fact, as far as the essential purpose for which they are suited is concerned, spoken words and written characters (whether independent ideographs or combinations of phonetic symbols) are equally 'names,' perceived in one case by the sense of hearing, and in the other by the sense of sight. But we should be crediting the ancient Japanese with a train of reasoning on the subject far beyond their powers, if we supposed that they were led by philosophical considerations to look upon ideographs as a sort of "names." In making the acquaintance of a Chinese character for the first time, they no doubt learnt the number and sequence of the strokes of which it was formed, its pronunciation, and what it was called in their own tongue. We may be almost certain that they began by learning those characters
which represented what we call substantives, or rather nouns, and to which they naturally applied the word na, name, extending it afterwards to (227) others which denoted qualities, actions and relations. This supposition is corroborated by their earliest extant attempt to form a dictionary, namely the Wa-miyau Seu (和名抄) or ‘Transcription of Japanese Names,’ composed by the famous Minamoto no Shitagafu (911-983), which is a collection of Chinese characters, with definitions of their meaning, and the Japanese equivalents, all of which are nouns substantive. It need hardly be said that this is a book of the greatest value for linguistic purposes, and with which no student of the older literature can dispense.

At what period the Chinese system of writing was introduced into this country cannot be stated with certainty; on the one hand we are told that the first teacher came from Korea in the year 285 A.D., nearly four and a quarter centuries before the composition of the earliest known historical record, and in an age which can only be regarded as semi-historical at the best. A glance at the popular chronology shows that this event is placed during the reign of a sovereign to whom is ascribed the age of one hundred and eleven years, while his successor is said to have attained the great age of one hundred and twenty-two. It may be urged, of course, that so long as we accept as facts the ages attributed in the Old Testament to the Hebrew Patriarchs, it is hardly open to us to dispute the genuineness of similar, though less extraordinary, instances of longevity in the early annals of Japan, but this is an argument which probably will count for little with serious people. I think we may safely come to the conclusion that the general character of the so-called history of the period to which the introduction of Chinese literature is assigned, is not such as to warrant our placing any confidence in its exactness with regard to dates, although some of the events recorded may actually have taken place at some previous time, in an age considerably remote from that of the records themselves. We have in the Kozhiki
(711 A.D.) the positive statement that the Thousand Character Composition\(^1\) (Seizhimoši 千字文) was one of the (228) first books brought to Japan by the Korean Wani, along with the Lünü or Confucian Analects (論語), and we know positively that the former book did not exist in its present form before the reign of Wu-ti (武帝) of the Liang (梁) dynasty (502-550), so that it certainly could not have reached Japan by way of Korea much before the middle of the 6th century A.D. But if the fact that this book was amongst the very first brought to the knowledge of the

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\(^1\)Motowori, in the Kozhikideš, vol. 33, p. 27, quotes a note appended to a Chinese variorum edition of the 千字文 which gives the following account of the origin of the book. "Wu-Ti (265-290) of the Tsin dynasty succeeded to the Wei dynasty, and while he was at the city of Luchou, an official named Chung Yu made this composition and presented it to the emperor, who was so delighted with it that he kept it always close by him. When the (last of the) Tsin dynasty was expelled by Wên-Ti of the Sung dynasty, he fled for safety towards Tanyang, (282) having the Thousand Character Composition with him in a cart. On the way he encountered a shower of rain; the cart leaked, and the Thousand Character Composition got wet. On reaching Tanyang he put it away in a case. Fifteen emperors of the Tsin dynasty had ruled the empire in succession, during a century and a half. When Liu Yu, the Wên Huangti (424-454) of the Sung, ascended to the throne and ruled the empire, he opened the library of the Tsin emperors and found this Thousand Character Composition so injured by the rain that the sequence [of the words or phrases] was lost. He ordered his General of the Right, Wang Hichi (王羲之) to arrange the rhymes, but he was unable to do it. The Sung emperors ruled the empire for about sixty years, and the Tsi then came to the throne, and ruled Tanyang, but still no one could put it [the composition] in order. Seven emperors of the Tsi ruled during thirty years, after which Wu-Ti (502-550) of the Liang dynasty came to the throne, and he gave a command to Chow Hing-Sze, who put the rhymes in order, and produced the Thousand Character Composition." There is a glaring error here in the statement that Wên-Ti of the Sung dynasty gave the disordered document to Wang Hichi to correct, for Wang Hichi had been dead 44 years when Wên-Ti became emperor. A more probable story is that contained in the 南史, 文藻傳 (see Wylie's Notes, on Chin. Lit., p. 17), that Liang Wu-ti (d. 549) had in his possession a thousand Chinese characters which had been written by the celebrated calligraphist Wang Hichi, and that he gave them to Chow Hing-Sze to put into rhyme (see Mayers' Hdbk., Art. 68. Mr. Mayers says that Wang Hichi wrote the 1000 characters for Liang Wu-ti, from which it would naturally be inferred that they were contemporaries, but the former died in 379 and the latter lived to 549, one hundred and seventy years later.)
Japanese, about that time or later, be true, it is not unlikely to have been handed down with greater accuracy than the mere date, and we need not be surprised at the name of the book being recorded in the year 711, even if the precise date of its importation were no longer known. Thus, if the Confucian Analects and the Thousand Character Composition reached Japan together, as we are told they did, and were the means of introducing Chinese literature into Japan for the first time, that introduction cannot be older than the (229) middle of the 6th century. Against this theory is to be placed the statement in the Nihoši (720 A.D.), that in the year 403, or over three centuries earlier, "historiographers were appointed for the first time to all provinces, to record words and events," which, if exact, leads to the inference that at the Court such officials had existed before that date. In a paper which I wrote a few years ago, entitled the "Revival of Pure Shintō," which was reprinted in the 3rd volume of our Transactions, I quoted this statement without qualification, as if I accepted it as historical truth, and I am not at present prepared to disprove its accuracy, although less disposed than formerly to accept it with implicit faith. A special study of the Nihoši and Kozhiki would be necessary to enable us to draw the line between the semi-historical and historical in those records. It certainly appears most probable that Chinese literature and the art of writing were mainly communicated to the Japanese by Buddhist priests, although not first introduced by them, and to this cause is to be traced the prevalence in the early literature and in the spoken tongue of the people of that variety of pronunciation of Chinese words known as Go oō (呂音), which was then and has continued down to the present day to be taught and used by the Buddhist priesthood, while the classical variety or Kaō oō (陰音) is a later importation.

When Chinese literature was introduced into this country, the Japanese at once set to work to learn how to read and to translate it into their own language. The Buddhist scriptures, though written in Chinese characters, contained
a great deal that was more transcription of Sanscrit or Pali, and it was more important to be able to repeat them than to understand their meaning. It became the practice to read them with the Chinese sounds in the order in which they are written, according to the method still observed in Buddhist seminaries, and known as bou-yomi, 'stick-reading.' Students of the works of Confucius and his followers cared more for the meaning than for the sound, and they fell into a habit of translating literally, preserving the Chinese word where there was no Japanese equivalent or none which immediately suggested itself. In this way innumerable Chinese idioms and phrases were introduced into the Japanese tongue, producing a marked effect upon the genius of the language, which it would be extremely instructive to trace out in detail. No one has yet attempted to compare the two languages, (230) and to distinguish those similarities of modes of expression which are due to the influence of the Chinese language upon the Japanese through the medium of literature, from those which appear to be spontaneous coincidences.

Moving their fingers up and down the page, as they turned the original into Japanese, they found it convenient to devise marks for the particles and terminations of the verbs, in order to assist the memory, others to show whether a character was to be translated or to be read with the Chinese sound. In modern editions of Chinese works intended for the use of learners, these purposes are served by what are known as sute-gana; but before the hana had been invented, certain dots or small strokes were employed, placed at different parts of the square which a Chinese character might be imagined to occupy. Thus a dot in the centre of a character denoted no, of; one at the upper right-hand corner, wo, the sign of the objective case; another, a little lower down on the right-hand side, koto, thing, one at the upper left-hand corner, the particle ni, and so on. These dots and marks are called the wo koto teñ, from the values of the first two in the square. Books have been preserved in MS. which are marked in this way, one being
a copy of the Safdaikaku (三代格, Regulations of the Three Reigns) another the Classic of Filial Piety (孝經), which show that these marks were still in use long after the invention of kata-kana. It may here be noted that the earliest prose writing in ordinary kana is the Koki-shifu (古今集), about 922 A.D. The only extant kana up to that period are those in the Kozhiki, Nihoši, Mañyeushifu, Kogo-shiui and perhaps the Yeši-shiki, in all of which the entire Chinese characters, or Mañye-su-gana, are employed to a greater or less extent. Of course the kana in the Kozhiki and Nihoši are the earliest examples of the use of Chinese characters by the Japanese as phonetic symbols, and next to them come the poems of the Mañyeushifu.

Various systems of wo koto teñ appear to have been used by the different schools of Chinese learning and by the numerous sects of Buddhists in their monasteries, many of which were, in their latest state at least, posterior to the invention of the katakana syllabary, of which use is made in by far the greater number known. The 495th volume of Hanawa’s Guñishiyo ruwizhiyuu (詳書類聚) contains several specimens, and the Wazhi Dai Kuwañ Seu (和字大観鈔) a single system, and (231) from a comparison of these with two other collections in MS. it appears that the purest examples of the contrivance are those of the Sugahara and Kiyohara families of Chinese scholars belonging to the Court. It seems that these families had each two sets of marks, one employed in reading the classics, the other only used for historical works and general purposes. So long a period has elapsed since the use of kana superseded the wo koto teñ, and so great the secrecy which was observed with regard to them by the rival schools, that considerable differences exist among what purport to be copies of the same system. As a specimen of them, the wo koto teñ of the two families and a facsimile extract from the Classic of Filial Piety (孝經), in which they are marked upon the Kiyohara system, are here given. The katakana in the latter are a modern addition to the MS. from which the copy I have used was printed.
The idea of using Chinese characters to spell Japanese words evidently originated from the study of Chinese versions of Buddhist sacred literature, in which a great number of Sanscrit or Pali words (I believe it has not yet been determined which language was the original of these translations) were transcribed by means of Chinese characters employed merely as phonetic symbols. Not a few of these words survive to the present day in the spoken language of the Japanese, and naturally to a far greater extent in the doctrinal literature of the Buddhist sects. No one who thinks upon the subject can suppose that alphabets or syllabaries have sprung in their simplest and most perfect form from the brain of any single individual, however gifted with inventive genius, and the researches of scholars have proved that in one instance which concerns us all, namely that of the Roman alphabet, the process of its development from Egyptian picture-writing was a very gradual one, which proceeded by steps far removed from each other in time, and that were taken, not by one continuous race of men, but by several in succession, occupying different parts of the world's surface, until it came to be what it is now, a very imperfect means, at the best, for recording spoken sounds. This is one of the strongest arguments (and to my mind an argument which would require an enormous amount of positive evidence to shake, much less refute it) against the theory that the Japanese, previous to the introduction of Chinese characters, possessed, not a syllabary—which would be in natural accordance with the physical structure of their language—but (232) an alphabet, constructed upon the most scientific principles, the letters of which are composed of horizontal and perpendicular lines, long and short, combined according to a regular system of variation. This is the sort of alphabet which Hirata Atsutane and others have put forth as the square form of what they call Zhiūdai no moshi, or Shiūdaizhi, (characters of the age of the gods), but which is manifestly borrowed from the Korean alphabet, with certain modifications. It is very evident to any one who has examined the
Korean alphabet that it not only was devised by some person or persons who understood the principle upon which an alphabetic system of writing must be constructed, but also that it was based upon the alphabet of a language, the Sanskrit, which also influenced in an indirect manner the formation of the Japanese syllabaries, and the most popular order in which their signs are arranged. Had the Japanese really possessed an alphabet of their own before the introduction of Chinese literature, they would not have been driven to invent the wo koto te阿 system, or rather to develop that system out of the circles which the Chinese use for marking the tones of characters.

It was not by a sudden discovery that the Japanese learnt to write their own language in kana, that is, in Chinese characters used merely as phonetic signs. Their first impulse, after having made themselves acquainted with the ordinary Chinese literature, was to attempt to write in the same style. The Niho阿gi is a specimen of what they were able to accomplish in the way of imitation, for nearly all the phrases used in its composition can be traced back to a Chinese original, so that it is a mosaic of borrowed sentences, although the subject matter is Japanese legend and history. Whenever they wished to preserve the native form as well as substance, either of poetry or legend, they put down in Chinese whatever could be translated, and following the example of the Chinese priests, who, in translating the Buddhist scriptures had represented those words, for which they could think of no equivalent, by Chinese characters used phonetically, they transcribed each syllable with a Chinese character which had the same sound, or which could be rendered in Japanese by a monosyllabic word of the same sound (き假, oи kana and 騁假字, kuи kana); or they wrote a couple of syllables with a Chinese character, the ordinary translation of which was some Japanese dissyllable of quite different meaning, but composed of the (233) same vowels and consonants (假字, kari-mozhi); and sometimes the sound of a Chinese character was used to represent two syllables (二合の假字, ni
gafu no kana). At first they did this only when they were forced to do it, and some time elapsed before it became the custom to write poetry exclusively in kana. But the discovery having once been made, its use could be extended when circumstances rendered it necessary. Thus the verses contained in the Kozhiki and Nihoñgi are written exclusively in kana, perhaps because it was considered of absolute importance that these compositions, attributed in many instances to divine personages, should be transmitted in such a way that there could be no doubt whatever of their exact wording. In the Mañyefushifu it is chiefly the later poems (about the middle of the 8th century) which are so written, while the earlier are half translated into Chinese prose, from which they are only to be retranslated with great difficulty. We find, too, that while one poet, Yamanohe Okura, writing about 730, used principally kana, most of his contemporaries wrote with Chinese characters used as ideographs. The poems of Kakino-moto no Hitomaro, who died before the end of the 7th century, are almost exclusively written with ideographs. This merely serves to show that the use of kana in poetry did not become universal all at once, and that the idea of employing phonetic symbols not being familiar to the Japanese mind, was not readily adopted.

It is perhaps believed by a great many persons that the Japanese syllabaries called kata-kana and hira-gana, as we now possess them, were actually the individual contrivances of two men named respectively Kibi no Mabi (b. 695, d. 776) and Koubofu Daishi (b. 774, d. 835), for such are the statements which have been handed down from a remote period among the Japanese, and have been repeated by successive European writers on the authority of their native teachers. It is quite possible that the last of these may have selected the forty-seven common signs which are known as hira-gana (whether 'easy kana' or 'broad flat kana' be the origin of the name does not matter), and arranged them so as to convey the same meaning as a certain succession of phrases in the Daihafuniya Kiyau (大盤若

²See Kozhikidek, vol. 1, p. 29 verso to p. 44.
that the former performed the same operation of selection upon the kata-kana (234) (or part-ka-na) which were in use at the period. There is no evidence to prove the contrary, and oral tradition is in favour of the legends. But what is beyond a doubt is that they did not invent or discover the idea of using, or 'borrowing,' as the term ka-na implies, Chinese characters to represent mere sounds, for this use of Chinese characters was an invention of the men who translated the Buddhist Canon from the original into Chinese, and it was imported into Japan in those very Chinese versions by the missionaries of Buddhism. In the earliest books extant, such as the Kozhiki,³ Nihonji, Mañyeushifu,⁴ in the Norito contained in the Yeigungishiki, and in the series of official Annals which succeeded the Nihonji, an immense number of different Chinese characters are used for each single syllable articulated by Japanese mouths. It must be remembered that these were written nearly always, if not exclusively, in running hand. To believe that these ancient historical and literary monuments were handed down carefully transcribed in square character, would be as great an error as to suppose that the spelling of modern editions of Shakespeare is the same with that of the first folio. In fact many of the obscure passages in the Mañyeushifu are owing to mistakes of transcribers, who blundered over the cursive character of the MSS. from which they were copying to an extent that would have been impossible if the text had been written in square character. These kana written in the cursive form gradually became more unlike the complicated originals from which they were derived, until all trace of resemblance has disappeared, unless the transformation be gradually followed backwards through the successive variations. It would be impossible unaided to recognize 武 in 武, 安 in 美 in み, 知 in し or 留 in る. The number was so great that it became necessary to select the easiest to teach to children, and this was the origin of the set called

³For a list, see Kozhiki-Den, vol. 1, p.30. ⁴The 萬葉用字格 exhaustive of all the kinds of kana used in that collection.
iroha gana, usually confused in thought and speech with the hiragana.

In the same way we can hardly believe that Kibi no Mabi was the inventor of the katakana. Besides the ordinary set of forty-seven, there are many others which were in use at an early period, and which are even yet to be found in limited use amongst antiquarians. There (235) was therefore a larger number from which the forty-seven were chosen. The annexed table contains those which I have hitherto met with.5

In this table the upper of each set of three rows is the uncommon form of the katakana, the middle one is the ordinary form, and the lower is the character from which the uncommon form is supposed to have been derived. Whether the formation of katakana preceded that of the hiragana is unknown, and recent Japanese writers on the subject seem to have agreed that the point is not likely ever to be determined; but arguing from the relative degree of artificial contrivance which characterizes each, I cannot help thinking it probable that the katakana are of later origin than the other, in spite of the supposed inventor of this syllabary having died about the time that the person to whom the hiragana are attributed was born. In confirmation of this view we have the fact, so often noticed by Europeans with surprise, that the katakana syllabary, to us the easiest of acquisition and apparently the most simple in principle, is by no means popular, and may be said to have been almost unknown until lately, except to educated people and users of native dictionaries. However this may be, all that is of immediate importance is that at some period or other, perhaps at two successive periods probably not very remote from each other, men who had troubled their heads about the matter had discovered that all the sounds uttered by Japanese, as it seemed to them, could be indicated by means of forty-seven signs, to some of which diacritical marks were sometimes added to express what

they held to be accidental or conditional modifications of sound, and that it was agreed that they might be written at option in forms called kata-kana and hira-gana. I choose the former for the purpose of the remarks which I now propose to make concerning the phonetic value of these signs.

The most scientific arrangement of the forty-seven sounds is that which is known by the name of gozhifu ren on in no dsu (五十四音頭圓), or scheme of the fifty syllables and finals. It is of acknowledged later date than the two syllabaries, having appeared for the first time in a book on music called kuwan-ge on gi 管絃音義, 'meaning of the sounds of wind and stringed instruments,' written in 1185. There is another arrangement given in what is called the Abridged Wamiyau Seu, the earliest copy of (236) which is dated 1546. When this is translated into katakana we have only forty-seven sounds to do the work of fifty, and consequently three of them have to perform double work in the complete scheme. Some modern grammarians have proposed to use certain signs of their own invention to make good the deficiency, and thus to complete the series of fifty, which according to theory ought at some time or other to have existed. I shall be able to give good reason later on for believing that the syllabic sounds for which no signs have been handed down, formed at one period part of the linguistic apparatus of the Japanese, but it is quite certain that the recognized number of sounds, at the time when the two popular syllabaries were selected, was only forty-seven, exclusive of the final consonant ƙ or ƙ (a later formation), and of these forty-seven, three have since disappeared from the spoken language, as will appear in the sequel.

In order to arrive at a satisfactory set of equivalents for the signs of the Japanese syllabary, three axioms must be conceded. Firstly, that for each sign a distinct equivalent be selected, so that the equivalent shall represent a single sign, and it shall thus be possible to turn a transliterated word back into the original kana without a mistake.
Secondly, that we use such equivalents as might reasonably have been adopted by the Japanese themselves, if at the period when the syllabaries were constructed, the material out of which they were to be formed had been the Roman alphabet instead of the Chinese ideographs; and in cases where we cannot be certain of the pronunciation of that period, that we adopt the modern pronunciation of Yedo and Kiyauto.

Thirdly, that we shall not use more letters to transliterate any one sign than are absolutely necessary.

Concerning the value to be assigned to the letters of the Roman alphabet which we shall employ, a few words are also necessary. If possible, it would evidently be most convenient to take the pronunciation of some single European language for both vowel-letters and consonant-letters, and say simply: transliterated Japanese is to be pronounced exactly like the language thus chosen. But unfortunately that is not practicable. The vowels in Spanish seem to me to most nearly coincide with those of the Japanese language, but all the Spanish consonants do not correspond to the Japanese consonants. A compromise is therefore necessary. What are often called the Continental sounds of the vowel-letters (237) are now generally recognized as the most simple and scientific, namely the values, with some variation, which they possess in the German, Italian and Spanish languages. It must be noted, however, that Japanese a and u, and perhaps the other three vowels also, are shorter than in German and Italian. If in writing Japanese we were to use ou as in French, or oe as in Dutch, for η the effect would be unsymmetrical, and besides we should then have to write ō ṭ with oou or ooe. The French and Dutch values of the vowels are useless, because insufficient, and in English the representatives of Japanese vowel sounds are for the most part provincial. For consonants the English value, where it differs from that of Continental languages, seems best. About f, h, g, b, d, t, k, m, n, r, s, there is no question. There remains the sound represented in Italian by e before e and i and ci before other
vowels; for which the Italian expedient may be dismissed at once, because it is not constant. In German four letters, *tsch*, have to be used for it, and in French *tch*, either of which is too much, and the English and Spanish *ch* is the simplest of all. For the sound which the Italians write *sei* and the Germans *schr*, we have in English the simpler combination *sh*, the only rival to which would be the French *ch*; but *ch* having been adopted for another purpose, is not here available. The letter *z* has the same value in Dutch, English and French, and the only other languages which could claim to supply a transliteration for Japanese, namely German and Italian, are in a minority, so that if *z* be taken for the sonant of *s*, there is less chance of its being mispronounced by foreigners than if it were used for *ts*. Next, *w* properly exists only in Dutch, English and German; in Italian it is represented by the vowel *u*., which we require for another purpose, and in French by *ou*, which is somewhat clumsy. But the English and Dutch use of *w* (though not quite identical) is sufficiently close to give it the superiority over the German pronunciation of the letter, which in fact does not occur in Japanese at all. For the sonant of *k* it is open to us to use *g* as in English (except in some words before *i* and *e*), Italian (before *a*, *o*, and *u*.), and German (when it occupies an initial position in a word or syllable) against *gh* in French and in Italian (before *i* and *e*), but the adoption of the latter is clumsy, and *g* is better, because simpler. There remains only the consonant which forms the initial of the syllable *ʃ*, i.e. of the sonant corresponding to *ch*. In French there is no possible way of (238) rendering this sound (except by *djɔ*), and Italian would give us *gi*, which we require for another purpose, namely for the sonant of *ki*. A German must write *dsch*, which is inadmissible for the same reason, somewhat enforced, for which we reject *tsch* for the initial of *v* (*shı*). The Dutch language cannot pronounce it, and the English *j* possesses the superiority of simplicity over the only possible competitors. The consonants are thus to be taken at what, shortly stated, is their English value. No doubt it might
appear more scientific to use s and z, with some diacritical mark, instead of sh and zh, an italic g, or g with an inverted caret over it, instead of j, and some other special sign instead of ch, but considering the usual resources of printing-offices, the inconvenience of multiplying types, and the neglect shown by mankind in general to accents and diacritical marks, the compromises here advocated are more practical.

The top line of the Table of Syllables and Finals is formed as follows:

$$\begin{align*}
\text{ア カ サ タ ナ ハ マ ヤ ラ ワ} \\
a \ ka \ sa \ ta \ na \ ha \ ma \ ya \ ra \ wa \\
i \ ki \ shi \ chi \ ni \ hi \ mi \ yi \ ri \ wi \\
u \ ku \ su \ tsu \ nu \ fu \ mu \ yu \ ru \ wu \\
e \ ke \ se \ te \ ne \ he \ me \ ye \ re \ we \\
o \ ko \ so \ to \ no \ ho \ mo \ yo \ ro \ wo
\end{align*}$$

the characters being read from right to left. Under a should come a column composed of the remaining vowels i, e, o, u, and under each of the other signs a column composed of its initial consonant and the same set of vowels. But this would give fifty syllables.

$$\begin{align*}
\text{イ キ チ ニ ミ イ ユ ヒ ハ ニ マ ヤ ラ ワ} \\
i \ ki \ shi \ chi \ ni \ hi \ mi \ yi \ ri \ wi \\
u \ ku \ su \ tsu \ nu \ fu \ mu \ yu \ ru \ wu \\
e \ ke \ se \ te \ ne \ he \ me \ ye \ re \ we \\
o \ ko \ so \ to \ no \ ho \ mo \ yo \ ro \ wo
\end{align*}$$

It will be observed that in this table イ ウ エ have to do double work. It will be more convenient to discuss their office afterwards, and I will proceed first with those columns of signs concerning the value of which, and their expression in Roman letters, there has never been any dispute.

Thus サ, シ, タ, ナ, ヨ are by every one written ka, ki, ku, ke, (239) ko; サ, シ, タ, ナ, na, ni, nu, ne, no; and サ, シ, タ, ナ, ma, mi, mu, me, mo. Some foreigners have supposed that in サ, シ, タ, ナ, オ they recognized a sound
allied more closely to the ordinary European \( l \) than to \( r \),
but if that pronunciation of the initial consonant of this
series resemble \( l \) in any part of Japan, there can be little
doubt from the united testimony, whether direct or indirect,
of foreigners who have had opportunities of hearing the lan-
guage spoken in various provinces, that something closely re-
sembling \( r \) is the most usual sound given to it, and in writing
\( ra, ri, ru, re, ro \), we shall certainly be in conformity with the
most approved practice. The exact pronunciation of this
letter, and its difference from the \( r \) of various European
languages, are points beyond the scope of the present paper,
which is occupied with the consideration, not of pronuncia-
tion, but of the orthography of Japanese words.

The soft or sonant gutturals in Japanese are formed by
adding two dots or small circles to the hard gutturals, as
follows:—

\[ \text{うこと, むもも} \]

In the island of Kiushiu the initial consonant of these
syllables is uniformly pronounced \( g \), in whatever part of a
word it may occur, but at Kiyauto and that part of Japan
which lies to the east of the old capital, it is only so pro-
nounced at the beginning of words, while it is nasalized
when it occurs in the middle of a word. Exceptions to the
general rules are formed by the particle \( ga \), which is usually
pronounced as if it formed part of the previous word, and
by \( gotoshi \) and \( gurai \),
that is, nasally, while in mere re-
duplications of roots beginning with \( g \), as \( gata-gata, goro-
goro \), it is not nasalized. But it may be doubted whether
such reduplications should not be rather considered as two
words, instead of one united by a hyphen. It might natural-
ly be supposed at first sight that this soft guttural should
be written \( g \) where it is to be so pronounced, and \( ng \) when
it is to be nasalized, but the probable effect of writing \( ng \)
would be to lead English-speaking people to pronounce
\( ngg \); as, for instance, if \( g \) \( r \) were written \( kango \), most

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6Zhifu \( go \), fifteen, which is really two words, ten five, and \( shi go \),
four or five, are other cases of this irregularity.
people would read it *kang-go*, that being the English practice in such words as dingy (a small boat), jingo, lingo, mango, fandango, Congo, Rangoon, shingle, jingle, dangle, Mongol, Fingal, and others. Italians (240) and Spaniards would also be led to pronounce *ngg* by this spelling. It seems better, therefore, to write *g* in all cases, and to lay down the rule beforehand, that it is to be nasalized in the cases above mentioned, with certain exceptions. In Kiushiu of course this rule may be neglected, without any danger of one's being misunderstood by the inhabitants.

The next column to be considered is that of the dental sibilants サ シ ス ツ ョ. All writers on Japanese grammar have agreed, so far as I am aware, to express the first sign and the last three respectively by *sa*, *su*, *se* and *so*, but there is a difference of opinion with regard to the proper equivalent of *ツ*. Some think that it should be *si*, for the sake of uniformity with the rest of the series, or because we may suppose that to have been the ancient or original sound of the syllable. Others have merely continued to write *si*, because the earliest writers, who were chiefly acquainted with the Hizen dialect, in which it is so pronounced, had set the example. But this argument would render it incumbent on us to express *ツ* by *she*, in order to be consistent, for that appears to be the Hizen pronunciation of this latter syllable. As *ツ* is certainly pronounced *shi*, both at Yedo and at Kiyauto, and over the greater part of the country, considerations of utility induce us to write it thus, and since we do not thereby in any degree obscure the fact of its being a sibilant, it is easy to remember that it belongs to the same series as サ シ ス ツ ョ. The fact that *ツ* is pronounced *she* in one part of the country would lead us to the conclusion that the initial consonant of this series was originally somewhat indefinite, and lay between *s* and *sl*, and that in course of time, as the habit of articulating consonants with distinctness began to grow, *s* was preferred for certain vowels in some localities, while *sl* was prefixed to them in others. So we get *sa*, *shi*, *su*, *se*, *so*, in the two capital cities and in the greater part of the country, but *sa*,
si, su, she, so in Hizeña and a few other localities in the west; also in Yonezawa, on the authority of Mr. Charles H. Dallas, in Vol III. of our Transactions, p. 145. To represent the original intermediate initial consonant would be impossible with the Roman alphabet unassisted by dia-
critical marks, the use of which is always to be avoided if possible, and the best course is therefore in this case to represent the actual pronunciation of the standard of the most cultivated part of the population.

(241) By adding the sign of the nigori to φ, υ, ξ, τ, υ, we get θ, ς, ξ, ζ, υ. There is little difference of opinion among students as to the way in which the first, fourth and fifth of this series are to be represented, and I know of no one who objects to za, ze, zo. If ς is to be written shi, reasoning from analogy it would appear a matter of course that ς must be equivalent to shi, but as a matter of fact it is so pronounced over only a proportionately small area, and is confined, I believe, to the southern part of Kiushiu. Most of us in this country have written it j, because the almost universal pronunciation resembles that of j in En-
glish. In the different editions of his grammars of both the spoken and written dialects of Japanese, Mr. Aston has followed the usual practise, and in the second edition of his "Grammar of the Japanese written Language," in order to distinguish this j from the precisely identical sound which is given to the initial of ς, in other words to the sonant or soft consonant corresponding with ch (as in child, church), he has written the latter syllable dji, apparently considering that as ς belongs to the dental column of syllables, the introduction of d can give rise to no misunderstanding as to the nature of the sound thus figured. It is certainly desirable that as near an approach as possible to uniformity should be made by students, but I should have preferred to use zh in this place, reserving j for the initial of ς. I shall recur to this subject in discussing the dental series, which comes next in order to the sibilant.

A difficulty presents itself with regard to the mode of writing ξ. There is no doubt that the people of Yedo often
confound ้ with ณ in their common speech, and yet there are certain words in which they seem to me to pronounce ้ correctly, that is to say, as ณุ. This habit of saying ณ where they should say ้ does not appear to be universal among the inhabitants of the city, and I am inclined to think that it is in reality confined to persons who have not received what would be considered a liberal education, just as we find that the error of substituting ชิ for หิ in words beginning with ค and accented on that syllable, is committed chiefly by the middle and lower classes, especially by women. This is, however, not a local variety of pronunciation which is entitled to be recognized as standard, for a great many of those who are daily guilty of the practice are quite conscious of it, and often make amusing blunders by trying to correct themselves where they are not in the (242) wrong, just like uneducated English people who misplace their ห's, from a nervous desire to commit no mistake. Even if ้ were universally pronounced ณุ by all classes, both educated and ignorant, I should still advocate writing ณุ, because this spelling has the advantage of indicating at once the corresponding Japanese sign, and it would be easy, if necessary, to lay down a rule that it should be pronounced ณุ; but still more is ณุ to be preferred when it actually represents a better pronunciation, which is recognized by Japanese writers on orthography to be the correct one.

We come now to the dental column of signs ง, ต, ฌ, ถ, ท. As in the case of the sibilant series, there are certain of these signs with regard to which no difference of opinion has ever existed, namely ง, ต and ท, which every one writes ตา, เถ and โต. Of the remaining two, ต has been written ชิ by all students of the language in the eastern part of Japan, while those who studied at Nagasaki, and the late Dr. Hoffmann, who derived his early knowledge of the pronunciation from Europeans who had resided there, wrote ทสิ. This is the way in which we should expect to find ต pronounced by a dialect which pronounced ณ si, since in either case ต is merely ต with the first half of the
consonant $t$ prefixed. Whether we try to pronounce $tsi$ or $tshi$, as they would naturally be pronounced by an Englishman, it is evident that we do not complete the $t$. As Professor Max Müller observes in reply to those who maintained that the $ch$ in English consists of two consonants, $t$ followed by $sh$, and should not be classed as a simple consonant, "$Ch$ may be said to consist of half $t$ and half $sh$; only give one consonant. There is an attempt of the organs at pronouncing $t$, but that attempt is frustrated or modified before it takes effect." For $v$ nearly all scholars, whether studying in Japan or in Europe, have written $tsu$ up to the present, with a few exceptions. Not that the initial consonant is $t-s$, any more than $ch$ is $t-sh$, but because an European in trying to pronounce, as he thinks, $ts$, comes as near as possible to the required Japanese sound. Professor Max Müller's remarks as to the nature of the consonant $ch$ apply with equal force to $ts$; that is, it consists of half $t$ and half $s$. But a love of theoretical uniformity has led a few scholars, especially those of the Istituto di Studij Superiori in Florence, to write $ti$ and $tu$ for the two signs $†$ and (243) $v$; possibly on the ground that these signs were anciently so pronounced, $chi$ and $tsu$ being, according to them, modern corruptions. This practice has been likewise adopted by some Japanese writers, to whom has fallen the task of presenting a few isolated Japanese words in the European character, apparently from the same desire to attain uniformity in theory at the expense of irregular facts. Dr. Edkins, in his Introduction to the Study of the Chinese characters, p. 181, asserts that the sign $†$ was at first $ti$ and $di$, and afterwards changed to $chi$ and $shi$, and he endeavours to prove this by the fact that the Chinese character $T$ ting is written $† v$, shiyau, in the Japanese transliteration. But there is no reason to suppose that the Japanese transliteration exactly represented the Chinese sound. In the same way a modern Japanese trying to represent in kana the English definite pronoun 'the,' will write $z$ $†$ or $z$ $¥$.

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7 Lectures on the Science of Language, 2nd series, p. 141.
(zu or zuwi), but that does not prove that the present pronunciation of A is th. The simplest explanation of the fact is that * was the nearest thing to ti that the ancient Japanese possessed, but there is nothing to show that they were ever identical. There does not exist any evidence in support of the supposition that tsu and chi are corruptions of tu and ti, and the more probable conjecture is, that if this series ever possessed a single consonantal initial common to all five syllables, is was intermediate between the two consonants which are actually found in the modern language, and that where t occurs it is a purification, so to speak, of this previously existing indeterminate consonant for which our alphabet affords no adequate equivalent. We cannot be certain of what the ancient pronunciation of the whole series was, nor could we represent it, even if certain of its original nature, and it seems more practical to represent, as it is within our power to do, the modern actual pronunciation of the standard dialects of Yedo and Kiyautu.

The soft dentals are represented in Japanese by the addition of the nigori mark, Ψ, Ψ, Ψ, Ψ, Ψ; and here again there is conformity amongst students with respect to the mode of expressing the first and the last two of the series, which are universally written da, de, do. Those who express the hard or surd syllables Ψ and Ψ by ti and tu, naturally write the corresponding soft or sonant syllables di and du. Most Europeans who have studied in Japan have used dzu for Ψ and ji for Ψ, with the exception of Mr. Aston in the second edition of (244) his "Grammar of the Written Language," where, as already observed, he has employed dji to distinguish Ψ from Ψ, which he writes ji. Some mark of the kind is manifestly desirable, for nothing could be more misleading to any student who wishes to reconvert a transliterated word or text into the original signs, than the practice of rendering the soft sibilant and the soft dental before i in the same manner. In English j, as we pronounce it, denotes the soft sound, the corresponding hard sound to which is written ch, and if
we represent \( v \) by \( \\
\) it seems most consequent to use
\( ji \) for \( \varphi \). Although \( z \) of the sibilant series is also pro-
nounced \( ji \) throughout nearly the whole of the country, it
is evident that this is not its correct value, which should
be \( z \) or \( zh \), or at least something between them, and
therefore in a system of transliteration, based as far as
consonants are concerned upon the English use of the
Roman alphabet, \( j \) should not be used to denote the cor-
ruption of \( z \) or \( zh \), but should be restricted to its proper
function of representing the sonant which corresponds to
the surd \( ch \). In Professor Max Müller's physiological
alphabet\(^2\) and in his transcription of the Sanskrit alphabet,\(^3\)
\( j \) is employed in this manner, which I venture to think
furnishes an additional reason for our adhering to the use
of \( ji \) for the syllable \( \varphi \). At the same time in coming to
a decision on this point, we must not leave out of sight
the great recommendation of Mr. Aston's method, namely,
that while completely distinguishing between the two sylla-
bles, it enables us at once to sound them both according
to the pronunciation most in vogue at the present day.

There is at hird series, the initial consonant of which
was originally too indefinite to be represented in an exact
manner by any consonant belonging to the Roman alphabet.
It is the series \( \gamma, \epsilon, \eta, \rho, \theta, \phi, \theta, \alpha, \beta, \gamma \).
From the fact that the sounds represented by these signs readily pass under certain
circumstances into the hard and soft labials \( pa, pi, pu, pe, \phi, \theta, \alpha, \beta, \gamma \), it appears to be a matter of
course to include them also in the class of labials, and in
the west of Japan, in the province of Hizen, as well as in
Aushiu in the north, they are actually pronounced as nearly
as possible \( fa, fi, fu, fe, fo \).\(^{10}\) The early Christian mission-
aries in the 16th century seem to have been most familiar
with dialects which followed this practice, and the first
modern (245) European writers on the Japanese language,
who derived their knowledge chiefly from Nagasaki, natu-

\(^2\) Lect. on Sci. of Lang. 2nd Series, p. 152.
\(^3\) Ib., p. 158.
\(^{10}\) Mr. Dallas; Transactions: vol. ii., p. 145.
rally used * as the initial throughout the series. Their example was likewise imitated by European students of the language, who never having visited the country, had no opportunity of hearing the pronunciation of educated residents at either Yedo or Kiyauto. On the other hand, those who pioneered the way in Japanese studies in the east part of the country, especially the Rev. Dr. S. R. Brown and Dr. J. C. Hepburn, endeavoured to represent the five syllables by the sounds which they actually heard, and wrote ha, hi, fu, he, ho, as being the closest approximation attainable. It spite of the fact that the letter h represents the spiritus asper or hard breathing, and comes nearer to a guttural (German ch) then to a labial, this use of it is in accordance with the facts, as appears from the following passage out of Suzuki Otozhirau's Kotoba no Chikamichi, or 'Short Road to Language.'

"In all ages and in all countries  DataManager,  DataManager,  DataManager,  DataManager and  DataManager have ever been the origin from which all (other) syllables and finals have sprung. To prove this, if the mouth be opened and breath be emitted direct from the throat, the sound  DataManager ..... is produced. This sound is the natural striking and resounding of the breath against the whole of the interior of the mouth. If now the lips be opened wide and the breath be emitted through the closed teeth, the sound  DataManager ..... is produced. In this case the breath touches the teeth, and resounds against the interior of the mouth. But if, on the contrary, the breath be emitted with the lips puckered together and the teeth separated, it lightly sounds  DataManager, a sound in which the breath touches spontaneously against the lips and resounds against them. Again, if the tongue be pressed against the base of the lower gum and breath be then emitted, the sound  DataManager is spontaneously produced, a sound which resounds from the interior of the mouth to the base of the lower gum. But if, contrariwise, the lips be contracted, the cavity of the mouth be puffed out, and breath be emitted against the roof of the mouth, a light sound  DataManager is spontaneously produced. In producing

11 Also known as Minamoto no Shigetane.
this sound the breath touches the roof of the mouth and resounds against the walls of the cavity of the mouth. To speak more distinctly, these are the gutturals ʷ, ʢ, ɬ, ~, * or to speak more distinctly yet, they are semi-guttural and semi-labial."

(246) From this extract it clearly appears that whilst, in the opinion of the Japanese writer, the whole series partake of the nature of labials, the four syllables ʷ, ʢ, ~ and * are produced mainly by the resonance of the breath against the walls of the cavity of the mouth, while ɬ is due to the impact of air upon the lips. That the initial consonant of ʷ, ʢ, ~ and * is precisely the same in each case, no one will, I think, venture to maintain. The directions for pronouncing ʢ seem to me exactly calculated to produce the sound heard in the standard dialects, a sound which differs a good deal from the initial of ʷ, less so from that of ~, and is also unlike that of *, but the general character of all four is much more like h than any other letter in our alphabet, and therefore the letter h, which has been accepted by the ears of nearly all writers on the language resident in Japan, seems to me to be preferable to the f, which has been used to represent the sound as given in a few provincial dialects. According to this view, then, ʷ, ʢ, ~,* will be written ha, hi, he, ho. But in the case of ɬ the evidence of the Japanese writer is distinct as to its labial character, and the practice of the writers referred to is also in favour of fu. Mr. Aston correctly points out that the initial consonant differs from our f, as the lower lip and upper teeth do not touch, "the result being a kind of strongly aspirated wh." This description of the sounds seems to me quite in accordance with what I believe my own ear informs me, but at the same time I think it will be found that the sound is very much nearer f than h. This may easily be tested by trying to induce a Japanese to pronounce the English word 'who' or by repeating a number of Japanese words beginning with ɬ, alternately as if it were equivalent to our fu and hu, and noting which the Japanese finds most like the pronunciation approved
by his own ear. His verdict will, I feel confident, be in favour of *fu.

When the signs of the series *-, *-, *-, *-, *-, have the nigori, they are written ba, bi, bu, be, bo, in conformity with the sound given to them in all parts of Japan, and this transcription is, as far as I know, universal amongst foreigners. When they take the han nigori, that is, a single dot or small circle, then they are always represented by pa, pi, pu, pe, po.

There still remain three series of syllables, namely the pure vowels, the syllables which begin with * and those which begin with y. As in (247) every other case, the series of five signs is complete, we naturally suppose that the same rule prevails here, and expect to find a, i, u, e, o : ja, yi, yu, ye, yo, and wa, wi, wu, we, wo. But as a matter of fact there are only twelve signs to represent the fifteen theoretical syllables. From etymological considerations it is evident that there was once a syllable yi. For example, the root of the verb 1 *-, 'to shoot,' is identical with the radical of *um, bow, and with *a, arrow ; 1 *-, the archaic form of *ume, dream, must have been *ime before it came to be pronounced *me; the root of *u, to repent, was *uyi, and that of *yuru, to grow old, *oi. It may even be heard at the present day, not as an initial, but in the middle of certain compounds of Chinese origin, like *ui, marriage, pronounced kan-yan, kon-yan, by many people. In the same manner it can be shown that * represents a primitive *u, as the simple vowel u. Thus for *utsutsu, actually, the Mañefushifu has *utsutsu (vol. XVII, pt. 2, p. 11); *osagi for *usagi, hare, (vol. XIV, pt. 2, p. 26, verso); *oso for *oso, falsehood (vol. XIV, pt. 2, p. 23 verso); *osoro instead of *oso, falsehood (vol. 4, pt. 2, p. 3). The Wamiyau Seu gives *oso for the otter, or, dinarily called *oso (vol. XVIII p. 17, v.). Atractylis ovata it called *okera in the Wamiyau Seu, while in old poetry we find the form *okera. It is not possible to say with certainty which of these is the older form, though from the frequency

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12The references are to the Riiyakuge edition,
with which an archaic 𓎀 becomes 🳋� in the more modern form of the language, we may conjecture the same to have happened here, by �-valu being changed into 🳀�. As an initial 𓎀 could not have passed into 🳀�, the antecedent of 🳀� must have been �-valu.\(^{34}\)

Whatever may be the opinion held as to the proper equivalent of 𓎀, it cannot be doubted that the roots of verbs which have their conclusive forms in 𡴁, like 𓊈𡴁, to be visible, 𡴁𡴁, to have a sensation, 𡴁𡴁, to burn, i.v. 𓊈𡴁, to pass over, 𓊈𡴁, to grow, i.v., 𓊈𡴁, to cease, i.v., 𓊈𡴁, to bend, i.v., 𓊈𡴁, to cure, i.v., 𓊈𡴁, to increase, i.v., 𓊈𡴁, to ring, i.v., 𓊈𡴁, to vanish, 𓊈𡴁, to be cold, must have ended in 𡴁, as 𓊈𡴁, 𡴁𡴁, 𡴁𡴁, 𡴁𡴁, etc. At the present day, over the greater part of the country, 𓎀, as an initial, is pronounced 𡴁, and it is only, as far as I am at present informed, the (248) Yedo and Kiyauto dialects that sound it 𡴁 at the beginning of a word. Even in these dialects, when preceded by an open syllable, or by the final 𓊊 (่) it is mostly pronounced with a faint 𡴁.

Nevertheless, all the earlier writers on grammar and etymology, such as Mabuchi, Motowori, Suzuki Otozhirau and their followers, always held the view that it was part of the simple vowel series, and ranked it accordingly with 𓊊, 𓊁, 𓊂, 𓊃 (or 𡴁).

Respecting this sign 𡴁 it is worth while noting that it was formerly ranged in the 𓊁 (wa) series, while 𓊂 was supposed to belong to the 𓊂 (a) column, notably by Mabuchi and the author of the Wakuji Shiwori (和訓蒙). As a matter of fact they are both, at the present day, pronounced 𡴁 when occurring at the beginning of a word,\(^{35}\) while 𓊂 as the mark of the subjective case, and also in the centre of a word\(^{36}\) (except after 𡴁 and sometimes after 𡴁) sounds very

\(^{34}\)These examples are from Shikida Toshiharu's Oō-iê-kei-mou 音韻 趋量 vol. I., p. 7.

\(^{35}\)That is, a single word pronounced by itself. In a sentence the final vowel or nasal 𡴁 of the preceding word affect its pronunciation.

\(^{36}\)The syllables 𡴁, 𡴁, 𡴁, 𡴁, and 𡴁 never occur in the centre of a word, unless it be a compound, or by loss of a previously existing consonant, as in mono-ushi, melancholy, or yaiba, blade, corruption of yakiba, and in
much like English *wo*, though the breathing is fainter. There exists, however, much stronger evidence than this in support of the view that ishops, and not *o*, belongs to the *wa* series. As Motowori says,* the identity of タル and タル, to be, of タミキ and タミキ, gentle woman, ニナナ and ニナナ, to neigh, proves that ishops and *o* and ishops belong to the same series, and as it has never been disputed that *i* is *wa* and *i* *wi*, it follows that ishops must be *wo*. On the other hand オキ and イキ, meaning breath, must both belong to the same set, that is of the simple vowels. Besides this, it can be shown that the original pronunciation of the character し, from which ishops is formed, was し and that of 手, from which ishops is derived, was *wo*.* It has been usually held, until lately, that the *katakana* sign オ is derived from the Chinese character 火* and also that the ancient (249) pronunciation of the Japanese equivalent word being し, this abbreviation was employed as the phonetic sign of the syllable し. The Wamiyau Seu says 'the Japanese name for 火 is オ,' that is, the pronunciation of the corresponding Japanese word is identical with that of the character オ. We can hardly doubt, therefore, that at the period when the Wamiyau Seu was compiled 火 and オ as *kana* signs were pronounced exactly alike, and that both ought to be transliterated in the same way. Here the question thrusts itself in, 'Did not the selection of forty-seven signs of the syllabary, and consequently the loss of either し or オ from the language, precede the compilation of this dictionary?' If it did, then this quotation settles nothing. In the Kozhiki, the earliest extant written example of the Japanese language, 火, 延, 火 and 杉 are use to repre-

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such cases hiatus is avoided in pronunciation either by inserting a semi-vowel, which is not usually written, or by converting the two vowels into a diphthong, or by making one long vowel of them.

*2*字音観字用格, p. 7.  
*2*Ib., pp. 35 and 37.  
*3*From the use of 火 in Chinese to mean river, it has been inferred that the Japanese equivalent has also that signification, but this appears to be incorrect; the Wamiyau Seu quotes a passage from the old Chinese dictionary of the Tang dynasty, the 唐韻, where 火 is defined by 河, sea, about the meaning of which character there is no doubt. Hence *iri-ye* naturally means inlet.
sent what would be written を in *katakana*, and yet of these four the first must originally have been pronounced *e* and the second *ye*, according to the corresponding Chinese sounds, while of 延 and 柿, both being *kun kana*, it does not appear at first sight whether they were used for *e* or for *ye*. By more modern Japanese writers than those previously referred to, it is maintained that 延 is not derived from 延, but from 延, and if so, as 延 was evidently pronounced in earlier times with an initial *y*, the syllabic sign を must originally have been *ye*. Ohoishi Chibiki in the 言元梯 (Gen gen tei, or Ladder to the Origin of Words), places all words beginning with を, excepting only を, to get, under the *y* column, and amongst them consequently the word 延, so that if he be right, the sign を, even if derived from 延, is nevertheless properly *ye*. Motowori and Suzuki are the most conspicuous advocates of the view which assigns to を the value *e*, and the latter has proposed to use for *ye* を, the lower half of を, which he considers to represent a sound belonging to the *y* series. On the other hand, it is maintained by Ohota Kata in the Kañ Go Ondzu (漢呂音圖), by Katayama, author of the Tetsu-zhi-hen (鐵字篇), an excellent spelling-book, by Shikida Toshiharu in the On-iin-keimou (音類啓蒙), and by Hori Hidenari, one of the greatest living authorities on Japanese grammar and etymology, that the proper sound of 返 is *e*, and their opinion is corroborated by the K'anghi Lexicon, which gives (250) 返 as the spelling of 返, on the authority of three earlier Chinese dictionaries of finals. Katayama and Hori consequently propose to denote *e* by means of 返, the upper half of the character, while Shikida, who appears to hold the opinion that 返 rightly represents *e*, has taken 返 for *ye*, as a convenient abbreviation of 延. These new signs are not, however, to be used in writing Japanese words; they are simply intended by their inventors to fill up the gaps in the Table of Fifty-Syllables, and for us they have no practical value. The discussion serves to illustrate the uncertainty which surrounds the question, and the extreme divergence of opinion among Japanese writers of reputation. I am incli-
ned on the whole to agree with those who would take ye as
the correct equivalent of ei, and the corresponding signs of
the hiragana syllabary. In the first place, although e is
the pronunciation common at the two capitals at the begin-
ing of a word, ye is heard throughout the west and north
as an initial, and it is a well recognized fact that provincial
dialects often retain forms and sounds long after they have
disappeared from the cultivated speech of capitals. Seeing
that the tendency in the past has been constantly to the
suppression of consonants, giving us u instead of wu in such
words as usagi, here; uso, falsehood; uso, otter (which were
originally wusagi and wuso), and doubtless others, that the
initial w of ウ (wi) has been dropped universally, that エ is
undistinguishable from イ, and that ゆ at the beginning of
words has been confounded with i from the time when the
two syllabaries were formed, it is very improbable, to say
the least of it, that an original e should have acquired an
initial ye. In other words, if e had been the general
pronunciation at any period, it is difficult to believe that it
could have been supplanted by ye throughout half the
country, and the most natural conclusion therefore is that
ye represents the sound prevalent when the person to whom
the iroha is attributed selected the forty-seven characters of
the hiragana, which he believed were sufficient to represent
all the pure sounds of the Japanese language. Besides, it is
acknowledged by all native scholars that a hiatus between two
vowels in the middle of a word is contrary to the habits of
the Japanese language, and that oboe, moe, koe, hae, and so
forth, are impossible. The true pronunciation of these
roots must, according to this view, have been oboyi, moye,
ko ye, haye, and so forth. Another proof is afforded by the
Makura-Kotoba, or ‘pillow-word,’ uchiyosuru, an alterna-
tive (251) of which is uchi と suru. Is it evident that と
must here be read ye, for yo is not interchangeable with e,
but only with syllables beginning with y.19 The apparent
cases of the occurrence of the vowels not directly preceded
by a consonant in any part of a word except the beginning

are fully explained by Shikida. On these grounds it appears to me advisable to write ye for £ and the corresponding hiragana signs. Consequently I propose to transcribe as follows:

\[
\begin{array}{cccc}
\tau & i & u & o \\
\zeta & x & e \\
\gamma & y & e & yo
\end{array}
\]

The remaining four sounds out of the twelve belong to the w column. W best represents their initial consonant, which is, however, much softer and less positive than the same letter as usually pronounced by Englishmen. In modern times, at least in the standard dialects of Kiyauto and Yedo, three of them have, when occurring as initials, lost the consonant, namely # wi, £ we and w wo, which are pronounced exactly like t, x and #, or i, e and o. In those dialects which still pronounce £ ye, the sign £ has likewise that sound. The fourth, £, still retains the initial w in Japanese words, but in some words of Chinese origin, as £ न, prince ( Madness), it has exactly the same value as न. But in spite of these facts, we cannot doubt that these syllables had not suffered this loss at the time when the syllabary was formed. It is clear from the cases of औ, न and न (which also represent the lost syllables य, य and e) that the framers of the syllabary were guided by actual contemporary practice, and were not influenced at all by considerations of etymological theory, and they would not have gone out of their way to adopt two sets of signs, न and #, न and न if there had been only one set of sounds to be represented. The loss of the initial consonant must have occurred very early, perhaps in the 12th century, and led to the constant confusion of # and न, न and # in written compositions, but in the ancient literature the distinction is maintained. Although no difference is made in pronunciation at the present day, the labours of recent etymologists have restored the correct spelling, both of

10 春諭啓蒙, vol 2, p. 38.
native Japanese words and of words borrowed (252) from
the Chinese, and it seems advisable, therefore, to write wi,
we, and wo for #, x, and y, in order to avoid ambiguity.
Wuru, to be, and iru, to shoot, wuru, to be, and oru, to
weave, are pronounced exactly alike, but it is obviously
advantageous to avoid in writing by this simple means the
ambiguity which exists in speaking such words, for though
a question addressed to a living speaker serves to clear up
doubt, documents can give no explanations other than those
which appear on their face.

There is a difficulty in the case of x and x which at
present I see no means of surmounting. In the west and
north of Japan, the few indigenous words which begin with
x (we) are pronounced as if they were written with x, that
is, according to the practice of that part of Japan, as ye.
I have said that it is difficult to suppose that e could have
acquired an initial y, and yet this is what must have taken
place if we in becoming ye first dropped the w, as it has
done in the east. Is it perhaps to be explained by saying
that w passed directly into y? I must confess, however,
that I know of no evidence to support such a theory. The
solitary example of eru, to get, becoming yeru, gives no
trouble, for we may easily suppose that a single case of e
was likely to get confounded with the numerous cases of
initial ye.

Lastly, there is the sign ˇ (λ in hiragana), which never
occurs except at the end of a syllable or word. In the
漢字三番 indentation (Kan shi san on kau) of Motowori it is sugges-
ted that the hiragana sign λ is derived from a cursive form
of WithValue or from the hiragana إجراء, and the katakana ˇ from ˇ.
Okada Masumi, author of the 假字母 (Kana, Kau), prefers
to derive λ from the cursive form of WithValue, while Arawi Haku-
seki looks upon both λ and ˇ as identical with the
Devanagari Anuṇāṣika. Okada is inclined to agree with
Arawi as far the katakana symbol is concerned, and if mere
resemblance of form were to decide the question, we must
allow that there is considerable reason for accepting this
view, in preference to that of a single writer, who refers it
to 兪. In any case both signs are of much later date than the rest of the two syllabaries. In the Mañye Huffman we always find a sign which can only be read mu, where in the later language we should have フ; of course ヶ and ヸ which occur in modern transliterations of the Mañye Huffman are no indications of the pronunciation of the original. It is also evident that it was invented after the Japanese transliteration of Chinese (253) words had been fixed, since if it had already existed when Chinese words began to be written in kana, it would have been naturally used as the equivalent of the Chinese final consonant ng, which it most closely resembles in sound. The fact is, however, that the vowel u (ウ) is employed for this purpose, and such words as chang 長, tang 堂, tong 棚 are written chiyau (チヤウ) tou (トウ), that being the nearest approach which the existing syllabary enabled the Japanese of that period to make. Even in the pronunciation of modern Japanese such nasal twang is sometimes given to u. The Chinese words which at the present day are written with a final ヶ, formerly had ア, mu in its place.

From the fact that the ancient future ending ヶ (mu) has changed into ヶ (ム) in the later forms of the language it might be hastily inferred that the origin of ヶ was ヶ in all cases, but it is easy to show that such an inference is incorrect. It often occurs merely as a strengthening of the following consonant, as in nukiinde, to be distinguished, for nuki-de; in kañgame, to consider, for kagami, in the negative conditional termination -suñba instead of -suba; also in such names as Buñgo, and Biñgo, properly Bugo and Bigo. As a corruption of mi it is very common, as asoñ (a title), for asomi; kíndachi, nobles, for kimi-tachi; kañ-sashi, hairpin, for kami-sashi, and in the colloquial participle of verbs in mi, as tanoñ-de for tanomite, asking, yoonde for yomite, reading. Mo also becomes ミ, as in neñgoro for nemogoro, earnestly; ni, as in nañso for naniso, something; ikan ni, how; ri, as kudañ (in kudañ no gotoku, as above) for kudari; ohañnu, finished, for oharinu; ru, as añmeri, seems to be リ; ha, in warañbe, boy, for warahabe; hi, in
mo̖ndo, water-carrier, for mohi-tori; kurando, a keeper of the wardrobe, for kurabi; akiando, merchant, for asi-bito, and the colloquial participle of verbs in bi-, as oyo̖nde for oyobite, reaching; to̖nde for tobite, flying; and ho, as in hoto̖ndo, nearly, for hotoboto. The  which is a corruption of mu, is, however, far commoner than the  from other sources.

It has been hitherto the custom of most, if not all European and American students of Japanese to transcribe the signs  and ̃, by the letter n. Perhaps there would be little reason to object to this if the n never occurred except at the end of a word, provided that readers would always bear in mind that this d, when followed by a vowel, or by y, w, (254) h or f is to be pronounced somewhat like the French nasal n. The difficulty of inducing people to remember this fact on every occasion, would be most effectually avoided by adding some mark to the letter n, which would at any rate suggest to the reader that it differs from an ordinary n. The most convenient method of doing this is by using ñ, a form which is to be found in most ordinary fonts of type, while any other sign we might elect to use would have to be specially manufactured.\footnote{I imagine that n with a dot under it, given by Prof. Max Müller in his physiological alphabet, would best represent the sound. See Lect. on the Science of Language, vol. ii, p. 152.}

It may be said that, after all, readers will easily learn that n at the end of a word is to be pronounced as in French, and that consequently we do not require a special sign, but the answer to this is that in a large number of common words of Chinese origin the sign  occurs in the middle-followed by a syllable beginning with a vowel, and that in that position it is impossible, without having previous acquaintance with the particular word, to know how to pronounce it, if  in the transliteration is represented by simple n. For instance, what chance would there be of a correct pronunciation being given at first sight if, 意, friendliness, 原因, origin, 天意, heavenly grace, 延引, delay, 婚姻, marriage and 安隠, tranquillity, was written koni, geni, tenon,
yenin, konin and anon. The natural tendency would be to divide these words as if the middle \( n \) belonged to the succeeding vowel, and to read ko-ni, ge-nin, te-nin, ye-nin, ko-nin, and anon, and in the second of these cases, at least, ambiguity of meaning would arise in reading, from the fact that the same combination would be used to write \( 下 \), genin, a common person. This is leaving out of account the incorrect pronunciation of \( n \) for \( \hat{n} \), and consequent misapprehension on the hearer’s part. A suggestion has been made that the difficulty might be got over by the use of a hyphen, and by writing kon-i, gen-in, yen-in, and so forth, but the objection to this plan is that the hyphen would convey an erroneous idea of the character of these words, which often are not compounds in the usual sense of the term, besides rendering the hyphen useless for purposes to which it is more appropriate. Some modification of \( n \) is certainly a more fitting means of representing the sound, and we are obliged to take that which we (255) shall have the greatest chance of finding in the printing-offices to which we have access in the east. The facts that \( vr \) before a labial (except \( h \) and \( f \)) is pronounced \( m \), and \( n \) before a dental do not affect the question. That is a rule of pronunciation which will have to be learnt among the rest, for whatever system of transliteration be adopted, whether phonetic or in accordance with the kana, some such rules will have to be learnt before a sentence can be correctly pronounced.

From the foregoing considerations it appears that the following is a rational and convenient method of transcribing single kana signs:

\[
\begin{align*}
I & \rightarrow ha \rightarrow ho \rightarrow to \\
Y & \rightarrow ta \rightarrow so \\
Y & \rightarrow ma \rightarrow fu \\
We & \rightarrow hi \rightarrow mo \\
\end{align*}
\]

or,
A system of transcription for the signs having been thus arrived at, it would appear most natural to transcribe whole words in accordance with the Japanese spelling, just as we do in writing Greek or Russian or German words with the Roman alphabet. It is only necessary to know what the Japanese spelling should be. In the middle ages, when the nation was too occupied with its civil wars to be able to cultivate literature, orthography was neglected, and every one who used the kana (256) in writing trusted to his ear or any other private and particular guide, very much as the Englishmen of the Elizabethan age did. Another cause of the prevailing ignorance of the correct spelling or kana-tsukahi was the practice of writing chiefly in Chinese or in a style derived from it, which for the most part rendered a knowledge of the proper kana unnecessary. Nevertheless the sources of this knowledge still exist in the earliest poetry and in the prose romances, and during the last two centuries the labours of native scholars have gradually determined the orthography of all words belonging to the literary style, with but few exceptions, concerning which some doubt still exists. The result of their researches is embodied in the Waku Shiwori (和訓案), by Tanigaha Shisei, which is the guide to be followed for the spelling of words of Japanese origin and a few of Chinese derivation. For the proper kana to be used in spelling the sounds of Chinese characters, and consequently of words borrowed from the Chinese, the lists in Motowori’s 学音文字用格 (Zhi oñ kana-dzukahi), are the generally recognized authority. They have been reprinted by Suzuki Otozhirau in his
Kotoba no Chikamichi and in the 歌學集腋 (Kagaku Shifuweki). Provided with these works, we have no difficulty in transcribing all Japanese words, whether of indigenous or Chinese origin, met with in books, and also ninety-nine out of every hundred heard in the colloquial tongue, for the differences between that and the written language12 consist chiefly in grammatical forms and significations of words, and in the comparative poverty of the former in words taken from the Chinese.

This system of following the Japanese spelling, sign by sign, is what I propose to call the 'orthographic method' of transliteration, as distinguished from the phonetic systems hitherto in general use. Its superiority for linguistic purposes is very great, on account of the greater clearness with which it shows the relation of different grammatical forms to each other, and it affords great aid in etymological research by presenting to the eye the earliest pronunciation of words, which otherwise would not easily be recognized as related, because phonetic spelling, according to the modern pronunciation, would render the relation obscure. For instance, the words for 'rope' and 'twist,' if written (257) phonetically, nawa and nō, apparently possess nothing in common but the initial n, while if they are written, orthographically naha and nafu, one has only to remember that the consonant which is h before a is f before u, in order to perceive that the one word is derived directly from the other. So also the system enables one to see at a glance that auo green, blue, and awi, the name of the plant which furnishes the common indigo dye (Polygonum tinctorium) are related. The orthographic spelling is also that which must be adopted by students of comparative philology who wish to trace the connection of Japanese and other members of the Altaic family of languages, for the separation of the races who speak these tongues took place long before the beginning even of the historical period, and the earliest forms attainable will be of the greatest service.

12 The language of poetry excepted, which does not admit of words derived from the Chinese.
for purposes of comparison. Guided by phonetic spelling, errors may be committed such as one which appeared lately in print. It was suggested that "the word taira, which denotes a fertile, enclosed plain, might be of the same origin with the Tartar Daria, river, river-plain." Taira, spelt orthographically, is ta-hira, the first syllable of which is a prefix common to many words, probably identical with te, hand, and hira is the essential part of the word, which means 'flat.' Now there certainly does not appear to be much resemblance between Daria and hira.

The aid which the orthographic system lends to etymology makes its use preferable also for the student of early history and mythology, the greater part of whose researches must consist of etymological investigation. Dictionaries to the classical Japanese literature ought also to be constructed on this system, because the modern pronunciation of the words in use eight or nine centuries ago would be of no value to a student resident in Japan, while to a student working in Europe it would be a mere source of perplexity. I cannot see any reason for making a difference, with regard to the matter of spelling, between native words and words derived from the Chinese. In the classical prose, and in a great many modern books, words of Chinese origin are often written in kana, with no Chinese characters at the side to indicate their meaning. How is the student to know at sight that a certain combination of kana signs denotes a Japanese or a Chinese word? For instance kiyoshi may be either the Chinese word 居 to dwell, or the root of the Japanese word kiyoshi, pure. But if in the dictionary the Japanese (258) word is to be spelt orthographically, and the Chinese word phonetically, then the reader has to make a guess as to the nationality of the word, and according to the theory of probabilities he must on the average be wrong five times out of ten, which will add fifty per cent to his labour in looking up words. Besides, how are compound words composed of a Japanese and a Chinese element to be written? Surely no one would propose to spell one part phonetically and the other
orthographically. There is another advantage to be derived from spelling the Chinese words according to the orthographic system, supposing that to have been adopted for Japanese words, namely, that the spelling of words of Chinese origin according to the kana, is of great assistance in determining the standard pronunciation of the Chinese language fourteen or fifteen centuries ago, and in a large number of cases it suggests the corresponding pronunciation in the Mandarin dialect, which is the most useful to know of all the modern dialects of Chinese. Thus, all words which are spelt with the final au in Japanese have the final ang or ao in Mandarin; shiyau in Japanese is nearly always shang in that dialect, while ou corresponds to ung. The final wau in Japanese represents wang in Chinese; an corresponds to an and uwan to wan. To trace out the constant relation of the Japanese spelling of Chinese words to the pronunciation in the modern dialects, or even to the Mandarin alone, would be an extensive undertaking, but these few examples are sufficient to show that the kana spelling would afford valuable aid in such an investigation, while the modern Japanese pronunciation, especially that of the eastern metropolis, would be simply misleading. There is no greater difficulty in remembering the proper kana spelling of words derived from the Chinese than in the case of native Japanese words, and few well-educated persons would make a mistake in orthography in the present day, while in the west of Japan the youngest children never fail to distinguish in their pronunciation between kuwatsu and katsu, kuwan and kan, kuwaku and kaku, though in the east the two are confounded.

Another recommendation in its favour, even for every-day purposes, is that it employs no accents over the vowels, and the only type not used by Americans, Dutch, English, French, Germans and Italians is the ạ, which is absolutely necessary in order to prevent a confusion between n and a sound quite different from it, while any phonetic (259) system yet devised requires ọ with a long accent in one word out of five besides long ọ and short u, short i, and perhaps
long a and e. It is found in practice that few persons will take the trouble to put in these accents, and the consequence is that words are not spelt as they are pronounced, and then, if pronounced as they are spelt, are not understood. The commonest case in point is that of names of places which begin with Oho, great, which is pronounced as a long o, and in a phonetic system would be represented by O, with either a long or a circumflex accent over it. Few fonts possess such a type, unless specially ordered, and few persons mark the accent in writing. Thus we find the name of the second city in Japan written Osaka; that of a town near Nagasaki, famous for its connection with the early history of Christianity in Japan, as Omura; that of a province in Kiushiu as Osumi, all of which are in reality long O. Further, we make no distinction between the names of islands and surnames, one of which has the long, the other the short o, and write Oshima and Oyama for both. If we adopt an expedient which has been suggested, and write double o for long o, there is a danger, for English speaking people at least, that this will be taken for oo as in 'good' or 'brood.' A rule of pronunciation must here be prescribed and learnt, but if we are to be at that trouble, we may as well learn a rule with respect to the Japanese spelling, instead of a rule about a new invention of our own. I suggest, therefore, that we should spell according to the kana in these cases, and write Ohosaka, and so forth, as was done by some of the earlier writers upon Japan about twenty years ago. This is only one case out of many in which the orthographic spelling would be preferable to phonetic spelling shorn of its accents. The question between the two systems would probably be settled for ever, if the Japanese nation took to writing in the principal European alphabet instead of in Chinese characters and kana, for foreigners would then have a norm to which they would be compelled to conform; but much as this reform is to be desired in the interests of the Japanese people, there are no signs of its being adopted at present. The tendency of the time, as shown especially in the leading
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子曰：大孝，孝之本也。教之所由生也。德者得也。

孝道者，乃立德之本。基教化所生也。德者得也，

天地之道得则日月星辰不移其位，寒暑雷雨不改

其节。人生之化得则骨肉之亲同其义，百官守其

职。男女之孝得则子孙和顺，长幼相奉，亲成欢

娱，姻族敦睦道之矣。
articles of newspapers, and in officials decrees, notifications and laws, is all the other way. New combinations of Chinese words, which are incomprehensible without the pictorial aid of the ideograph, are sought out daily with great diligence from the most (260) recondite sources, and added to the huge vocabulary which threatens ere long to become unintelligible in great part to all except the omniscient. What I have attempted, however, to do in the preceding pages is to construct the most practical system attainable; which will enable Japanese to be written in Roman characters in such a way as not to confound pronunciation or meaning, and so that the acquisition of far fewer rules and exceptions than are required to be known in order to pronounce English, French or Dutch will render the pronunciation of Japanese a matter of ease.

List of Books consulted or referred to in this paper:

<table>
<thead>
<tr>
<th>言元梯</th>
<th>假字類纂</th>
<th>造古畫點譜</th>
<th>磬家點圖</th>
<th>奇光韻鏡</th>
</tr>
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<tbody>
<tr>
<td>阿拔徑</td>
<td>字晉假名選</td>
<td>好古日録</td>
<td>諸鏡祿中秘傳鈔</td>
<td>韻鏡祿中秘傳鈔</td>
</tr>
<tr>
<td>歌學集腋</td>
<td>音韻假字用例</td>
<td>萬葉用字格</td>
<td>漢呉音圖</td>
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<td>藝韻啓蒙</td>
<td>假字考</td>
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(274)

ASIATIC SOCIETY OF JAPAN.

(a61) A General Meeting of the above Society was held at the Shōhei-kukan, Seidō, Tōkyō, on the 11th February. The Rev. Dr. Syle, President of the Society, occupied the chair.

The Recording Secretary announced the election of the following gentlemen as members of the society:—Lieutt. C. W. Baillie, R.N., Mr. Ernest F. Fenollosa, and Mr. C. J. Tarring.

The Librarian reported the receipt of various periodicals.

Mr. Ernest Satow then read his paper "On the Transliteration of the Japanese Syllabary."

The President, after thanking Mr. Satow for bringing before the society so valuable a paper on so important a subject, referred to the fact that in the transactions of the Asiatic Society of Bengal (which was the mother of all Asiatic Societies), the very first dissertation read by the first president, Sir Wm. Jones, was on the same topic. A system of alphabetic writing for the dialects of India had then been adopted, which, with modifications, had been used by Pickering in the N. American languages, and by Dr. Wells Williams for the Mandarin and Canton pronunciations of Chinese. Professor Max. Müller had also elaborated a scheme—a surprising one, considering the hand from which it came, greatly embarrassed by diacritical marks, and italics and small-capital letters. The Russians had resorted to the Greek letters in order to make a perfect alphabet, neither redundant nor deficient; but the result was not altogether a happy one. In short, the task was an exceedingly difficult one, as those well knew who had attempted to deal with the several provincial dialects of China—even Shanghai and Ningpo, though so near together, requiring a different apparatus, not to speak of Tie-chew, Foochow, Amoy, Canton, and Chefoo. In Japan, attempts had been made by Dr. Hepburn, Sir R. Alcock, Mr. Bransen, Mr. Lyman, and others; now Mr. Satow proposes a scheme which has a marked peculiarity. The President added that he had himself endeavoured, some months ago, to give this subject a practical bearing, by proposing that committees from this Society and from the German Asiatic Society should confer with the authorities of the Mombushō, and endeavour to secure the adoption of some system which might be set forth "with authority;" and now that, in the Mombushō itself, a kind of Council of Education had been established, he thought it a favourable opportunity for effecting something that might prove valuable to both Japanese and foreigners.
Mr. Bramsen asked Mr. Satow to what extent he advocated the adoption of his system;—whether he meant to confine it to dictionaries and grammars of the written language, or to adopt it generally for the spoken language as well.

(262) Mr. Satow replied that he was not prepared to recommend the immediate introduction of the orthographic system for all purposes, though he was aware of the inconveniences of having two systems in use together. It had been suggested by several scholars that there should be a phonetic system for popular use, and a second based on the Japanese spelling, for scientific purposes. There were several objections to every so-called phonetic system that had yet been proposed, the chief of which was that they did not fulfil their purpose. In Japanese the terminal vowel of a word always modifies an initial vowel in a word following it, rules for which must be learnt, for it is impossible to represent this modification phonetically, as it would of course involve spelling a word differently according to the position in which it was found. But yet in compound words it would manifestly be convenient to indicate this change, if we could only determine what words are to be treated as compounds. It is, however, not easy to do this. A great many words which seem to be compounds in the later language, because the action which the two elements of the compound represent are conceived as one, in the older Japanese are certainly distinct words corresponding to distinct actions. All these questions, however, disappear when the orthographic system is used, because no account is taken of them by the original kana spelling.

Mr. Bramsen thought those present hardly realized what the innovations amounted to. We should have to write such a word as shō-shō, a little, seu-seu; mō chō, to-morrow morning, miyauentei. A common syllable like tō is in Japanese written in six different ways, according to the word it is used in, viz.: tōwo, toho, tou, tofū, tuu, and tōfu. The correct way of spelling can only be ascertained by looking up the character in question in a Chinese dictionary, and thus finding its equivalent in kana. If, as Mr. Satow asserted, foreigners have not yet learned to indicate the long vowel in Osaka, Ōyama, what prospect is there of making them write the name of the province of Ōshiu Afasiu or Aushiu (the speaker did not know which of the two it was, not having his Chinese dictionary with him)? The question seemed simply to be this: Is the new system proposed by Mr. Satow to be generally used, for the spoken as well as the written language, or is it to be used exclusively by grammarians and etymologists? In the first case, the system is utterly impracticable, because, as already remarked, the reading of it demands a thorough knowledge of all the combinations of the kana, while the writing of it requires an extensive acquaintance with the Chinese character. If, on the other hand, the system is merely intended for etymological purposes, there seems to be nothing gained at all by transliterat-
ing. If a thorough knowledge of the kana and Chinese characters is required to use the system, why not remain satisfied with the kana as it is? It is surely easier to write down the short Japanese signs, than to use two or three Roman letters for each. Thus it appears that if the proposed system is intended for general adoption, it is useless, while if specially designed for etymological purposes, it is superfluous.

Mr. T. W. Hellyer thought that if Mr. Satow's new system of transliteration were brought into general use, it would exclude the greater portion of the large (263) class of students of the Japanese language, who only have time to acquire sufficient knowledge to enable them to carry on ordinary conversation, from making use of the different books that are published in Romanized Japanese, and from writing Japanese words according to the recognized system. Whilst admitting that some students of this class might take the trouble to learn how to read the new style of transliteration, he felt sure that none could learn how to write in it, as to do so would require an acquaintance with the use of the Chinese dictionary.

Mr. Chamberlain remarked that the subject of transliteration was one as to which agreement seemed hopeless, chiefly, perhaps, owing to a cause to which sufficient attention was rarely paid, viz., that under the single name of "Japanese" are in reality included two distinct languages, differing from one another almost as much as Latin and Italian, viz., the Written Language and the Spoken Language. If, as Mr. Satow had stated, and as was doubtless true, it would be highly inconvenient to adopt one system for transliterating the Written, and another for transliterating the Spoken, Tongue; and if, as seemed likely, no single system would be equally suited to the requirements of both, the question was: which should be sacrificed to the other? To this question he, for one, had no hesitation in replying that, from both the practical and the theoretical point of view, the Written Language has the greatest claims on our attention. It is not as a medium of everyday intercourse, but as the vehicle of a highly interesting literature and as an important member of the Altaic family of tongues that Japanese is to be chiefly valued. For facilitating the study of this literature, and for furthering etymological researches, it is plain that that method of transliteration which preserves the standard native spelling and, thereby, the original pronunciation of words is the one that to the theoretical student must offer the greatest advantages, on the other hand, if the constructor of a system of transliteration looks forward to the day when the Japanese nation will adopt the Roman alphabet, it cannot be doubted that that plan will best meet their necessities which pays chief regard to the Written Language, which is the only one they ever care, or are ever likely to care, to write. As for those Europeans who wish to write Japanese without properly learning it, their number is so small and their claims so slight that the alleged difficulties to them ought not to be
allowed to stand in the way of the adoption of a scientific and consistent system. If they find it too hard to learn, let them write by rule of thumb as heretofore. Very likely they may be understood. But, in reality, the hardships imposed on these persons by the new system are not nearly so great as Mr. Bramsen and Mr. Hellyer suppose. Even our own extremely irregular English orthography is, notwithstanding all that may be said against it, to be learnt by a very moderate effort. The word "scissors," says a high authority, might, following analogy, be spelt in no less than 240 different ways. But would any person with a tincture of education be likely to misspell it? The case, however, against the native spelling of Japanese is not by a very long way so strong as the case against the received mode of spelling English. That with regard to pure Japanese words is this so, (264) seems to be generally acknowledged, and the advocates of the orthographical system rest their chief objections to it on the difficulty of discovering the proper orthography of like-sounding but differently spelt Chinese monosyllables. There is some difficulty, but it is not extreme; for once remember the correct spelling of a very small percentage of the characters, and you will know the spelling of almost all, both pronunciation and spelling being, in the vast majority of cases, determined by what is called the "phonetic" (in Japanese tsukuri).

Mr. Blanchet said he would be very glad to see Mr. Satow's system in use, but he almost despaired of this being effected. He very often had to correct his own teacher in the spelling of words in the kana.

Mr. Soper remarked that for dictionaries and grammars the orthographic system was the more logical. Even for practical purposes the phonetic style was defective, as a stranger could not always, according to it, pronounce correctly.

Mr. Bramsen thought Mr. Chamberlain, being himself an Englishman, greatly underrated the difficulties arising from the habit of writing the same sound in so many ways. He could testify that it would be infinitely easier to a foreigner to acquire a knowledge of English, if, for instance, the long sound of e was always written in one way, instead of being written e, ee, ea, i, ei, and ie. The same feeling seemed to be gaining ground in England itself. Thus, the speaker had seen a "Phonetic Journal," which is widely circulated, written in and advocating a mode of writing in which the same sound is always rendered by the same letters. All over Europe there is a tendency to simplify language by throwing out all superfluous letters; and to advocate exactly an opposite course here, namely, to discard our phonetic system for the sake of an orthographic one like Mr. Satow's, is at least very conservative. If, as Mr. Chamberlain says, the very few people who make a special study of comparing different languages would not take the trouble to learn the 48 kana characters, it was very unlikely that
everybody else, for the sake of using the system, would undertake first to learn "a few hundred" Chinese characters.

Captain James said he would like to know the object to be gained by this system;—whether it was for foreigners learning Japanese, or for the ulterior object of the Japanese themselves learning Roman characters.

Mr. Hellyer mentioned that one point had been lost sight of by Mr. Chamberlain when comparing the difficulty of spelling Japanese correctly with the difficulty that exists in spelling English words, viz., that whereas any tolerably well educated Englishman could tell you at once how to spell any ordinary word, it was not so with the Japanese; for if you asked how a certain word should be spelt in the kana, 20 people out of 20 would have to refer to a dictionary before they would be able to answer positively, unless the word enquired about were a simple one. This fact would render the adoption of the new system impracticable for general purposes.

Mr. Chamberlain stated, in reply to Mr. Hellyer, that for a few cents (26a) could be bought a book,—a very small one,—reference to which would lead him right in the spelling of words of Chinese origin. It is called じ-on kana Ben-ran.

Mr. Hellyer, in answer to this, remarked that; his orthographic system was supposed to be learned without a knowledge of the kana.

Mr. Chamberlain replied that books for learning the transliteration would be made.

Mr. Satow replied that, as far as reading texts transliterated orthographically went, he was inclined to think that the number of rules of pronunciation to be learnt would be very little greater than in the case of any system of phonetic spelling. He even believed that writing orthographically would not be a greater tax on the memory than writing phonetically with the aid of accents. Every one knew that in writing French it was far more difficult to remember the position of the accents than the spelling, and nearly every one would leave them out in consequence, so that the spelling of the word would not represent the sound, and the word when pronounced as it was written would not be understood. It was just as easy to recollect the sequence of letters in Kiyauto, as to recollect Kiot or Kiyoto with a circumflex or a long accent over the first o. In fact, the system which we pursue at present in writing Japanese is very much as if we were to try to teach the French language by dictionaries and phrase-books spelt phonetically; but the effect of such a plan upon the pronunciation of the learner would evidently be extremely injurious. To the observation that even for philological purposes the orthographic system was unnecessary, and therefore useless, because the kana would serve the purpose just as well, he replied that if it were possible to do without transliteration and use kana only in dictionaries and grammars, he would prefer it, but there were practical difficulties in the way. Firstly, an eye which was accustomed to read chiefly in the
Roman alphabet would never attain equal facility with any other; and it is actually easier to read Japanese transliterated than in the native character. Secondly, the kana are usually printed in perpendicular columns, from right to left of the page, which makes them unsuitable for printing along with the Roman alphabet horizontally and from left to right. If kana are printed as our letters are, then in order to read them with fluency, the student must unlearn his habit of reading down the page and acquire a new habit of reading across it, and the advantage of using the original kana would be very small indeed. So that transliteration would in the end be an advantage to the student. In making a dictionary of the written language, he would neglect the nigori marks, which are nearly always omitted in books, especially of the earlier literature, and place ō, ū, ū, and ḭ together,  kä and  ĝ together, and so on, as much trouble would be saved to the student by not having to hunt, it might be, in four places for a single word.

The President expressed a hope that this subject would not fail to appear on another occasion.

The meeting was then adjourned.
A DISCOURSE ON INFINITE VISION, AS ATTAINED TO BY BUDDHA.

TRANSLATED BY CAPT. J. M. JAMES.

(Read March 13th, 1879).

The following is a translation of a discourse on Ten-gan-Hiyau Shiyaku, i.e., Infinite Vision, or the state in which all earthly illusions are dispelled, and to which Buddha alone attained, interspersed with arguments by objectors amongst the congregation. The discourse was delivered at the temple of Shin-Kai-Zhi, at Shinagaha, in the month of August, 1878, by a priest named Sata Kaiseki, of the Itsu-Kau-shiu [i.e., Itsu-Kau sect], an off-shoot of the Zhiyau-do-shiu, and commonly termed Mon-to shiu, founded by Shin-ran Shiyau-nin during the latter part of the 12th century.

Sata Kaiseki is considered a man of note amongst the followers of the Itsu-Kau sect. His sermon consists of a series of arguments intended to produce belief in the intellectual perfection and holy state to which the mind of the great reformer “Buddha” attained, surpassing therein all other mortals, while it also illustrates the various doctrinal paths and stages of discipline which the novice must tread, with a fixed and unerring determination, before he can finally reach the state of Ten-gan (Infinite Vision), when all human cravings and desires shall have forever lost their hold on the senses: then, and not till then, has the inner or spiritual essence arrived at that final state of development which enables it to be absorbed into the Divine Essence.

The text is as follows:—
The subject of the discourse being announced, one of the congregation, a sceptic, stood forth, and thus addressed the priest:—

"Whereas it is invariably the custom of the Buddhist priests, when preaching the doctrines of their creed, to introduce various accounts of strange events said to have happened during the life of Shiyaka Muni (Buddha) and of those of his five hundred disciples, together with graphic descriptions of ōgoku (Hell) and Shiyumisen (the name of a fabulous mountain in India, where the gods are supposed to reside), they have an easy manner of illustrating these assertions by parable, or if that fail in convincing their hearers, of diving at once into the abstruse metaphysical reasoning of Buddhism, which very few, if any, are able to comprehend, the priesthood included. I particularly wish you would give us a lucid explanation of Hell and Shiyumisen (Heaven). In the first place, you say that Hell is buried ten thousand miles, or more, in the bowels of the earth. What human eye, or understanding is able to see, or really believe that such is the case? Again, that Shiyumisen is situated so high above this earth,—several hundreds of thousands of miles,—that no human being, however clear his organs of sight, can even conceive the manner of its existence. Truly, the more we consider and reflect on these subjects, the more are we plunged into, and lost in, the vortex of perplexed thought! All that the priesthood affirms on the subject, of Heaven and Hell is a mere fabrication, an assertion of which any plain man can easily perceive the truth without the aid of an eyeglass. If you explain the visible, which the eye can see and the understanding grasp, well and good. But as to the invisible, who can believe?"

To which the priest, taking up the discussion, made answer:—"In this world there are two great forces constantly at work, viz., Cause and Effect. Everything which takes places, from the least to the greatest, is comprehended in these two forces. To understand these, a man must be educated, and the greater knowledge he possesses the
more readily will all his former doubts be dispelled, and everything become plain to his reason. With the uneducated man the case is the reverse; he is always difficult to convince on any subject, however well his opponent may argue. His reasoning faculties not being developed, he cannot understand arguments, which, indeed, only serve to confuse him the more.

(269) "A person, before he can finally attain to Ten-gan (天眼, Infinite Vision),¹ must first possess the San-Riyau-Chi (三量知, Three Talents of Knowledge), viz:—

"I.—Gen-Riyau-Chi (现量知, the faculty of forming correct conclusions, from things that are presented to our organ of sight).

"II.—Hi-Riyau-Chi (比量知, the faculty of basing our conclusions on inferences). For instance, if you see smoke rising, you naturally conclude that there must be fire to produce the smoke. Again, if you hear men's voices, you feel assured that there must be some men within a short distance of you, even if you cannot now perceive them.

"None amongst you, I presume, will doubt these statements.

"III.—Hi-Riyau-Chi (非量知, the faculty of comprehending the impossible). [Being rather difficult to explain with clearness, the priest leaves this faculty undefined until further on in the discussion.]

"Therefore, if Infinite Vision exists, and sees freely around and beyond endless mountains, thereto comparing our own feeble knowledge which sinks into comparative nothingness beside it, there can be no doubt as to the existence of Hell and Heaven."

Another unbeliever asks the priest for a more particular description of the species of vision which he terms Infinite Vision, predicating of it the power of seeing over the above-mentioned vast distances.

¹Divyatākhakchus, the faculty of comprehending in one instantaneous view or by intuition all beings in all the worlds.—Eitel's Hdbk. of Buddhism.
²See Eitel's Hdbk. art. Abhidjñā.
The priest replied: "If you wish to know and understand the order of sight named Infinite Vision, which is indeed inconceivable by ordinary human beings in their present unenlightened state, I will try, by means of a series of doctrinal proofs, to explain the matter thoroughly to you, and shall thereby probably convince you. We commence with the Go-zhin-dzuu (五神通, Five Spiritual Attributes of Infinite Permeating Power),² viz.:

"I.—Tengan-Tsuu (天眼通, Infinite Vision), that order of vision which perceives the four extremes, viz., Hi (彼), the order which includes all things to infinity; Shiyau (障), the order which distinguishes between, or subdivides, all things to infinity; Sai (細), the order which perceives all things, even such as are too minute for the human eye (270) or intellect to take in, even with the aid of a microscope; Wen order (遠), the order of infinite perception. This order perceives things that no human eye or intellect could grasp in their present unenlightened state, even though they should use a telescope a million times more powerful than any yet invented.

"II.—Ten-Ni-Tsuu (天耳通, the all-hearing ear),² in all the four respects of Hi, Shiyau, Sai, and Wen.

"III.—Ta-Shin-Tsuu (他心通, the knowledge of the innermost thoughts of the hearts of all mankind).⁴

"IV.—Shiyuku-Mei-Tsuu (宿命通, the infinite knowledge of what has transpired through all pre-existing ages).³

"V.—Zhin-Kiyan-Tsuu (神境通, the infinite knowledge of all existing things). [It also includes the infinite powers of Transformation and Transmutation].

"Of these five orders of Zhin-dzuu, that which freely perceives Heaven and Hell is Ten-gan-Tsuu (天眼通, Infinite Vision), which is infinite in all the four respects of Hi, Shiyau, Sai, and Wen. For whatever hindrances may present themselves to our sight or reasoning powers, none

²Divyas' rōtra, the power to hear and to understand every sound, articulate and inarticulate, produced in any universe.—Eitel's Hdbk.
³Paratchitta djjāna.
⁴Pūrvavivasānu Smriti djjāna.
are present to it, permeating, as it does, everywhere and every thing, There can, therefore, be no doubt as to the existence of Hell and Heaven."

Again, one of the congregation addressed the priest, reminding him of the promise he had given not to relate any miraculous occurrences of which he could not bring forward proof positive, and suggesting that he had deviated considerably from this promise and told them incredible stories about innumerable kinds of eyes of which he, for one, could make nothing. So far as he knew, there was but one kind of eye, viz., that common to all living beings possessed of eyesight.

"In ancient times in China," the priest replied, "during the reign of the Emperor Bun, there were doubts entertained amongst the literati of the day as to the existence of a certain plant called Kuwa-Kuwan-Pu, (火浣布, a herb which was said, on being burnt, to possess the virtue of cleansing, without consuming it, any clothing material that might be placed on its fire: hence its name of Kuwa-Kuwan-Pu, lit 'cleansing by fire'). After due deliberation, it was decided that no such plant, or substance, could possibly exist, as such a thing was without all reason; and, to commemorate this decision, the Emperor caused the same to be inscribed on a stone tablet, which was placed outside one of the principal gates of the city, for the edification of all who might pass by and care to read it.

"Some years subsequently, during the reign of the Emperor Mei, son of the former Emperor Bun, an embassy bearing presents from the kingdom of Ko arrived at the capital, and presented, among other things, some specimens of the identical plant, Kuwa-Kuwan-Pu. They were brought as a special rarity, only indigenous to the envoy's country. The Emperor, on learning that a plant possessing such wonderful virtues did really exist, felt deeply humiliated at the ignorance displayed by his late father and his father's ministers, and forthwith issued an edict for the stone tablet to be removed and destroyed. Surely this is an instance of things existing in the world, whose exist-
ence, until actually demonstrated, seems out of all reason. In this world there are many subjects and things within reason, which appear to be without reason, and *vice versa*." [This must be taken as the priest's explanation of the talent of *Hi-Riyau-chi*, i.e., the comprehension of the impossible, which was mentioned earlier in the discourse.]

"Again, I will now try and explain to you the five different kinds of vision as described in the Sutra named *Mu-Riyau-Zhiyu* (無量壽). They are as follows:—*Niku-gan* (肉眼), Mortal Vision; *Ten-gan* (天眼), Infinite Vision; *Hofu-gan* (法眼, The Eye of the Law); *We-gan* (慧眼), Enlightened Vision of a Benevolent Order; *Butsu-gan* (佛眼, Divine Vision).

"For instance, take a man who, by continued study, obtains a knowledge of the laws both moral and civil, and of the different arts and sciences. His intelligence is developed to such an extent that he understands and perceives things and subjects which the ignorant man cannot even imagine: this is the species of vision termed Hofu-gan.

"Again, take the case of a man who is still more enlightened on a still greater number of subjects, and of clear intellectual discernment of a highly benevolent order,—one whom we might term a philosophical (272) philanthropist. His vision (intellectual perception) would be termed We-gan. I could give you a lengthened discourse on this last subject alone, but time will not admit of it on the present occasion. Butsu-gan, likewise, if described thoroughly and clearly, would occupy so much time that I should not be able to proceed with the other numerous subjects connected with this discourse. Wherefore, to economise time, I shall describe Niku-gan (Mortal Vision) only. Of this order of vision, there are eight different kinds, all of them entirely different from Infinite Vision; but if I explain the former thoroughly, and as clearly as I possibly can, you will perhaps be then less inclined to doubt the existence of the latter.

"I.—*Shiyaku-Kuwa-gan* (借光眼), vision produced by the reflection of borrowed light, is that order to which

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6Amitābha.
human vision belongs; for without the rays of the sun, moon, stars, or some artificial light, it is well known that it would be impossible for us to see at all: hence its name as above.

"II.—Ri-Kuwau-gan (離光眼), that class of vision which has a distinct innate power, and needs no assistance from the borrowed lights mentioned in the preceding paragraph. The eyes of the cat, dog, rat, cow, and horse are of this order. In confirmation of which assertion, I may remind you of the fact, familiar to every child, of the dexterity exhibited by cats in catching rats in the dark.

"III.—Nitsu-Kuwau-gan (日光眼), that order of vision which is obtained solely through the action of the light of the sun. The eyes of pigeons, sparrows and many others of the bird tribe are of this class, and their powers of sight are consequently limited to the day-time. Cases have been known of human beings being marked by the like characteristic. They must be supposed to possess eyes whose structure resembles that of the above-mentioned birds; at least, so the fact is accounted for, and hence the term Tori-me (鳥眼, bird-eye) which is applied to such individuals."

"IV.—Ki-kuwau-gan (忌光眼), that order of vision which dreads or (273) shuns the overpowering rays of the sun, such as the vision of owls, bats, and allied species. The eyes of these creatures, at least to all outward appearance, do not differ in any marked degree from those of other birds, yet, during the day-time, their powers of vision are simply overcome, and rendered powerless by the rays of the sun.

"V.—Wen-sai-gan (遠細眼), that order of vision which is possessed by the eagle and other birds of that tribe, who subsist and thrive by preying on weaker species. Thus the eagle or hawk, when soaring high up in the air on the alert

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7I have been informed, on reliable authority, that many instances have been known in Japan of people who lost all powers of vision on the approach of night, so much so that even the light of a lamp or candle would make very little impression for the better on their organs of sight.
for whatever prey may come first, can, from a great height or distance, distinctly see the most minute objects, and will rarely make a mistake by pouncing on anything other than his real prey. The eagle, if soaring up aloft, can distinctly see the hunter as he sets the bait, thinking to entrap him, even though the hunter should be ten miles distant. Hence the term Wen-sai-gan ('distant and minute sight'). Truly, the eyesight these birds possess is wonderful in comparison with our feeble powers of vision.

"VI.—Mu-Suwi-gan (無睡眼),—sleepless vision,—that order of sight which is possessed by the fish tribe. The eye of the fish never closes, nor does it require rest; whereas human beings, when asleep, naturally close their eyes, thus giving rest to those organs, repose to the mind, and nourishment to the body; but the eye of the fish tribe never rests for one moment. This order differs entirely from those which I have previously described;—does it not? In ancient times in China,—so tradition says,—when padlocks were first invented and came into use, the shape adopted was that of the fish's eye, emblematical of that which was supposed never to rest or sleep, but to be ever on the alert. Locks of this shape were believed to have the virtue of keeping robbers away, or at any rate to be ever on the watch for their approach. 2

"VII.—Sen-yeu-gan (穿妖眼), that order of vision which is possessed by dogs and monkeys, and has the power of seeing fairies, hobgoblins, and elves in their true form, so that its possessor cannot in any way be bewitched, or led astray by such supernatural beings. Human beings do not possess this faculty of supernatural vision, and, (274) consequently, are often bewitched, beguiled, and led astray by foxes and raccoon-faced dogs, who temporarily put on the form of some object which entrances the senses of the individual, and causes him or her to do whatever best pleases the beguiler. To the class of creatures thus endowed

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2 At the present day, throughout most parts of China, there is scarcely a native junk or boat of any kind which does not carry,—one on either bow,—two cavings of the fish's eye, as the emblem of watchfulness.
belongs the *Suwiko* (水虎, water-tiger), commonly called *Kaha-Taraau*, an animal which inhabits the beds of rivers, and is commonly on the alert for his prey during the summer time, when children go out bathing, so that many a child has lost its life through the attacks of this monster. Monkeys are supposed to possess the faculty of seeing this animal in its true form, and of being able to catch and kill it. Cases have been reported of the *Suwiko* having been seen by human beings; but this is evidently an error, caused by an overheated imagination.

"VIII.—*Zhi-hen-gau* (時變眼, periodically changing vision), that order of vision which changes at certain specified times, as the vision of the cat, which changes at noon and at midnight.

"I have now fully explained to you the eight different orders of sight variously possessed by human beings and by the animal tribes generally, each order differing considerably from the others. It, therefore, should neither astonish nor perplex you if I tell you of the existence of Infinite Vision."

Another unbeliever now addressed the priest, and:—"I can almost believe that other orders of vision than that which human beings are possessed of, do exist. But even allowing such to be the case, I doubt their possessors being able to see through a paper window. How, then, do you account for that order of sight which sees things at an infinite distance? There must be some limit, probably not exceeding twenty miles. I, therefore take the liberty to doubt the existence of the extraordinary powers of what you call Infinite Vision, which can, you tell us, see all things plainly at the distance of a million miles."

The priest answered: "That you should doubt this at first, does not surprise me much; for when we call to mind the different orders of vision of which most people have any knowledge, there seems no evident reason why Infinite Vision should exist. But when we reflect more deeply, and think of all those wonderful and mysterious occurrences which are daily taking place in nature (always allowing that nothing happens of itself, but that there must be a cause for
all things); then (275) there should be very little room left in your mind to doubt the existence of Infinite Vision in each degree of Hi, Shiyau, Sai, and Wen. Furthermore, I will show that Shiyaka Muni ('Buddha') alone attained to Infinite Vision, and will prove to you the same by comparisons drawn from those creatures who are known to possess a certain inferior order of Infinite Vision."

One of the congregation hereupon enquiring who might they be who are known to possess a certain inferior order of Infinite Vision,—

The priest replied: "It is such as have the power of bewitching, or otherwise deceiving human beings, namely, the fox, racoon-faced dog, ourang-outang, and ten-gu (a hobgoblin represented in paintings and images as a monster of human shape, with an extraordinarily long protruding nose). These creatures are endowed with an inferior grade of the faculty of Infinite Vision, and their sight consequently extends for hundreds and thousands of miles in all directions, from whatever place they may be standing in. In proof of this, I will relate to you a remarkable case which is known to have actually occurred:—

"A certain man, a native of Tsugaru (a province in the northern part of Japan), whilst residing in Hiuga (a province in the extreme south-west of the empire), one day when walking amongst the hills chanced to meet a fox, which he tried to kill or capture. The animal got badly wounded, but managed to escape. Its feelings may be easily imagined. So annoyed and disgusted was it at the treatment it had received, that it determined, by way of retaliation, to bewitch the man of Tsugaru. It began by completely entrancing his senses by suddenly showing to him the exact scenery of his own province, and the ceremony of his own marriage; next, it made him see the houses, the style of head-dress there in vogue, the different crests there used and with which the man was familiar, the manner of the entertainment, the face of the bride, the behaviour of the middle-man, the songs peculiar to the place, the dialect,—in fact every thing in the way in which it would have presented itself to him had he
been in Tsugaru, even to the extent of going through the
ceremony that takes place at a wedding. Thus, for the time
being, the man was perfectly bewitched and deluded, and
believed what he saw to be a reality. If the fox had pre-
sented to his sense of sight scenery other than that of
Tsugaru, it would not have had the effect of deluding him.
(276) But its evincing this knowledge of the man’s native
place, and its being able to show him things as they really
existed in Tsugaru, proves the fox to have possessed the
faculty of seeing over, and around, in all directions, that is,
to have possessed Infinite Vision. And to judge from its
hearing the voices of the people of Tsugaru, their singing,
laughter, and so on, it must have possessed Ten-Ni-Tsuu
(the all-hearing ear); from its knowledge of the feelings and
desires of the guests at the wedding, we must infer it to
have possessed Ta-Shin-Tsuu (the knowledge of the inner-
most thoughts of others). From its knowledge of the mar-
rriage ceremony as handed down from ancient times, we per-
ceive its possession of Shiyuku-Mei-Tsuu (the knowledge of
things as existing in previous ages); whilst the fact of its
being in Hiuga, and thence clearly seeing the scenery of Tsu-
garu, which is over five hundred Japanese miles distant, pro-
ves also its possession of Zhin-Kiyau-Tsuu (the knowledge
of all existing things, also the powers of transformation and
transmutation). And even allowing the fox, racoon-faced
dog, ourang-outang, and hobgoblin to be endowed with an
instinctive vision of a different order from that of human
beings, it would have been altogether impossible for this fox
to have known all the circumstances I have just related,
unless it had possessed Ten-gan, Ten-ni, Ta-shin, Shiyuku-
mei and Zhin-Kiyau-Tsuu. Foxes inhabiting countries
other than India, China, and Japan are not thus endowed,
and, consequently, have not the power of bewitching people.
Many persons doubt the possession of that faculty by the
foxes of the three above-mentioned countries. But the
diversity is to be accounted for by the different climatic
influences acting on the same species. For instance, take
the difference of instinct between the dogs of our country
and those from European countries: what sagacity and what stupidity within the limits of the same species!

"If, then, you allow that the fox and racoon-faced dog are endowed with the visual powers I have described, surely you can no longer doubt that Buddha possessed Infinite Vision, and that of the purest order."

One of the audience here interposed: "I admit your statement with regard to the power possessed by the fox and racoon-faced dog of seeing through, over, and around in all directions for hundreds and thousand of miles. But I find it hard to believe that Shiyaka Muni (Buddha) attained to Infinite Vision; for he was but an ordinary mortal,—the son of an Indian prince,—not a supernatural being. If he (277) possessed pure Infinite Vision, it is put natural to suppose that we should have been similarly endowed; but as this is not the case, there is reason to doubt that he alone was so."

The priest replied: "A hundred years ago, if there had been any man in this country who had known the art of photography or of electric telegraphy, and had publicly proclaimed his knowledge to the world, no doubt but that he would have forfeited his life for his temerity. But in these days, when people have become enlightened, we know that photography and electric telegraphy do really exist, and have ample proofs of their great use to mankind; and, after having once learnt their origin, and the theory on which they are based, a child even would find no great mystery in the whole matter. It is the same with Infinite Vision. After thoroughly investigating and understanding the origin and reason of it in its true sense, all doubts and suspicions are dispelled. Now, there is no reason to doubt the superiority of the understanding and intellectual powers generally of human beings as compared with those of all other animals. If, therefore, we admit that the fox and racoon-faced dog possess Infinite Vision, but deny that faculty to human beings, then we assert the superiority of those creatures to mankind. But knowing, as we do, that men are superior in intellect and in reasoning powers to
all other animals, it follows as a natural consequence that every human being must possess the seed of Infinite Vision. Nevertheless, should it remain in its latent state, without ever being developed, or be at least only partially so, then will the mind of the individual be liable to be taken possession of by doubt, and to be carried away by erroneous decisions. On the other hand, the more this precious faculty becomes developed, the more easily will the film which covers the retina of the spiritual eye be removed, and all doubts and fears be dispelled from our reason. A Buddhist work named Gu-Shiya-Ron makes mention of four different orders of Infinite Vision, viz., Cultivated Infinite Vision, of which there are two species, and Instinctive Infinite Vision, also including two different species. I remark on them as follows:—

"I.—Natural or Instinctive Infinite Vision is that order which is characteristic of the fox, racoon-faced dog, ourang-outang, and hobgoblin.

"II.—Cultivated Infinite Vision is that order with which human beings are endowed, and which is developed to a greater or less (278) extent, according to the original talent of the individual, and to the degree of earnestness with which he pursues its cultivation. This last order of Infinite Vision is sub-divided into two classes, viz., Sen-Zhiyutsu (仙術, Magic) and Zen-Zhiyau (禪定, Tranquil Abstraction). The former was peculiar to China, where it was much practised in ancient times. During the periods of Riyau and Zhin it was more or less discontinued, and since that time the art has gradually been lost. For a human being to obtain the power of magic, it is necessary that he should cleanse his heart from all worldly lusts and desires, and live an ascetic life in some remote mountain district, where, removed from all human society, existing for a lengthened time on the simplest diet and breathing the pure mountain air, his whole material and spiritual system is finally purified, and so changed from that of ordinary human beings that he is enabled to fly through the air at will, and to accomplish and perceive things which are beyond
the ken of ordinary mortals. These, in their ignorance, would attribute such powers to the interference of demons, or to some other supernatural ageney. But as every human being possesses the germ of Infinite Vision, this is simply to be regarded as its development effected by leading a simple and pure life.

"As for Tranquil Abstraction,—the second species of Cultivated Infinite Vision, it is gradually developed by following various devotional and disciplinary paths. To become proficient in it, requires unceasing effort on the part of the devotee to overcome the Roku-Bon-Nau (六烦恼, six principal sins and causes of suffering which beset the path of mankind through life), viz., Don-Yoku (貪欲, avarice, covetousness); Shin-ni (瞋恚, anger, indignation, angry passions); Gu-chi (愚蔽, ignorance, silliness); Utagahi (疑, doubt, suspicion); Man-shin (慢心, pride, arrogance, uncharitableness); Aku-Gen (惡見, sins of the eye, sinful lust, sensual lust). These six disturbing influences are constantly agitating the tranquility of the heart; and until these are subdued, the mind cannot reach that state which is necessary for the future attainment of Infinite Vision. The heart of ordinary mortals is like unto a lake whose surface, through the winds blowing from one quarter and another, is constantly kept in agitation. Anything which may be floating thereon is irresistibly wafted to and fro according to the influence and direction of the wind;—whereas the heart of one who had become proficient in Tranquil Abstraction would resemble that (279) of a smooth and peaceful lake, whose surface was freed from all disturbing influences, illustrative of what the heart of mankind at large would be if freed from these six besetting influences, the causes of all sorrow and misconception. Included under Tranquil Abstraction are several branches or disciplinary paths which must be passed through before attaining to it in its perfect state. Shi-Kuwan (止觀, fixed manifestation) is one of these, and includes the Go-Jiyau-Shin-Kuwan (五修心觀, five different methods by which the light of reason is made manifest and fixed in the heart). By way of illustrating these different methods, or paths,
I shall take first that of *Su-Soku-Kuwan* (數息觀, counting the number of breath inspirations), in which the believer concentrates his mind on his inspirations of breath, to the annihilation of all other thoughts, while reclining on the couch of Tranquil Abstraction. By perseverance in this path, the six besetting evil influences gradually lose their hold on the senses, and soon the light or splendour of Tranquillized Manifestation is diffused throughout the heart, purifying it and causing the light of reason to shine within. The heart then resembles the surface of a lake, where, after the winds and waves have subsided, a perfect calm reigns, showing the water in its natural, peaceful, and uninfluenced condition.

"Another path is that of *Shin-Itsu-Kiian-Sei* (心一境性, the natural impulse of the heart to remain in one tranquil state). The next path is termed *Kuwan-Miyau-Zhiyau* (光明定, Tranquil Beatitude). When this state is arrived at, all the desires and lusts of the world forever lose their hold on the senses.

"The next and final path which leads to perfected Tranquil Abstraction, in which is also included Infinite Vision, is *Kuwan-Sau* (光相, Reciprocal Splendour), by whose means true enlightenment of the mind or heart becomes apparent, thus showing that the seed of Infinite Vision, with which all human beings are endowed in a greater or less degree, is nearly developed. This seed, from being constantly moistened and nourished by the vivifying influences of Tranquil Abstraction in its various phases, now assumes the form of a matured tree by the attainment of Infinite Vision."

At this point one of the congregation addressed the priest, saying, "I understand, then, that Infinite Vision is only to be attained through the light of the manifestation of tranquillized splendour?"

(280) The priest, in reply, said: "The human eye sees objects by borrowing the light of the sun, moon, or some artificial light. In like manner, the different paths though which the novice must tread with unswerving devotion,
in his pursuit of Infinite Vision, grow gradually brighter by the rays of manifested splendor falling with ever-increasing power on the inward spark of reason the further he proceeds, until it culminates in Tranquil Abstraction in its most perfect form, as a light of the purest and most overwhelming brilliancy, the light, namely, of Infinite Vision."

"Does every body then," said an interlocuter, "possess the inward seed of Infinite Vision?"

"Yes," replied the preacher, "every human being possesses this seed; but whether it with develope itself or not, depends on its inward growth, and this inward growth will be accelerated or retarded according to the degree of proficiency to which the novice attains in the different paths which lead to perfected Tranquil Abstraction. To admit that the fox, racoon-faced dog, hobgoblin and ourang-outang are instinctively possessed of the faculty of Infinite Vision, while we at the same time assume that human beings are endowed with an intellect of a much higher order, is of itself a sufficient demonstration of the possession by mankind of the seed of Infinite Vision, and that of a superior order, viz., the order attained to through the various paths leading to Tranquil Abstraction. Infinite Vision is, therefore, of two orders,—Instinctive Infinite Vision, the faculty characteristic of the animals before-mentioned and which is limited to a certain extent, for they can only see and perceive things that are within a radius of one thousand miles, and not beyond, and Cultivated Infinite Vision, which is gradually developed by the inward growth of the seed, through the different phases leading to tranquil abstraction, and can see clearly for ten thousand miles. Even in this order, however, there are different classes, some developed to a greater degree of perfection than others. To some, 100,000 miles, to others 1,000,000 miles or a portion of paradise may be visible, or the San-Zen-Gai (三千界, three thousand worlds, or spheres) or the Žifu-Pau-Kai (四方界, all surrounding worlds, or worlds on all sides). Truly, great are the differences of
endowment. There are worlds other than our world, and others besides these, innumerable; but all are manifest to Infinite Vision. The most superior order of Infinite Vision to which ever mortal attained, was that which was reached by Buddha—Shiyaka Muni—alone. He, from his youth upward, saw that life presented no tangible realities. All was false and illusive; so, relinquishing all vice and all so called earthly pleasures, he devoted himself with unswerving effort to the attainment of true knowledge; and, by steadfastly pursuing the various paths leading to Tranquil Abstraction, finally attained to Infinite Vision, i.e., to Omniscience.
ASIAN SOCIETY OF JAPAN.

A General Meeting of the above Society was held at the Shōheikuwan, Seidō, Tōkiyō, on Tuesday, 11th March. The Rev. Dr. Syle, President of the Society, occupied the chair.

The minutes of the preceding general meeting were read and approved.

The Recording Secretary announced the election of Mr. E. Knipping, Dr. Wagener, and Dr. George A. Leland, as members of the Society, also of Mr. J. L. Hodges as Recording Secretary for Yokohama, and of Mr. J. Bisset as a Member of Council for Yokohama.

In the absence of the Librarian, Mr. Dixon announced the receipt of the following:—Transactions of the German Asiatic Society of Japan, Parts 15 and 16, 1878; American Oriental Society, Report of Proceedings, May, 1878; Bulletin de la Société de Géographie, September 1878: Celestial Empire, Vol. XII., Nos. 5, 6, 7 and 8, 1879; Index to Japan Mail and Times for 1878; Transactions of the Russian Geographical Society; Chinese Recorder, September, October, 1878; Austrian Monthly Sheet for the Orient, 15th January, 1879; Proceedings of the Royal Geographical Society for January, 1879; Dictionary of English and Japanese, by Messrs. Satow and Ishibaishi, Second Edition, presented to the Society by Mr. Satow; Report on the Second Year's Progress of the Survey of the Oil Lands of Japan, by Mr. B. S. Lyman, Presented by General Ōtori.

Professor Atkinson asked leave to present to the Society some further analyses of the Tōkiyō drinking waters. At the reading of his former paper on that subject, he regretted that there had been no time to examine more thoroughly the surface waters from a greater number of places. Since that time a number of new analyses of water taken from a great many different points of the city had been made, and a glance at the experimental numbers would show that they varied very much, for while some would be seen to be unfit for drinking purposes, others were of very good quality. He also wished to present an analysis of the water of the hot spring of Yumoto, at the foot of the Hakone pass, made by Mr. Kuhara, Assistant in the Laboratory of the Tōkiyō Daigaku. The remarkable point about this water was the fact that it contained traces of boric acid, probably in the form of borax. Dr. Martin had previously published analyses of the water of various points of the Kiga valley, as far down as Tōnosawa, but had not mentioned the presence of boric acid, nor had Dr. Geerts in his recently published compilation, "Les produits de la Nature Japonaise et Chinoise," given any proofs
of its existence in the Mineral Waters of Japan. Captain Descharmes, in describing the waters of Kusatsu, mentioned the existence of borax, (283) but as his information was entirely derived from Japanese accounts, its existence could not be accepted as proved without further confirmation. It would require many careful experiments before it could be said that sufficient boracic acid existed in this water to be a source of revenue to the country, but it would be worth while to make a careful chemical examination of the many hot springs, solfataras and fumaroles, which exist in this country. The temperature of the spring was found to be 46.1 degrees C., whereas Dr. Martin found it to be only 41 degrees C.

The President expressed a hope that what Mr. Atkinson had done in analysis would help this great city to get a supply of pure water, the first necessity of health.

Captain J. M. James read his translation of a Buddhist sermon of the present day, entitled "A Discourse on Infinite Vision as attained to by Buddha."

The President, after thanking Captain James for presenting the Society with his able translation on a subject so novel and interesting, referred to the strangeness of the fact that the discourse began with the statement of an objection, to the extreme courtesy which was displayed throughout it, and to the strong resemblance of its theories to clairvoyance, which was also found in China. The metaphysical acuteness which it exhibited was quite remarkable. The combination in Buddhism of the devotional and metaphysical elements was striking.

Mr. Satow congratulated the Society upon the fact of the subject of Japanese Buddhism having been taken up by one of its members. It was well known that new Buddhist sects had been founded in Japan, and it would be highly interesting if some one would make a comparison between the religion as it existed in Japan and China. About certain of the original sects, more was to be learnt in Japan than in China itself, in consequence of their having died out in the latter country. The whole subject of Buddhism was so vast, and the quantity of books that must be studied so great, that a single individual could scarcely hope to master the whole. It would be a good plan for students to divide the sects among them, and for each to work out one or two thoroughly. The history of Buddhism in Japan would also be of great interest, as well as the mythical account of its introduction.

Captain James was quite of Mr. Satow's opinion. If some of the students of Japanese took up some subject such as Buddhism and Shintōism, and each took a sect, much valuable information might be brought to light.

The President asked what were the characteristic differences of this Monte sect.

Captain James answered that their chief object of adoration was
Amida Buddha, the deification of a principle, and corresponding to our Almighty.

The Rev. Mr. Wright asked if the followers of the Nichiren sect did not worship the image of Nichiren.

Capt. James replied that he was not aware that they worshipped the image of Nichiren (which is generally placed above and overlooking the altar), but that on certain occasions when it was unveiled the congregation would make their obeisance to it, and at the same time repeat their doctrinal prayer, as an act not of worship but of reverence.

(284) In answer to further questions, Captain James stated that Nichiren was born at Kominato, in Bōshū, A.D. 1222, and died at the temple of Ikekami, in the province of Musashi, A.D. 1282, aged 60 years. Also with regard to the idols worshipped by the different sects, Capt. James enumerated the following:—

1st.—Ten-dai-shū use as their Honzon (or principal object of adoration) the image of Shaka-muni, Buddha.


3rd.—Jōdoshū, 4th.—Ikkō-shū, 5th.—Jisshū, 6th.—The Nichi-ten Hokke-shū use no particular idol, their chief object of adoration being contained in their doctrinal law.

These three sects are termed Nembutsu shū, and use the idol of Amida Butsu, or the Supreme Being.

He then said, that as Buddhism was such an interesting and inexhaustible subject for study, it would be desirable, in order to get a clear understanding of the doctrines of the different sects in Japan, for missionaries to make a special study of the different sects of Buddhism and their doctrines, making this one of their chief means for the study of the Japanese language and literature. This knowledge so acquired and the insight thereby attained into the thoughts and methods of reasoning of the mass of the Japanese population, could not fail to increase their usefulness in promoting the object for which they had come to this country. Without such knowledge how could it be possible for them to argue with and combat the deeply rooted opinions of the largest religion in the world, numbering 500,000,000 souls, and one of the oldest established?
WASŌBYŌE,¹ THE JAPANESE GULLIVER.

By B. H. Chamberlain, Esq.

(Read April 10th, 1879.)

In this reprint the orthography of Japanese names originally adopted has been exchanged for the easier phonetic spelling sanctioned by the Romanization Society and by Dr. Hepburn’s Dictionary.

A short time ago, while turning over some dusty volumes in an old book-stall here in Yedo, I lighted, in one of the dustiest of them, on a picture of a little man seated on a table, and being gazed at by a company of giants,—apparently some Gulliver in Brobdingnag. This easy guess was proved by a reference to the letter-press to be correct. Wasōbyōe, the hero of the book, makes, like our English Gulliver, a number of journeys to lands unvisited by other travellers before or since. He does not find any Lilliput, it is true, nor any Laputa. But he goes to the Land of Perennial Youth and Life, to the Land of Endless Plenty, to the Land of Shams, to the Land of Followers of the Antique, to the Land of Paradoxes, and, finally, to the Land of the Giants,—to Brobdingnag. Though in four volumes, the work is quite a short one, Japanese volumes often consisting, as the members of this Society well know, of but a few pages. I have, nevertheless, not found it convenient to translate the whole. Some of the journeys,—especially that to the Land of the Antique,—would be hard to make generally intelligible, even with an array of notes and comments quite disproportionate

¹和莊兵衛. 和 standing for Japan, and 莽 for the name of the philosopher Chwang Tsze, while the two remaining characters form, as it were, a termination indicating a name, the author indicates by his title the nature of the work,—a Japanese adaptation of Chwang Tsze's method of teaching by parable and simile.
to the merits of the work in question. The easiest, as well as the most pleasing, sections are the first and the last,—the journeys, viz., to the Land of Perennial Life and to the Land of the Giants,—a translation of which, therefore, forms the following paper. Nothing has been omitted but a few lines in the middle of the first (286) section; and the version is as literal as the divergent genius of the English and Japanese idioms will permit. The original, which bears date 1774, has no particular importance or celebrity, beyond that of having suggested to the well-known novelist Bakin his work of a somewhat similar nature, styled (in imitation of the present one) "Musō-byōe." But both treatment and tendency are so peculiarly Japanese, that, as a specimen of the modern didactic literature, it has seemed to me that the members of this Society might like to while away an hour in the company of this obscure Oriental Swift, who, if not endowed with the graphic humour of his western prototype, is at least free from that prototype's disgusting coarseness.

The text is as follows:

THE LAND OF PERENNIAL LIFE.¹

While the world was at peace and not a ripple stirred within the Four Seas, there lived at Nagasaki, in the province of Hizen, one Shikaiya Wasōbyōe. From father to son, the family had carried on a brisk trade in foreign merchandise, and Wasōbyōe's household of ten persons passed their days in all prosperity. Like the rest of the Nagasaki folk, he was a fellow who had his wits about him, could interlard his Japanese with ching,

¹不死園. The idea of such a land appears to have been introduced into China with Buddhism, and Japan would seem to have been at one time looked upon as the land in question. Whether the name of Fujiyama (sometimes written 不死山) gave rise to the notion, or whether the notion gave rise to the name, it would be hard to tell. The latter part of the Take-tori Mono-gatari, a celebrated Japanese classic of the 10th century, turns upon this reading of the name of the great volcano.
chang, chong when conversing with Chinamen and Hollanders, and was quite aware of his dignity as the head of a household of more than eight souls. On reaching his forty-eighth year, he handed over the business to his only son Shūzō, and built himself a little retreat a couple of hundred yards from the family dwelling, where he lived at ease, with a lad called Chōmatsu to cook his rice for him. Having always been addicted to (287) angling, he would go out day after day and night after night on to the beach and fish; and, later on, having learnt to manage a boat properly, he would leave Chōmatsu to take care of the house, and go out in the boat by himself after the only sport he had any love for, holding an oar in one hand and his rod in the other, with a face on him like Taikōbō, only with a crooked hook to his line instead of a straight one.

Well! it was when the eighth moon was at the full, that Wasōbyōe, bethinking himself that, as this was the night of the year he was likely to see visitors come pouring in with their most genteel airs, determined to escape the nuisance, and set off alone before dark in his little craft. So, as he floated hither and thither, swiftly from beyond the eastern billows, which she spanned like a golden bridge, uprose the oft-sung moon, fresh-washed in the salt sea waves. Beautiful as a picture, glowed the breakers in the offing and the pine-trees upon the strand, while the moon-

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3 Households—were ancienly of three classes,—those consisting of three, those of five, and those of eight or more members. The latter class naturally received a greater extent of ground at the annual re-distribution of fields. This system has long been in abeyance, but the terms deriving from it still subsist.

4 長松, the common book-name for servant lads.

5 大名望, a celebrated tactician of the Shū (周) dynasty in China. He took to fishing in his old age merely as a means of avoiding contact with the world, and used a straight piece of metal as a hook.

6 The eighth moon, when at the full, is supposed to far surpass in beauty all the other moons of the year. It answers to our harvest-mono. This full-moon was made the occasion of numerous elegant and literary assemblies, where verses were composed and other refined pleasures indulged in.
beams glided from twig to twig like to an hare? coursing upon the waves,—a scene which (since we need not make good our words!) was worth a thousand, was worth two thousand pieces of gold.² So thought Wasöbyöe, as he hummed to himself the limes—

"All the delights of the four seasons are summed up in the moon:
"From of old the bird sings but of the autumn,"⁹

and, as he hummed them, did not notice how far he was drifting from the shore. He had rowed out to sea about a league, carelessly angling and moon-gazing, when a bank of clouds, black enough, one would imagine, (288) for a vampire¹⁰ to choose for his chariot, loomed up from behind the western mountain-ridge, while the sighing gust foretold the coming rain. So, saying to himself, "No loitering in this fickle autumn weather!"¹¹ Wasöbyöe set to work again with the oars to make the best of his way home. But heavier and heavier fell the rain; a gust ripped the sail in two and broke the mast, and away and away, far out to sea, sped the little craft, as if borne on fleetest wings. Fighting for dear life, and utterly bewildered, Wasöbyöe rowed on, now to the right hand and now to the left. But, meanwhile, the moon had withdrawn behind the clouds. No landmark was anywhere to be seen amid the inky darkness. East and West had become indistinguishable, and the poor man knew not in what direction to endeavour

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7 The Chinese and Japanese place a hare in the moon instead of our tradition "man."

8 A recollection of the lines by the Chinese poet 東 破, saying:

春宵一刻值千金
花有清香月有影

9 Lines by the Chinese poet 杜 子.

10 I know not how to render the original なぬ (鴨). It is said to be a creature possessing the head of a monkey, the body of a racoon-faced dog, the tail of a serpent, and the limbs of a tiger, while its name is taken from its cry "なぬ-え." There is a celebrated story of the destruction by Gen Sammi Yorimasa of a なぬ which attacked the person of the Mikado Konoye-In. [See the No entitled "Nune," and the "Heike Mono-gatarī." ]

11 A Japanese proverb says: "There are two fickle things: the heart of man, and the autumn sky."
to urge on his boat. His arms were exhausted; his strength had given in; and, seeing that there was nothing more to be done, he nerved himself to face the future with the knowledge that, even should he escape with his life, it would only be in order to be cast on some unknown island. He therefore crossed his legs to await the will of Heaven, baled out the water from time to time, and sat watching for the break of day, leaving his future in the hands of fate and of the winds. But louder and louder blew the tempest, while the boat sped on towards shores unknown,—was it for hundreds of leagues? was it for thousands of leagues? was he awake, or was he dreaming?

Meanwhile, daylight reappeared, and a reddish tint overspread what seemed to be the East. But there came not the least pause in the violence of the wind and rain. The sea was a mass of white foaming waves like mountains of snow. Whither he was going he could not tell, and the sun set upon his bewilderment. In this manner did three days and three nights pass by, after which time the rain and wind abated, and the morning sun rose up in ruddy splendour. But Waso byōe could see that he was far away from the land of Japan. The appearance (289) of the ocean and the fashion of the sky were altered, nor was there anywhere to be discovered the trace of an island or of a mountain. So on he drifted at the mercy of the winds and waves, putting out his hook, from time to time, to catch a fish, which he would devour raw after the manner of the Abbot Shunkwan.11

Thus he dwelt upon the ocean for about the space of three months, but without being able to count either the days or the number of myriads of leagues that he had drifted. And, as he floated on, he came to what was evidently the Sea of Mud, of which he had heard tell, where there blows no wind and rise no waves, and where no fish

11 See the Nō entitled "Shunkwan" (俊寛), and the "Heike Monogatari." Shunkwan, who was abbot of the monastery of Hōshōji in Kyoto, was implicated in an intrigue against the powerful house of Taira, and banished to the islet of Kikwaigashima in the year 1177.
would take his hook. In this manner, ten days passed by, during which his strength oozed away, and he lay on his back at the bottom of the boat awaiting his latter end, when, just as the sound of his prayers to Buddha was growing faint, and it seemed as if any moment might be the last, lo! as in a dream, there came wafted to his nostrils a perfumed Eastern breeze, which he no sooner felt, than his spirits revived, and he was himself once more. "Strange!" thought he, and, raising his head, glanced round the horizon, where there stood forth in the far distance a mighty island, the breeze from which, every time it touched him, gave him sensations of indescribable delight. Full of joy, therefore, he determined to make for this island; his hands, as they managed the oars, recovered a degree of strength that had not been theirs for the last twenty days; the nearer he drew to the land, the higher rose his spirits; his voice began to keep time with the oars; and, after about half a day's exertion, he reached the land in safety.

His first care, on stepping on shore, was to look around him for the means of satisfying his long pent-up craving for a drink of water; and he soon found a spring of an unknown kind of water, fragrant exceedingly, and red in color. Not without hesitation did he take some of it up in the palm of his hand. But one draught sufficed to show him how sweet it tasted; nor had it scarcely been quaffed down before it interpenetrated every vital part, giving strength and firmness to the whole frame, satisfying in a moment the pangs of hunger that had been (290) accumulating for so many months, and making him feel more robust than he had ever felt before. "What god," thought he, "can have come to my rescue? Is this China, or is it Japan, or is it India? I must make enquiries." So he climbed up a great embankment, and, looking down on the scene that opened out beneath him, saw that both the vegetation, the fashion of the dwelling-houses, and the general aspect of the country were altogether different to those of his native land,—and not only different, but vastly more beautiful. And, as he gazed around him in bewilderment, a crowd of
men and women came pouring out of the town and soon surrounded him, viewing him with evident surprise, and talking to each other in an unknown tongue. No! this could never be Japan! neither were the people like those of Yezo or of Loochoo. Surely it must be either Nanking or Peking that was the abode of all this splendour. So, as he had always been proud of his fluency in Chinese, he put on his most genteel tone of voice, and began questioning the natives in, *ching, chang, chong*. But their faces plainly showed that not a word did they comprehend; and all the while the crowd, like crows gathered round an owl, continued to jabber away in a language that was neither Chinese, nor Dutch, nor anything else of which Wasobyoe could make out one syllable. He was, therefore, in despair and at his wit's end. But just then five or six persons, apparently officials, came forth, and, after holding counsel together, seemed to send to fetch some one. Only a short time elapsed before there came, pushing aside the corn was man of about forty years of age, with his head unshaven [after the ancient Chinese fashion], who, making his way to where Wasobyoe stood, thus addressed him in the Chinese tongue:

“What is your worship’s country, and what fate has driven you to these shores?”

To which Wasobyoe, also speaking in Chinese, made answer: “I am a native of Nagasaki in Great Japan, and have been blown hither against my will by the violence of the wind. Pray tell me what country this may be.”

Upon this, his interlocutor clapped his hands, and cried: “Is it possible? Well! you are a waif from a distant land! But you are (291) fortunate as well. This country is one of which you cannot but have heard tell: it is the Land of Perennial Youth and Life. It is divided from the shores of the Middle Flowery Kingdom by a distance of

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22 This refers to the method of catching birds called *zuku-biki*. An owl is placed on a stand in the middle of a wood, where the surrounding twigs have been covered with bird-lime; by which means are secured all the birds who come to look (and, according to the belief of the Japanese, jeer) at the stranger.
fifty or sixty thousand leagues, nor is it within the power of any man to reach it unless endowed with special knowledge. Like yourself, I, who now stand speaking to you, came originally from abroad. I am he who, in the world of mortals, bore the name of Jofuku,\textsuperscript{14} and served Shikōtei,\textsuperscript{15} king of Shin,\textsuperscript{16} in China. This Shikōtei, who was a violent and foolish prince, chose to institute a search for the Elixir of Life. The task devolved upon me; and, after many dangers and troubles, I finally managed to reach this place. But considering that, even were I to return with the Elixir, a prolonged service under so unrighteous a prince as was Shikōtei could scarcely end otherwise than in unhappiness, I at once determined to remain where I was; and here I have been ever since, living on during several hundreds of years without the slightest deterioration either in my physical powers or in my appearance. If you will elect to pursue the same course, you may prolong for ever a life that is subject to no maladies, while even supposing it to be your desire to return to the land of your birth, you will find it no easy matter to do so across all this vast expanse of ocean. So you had better make up your mind to remain among us."

At the conclusion of this most courteous speech, Wasōbyōe, in his turn, clapped his hands, and exclaimed: "What, my lord! are you the far-famed Jofuku? Happy, indeed, am I to be driven to the shores of this Land of Perennial Youth and Life,—a land of which I had, doubtless, heard men speak, but to whose actual existence I had never given credence. Wherefore should I think of returning to my native country in the mortal world?"

At the sight of Wasōbyōe's joy, Jofuku grew more and more delighted, and remarking that, as Japan was the nearest country to his own old home, he felt all the more particularly drawn towards the new-comer, led him to off

\textsuperscript{14} 除福. Chinese legend says that this worthy came over to Japan with a train of a thousand lads and a thousand maidens to search for the elixir of life.

\textsuperscript{15} 始皇帝. \textsuperscript{16} 秦.
his own house, where, as guest or dependent, Wasōbyōe spent the next two or three hundred years.

(292) The chief feature of life in this country was, as Wa-
sōbyōe observed, the absence both of deaths and of births. One death might, indeed, occur once in every thousand or couple of thousand years, and would be compensated by one birth. But this was only a rare exception among the many myriads of inhabitants, all of whom presented the appearance of being about forty years of age, and were all, both men and women, free from every kind of sickness. The seasons, too, were perfect; the succession of breezes and of rains all that could be desired; the crops good and plentiful—altogether a truly happy land. Every household kept its stud of storks, just as in Japan people keep oxen and horses, using them for agricultural purposes, and also for travelling about, in which latter case they would deck the creature out with a variety of trappings, and then jump on its back and fly about. Wasōbyōe, as he became used to the country manners, naturally got into the habit of stork-riding, and would go flying about on stork-back every day with a numerous troop of friends to inspect all the sights of the neighbourhood.

Among many others, must specially be mentioned the Peach-Tree Mountain, situated two leagues to the East of the city, and ten times as high as the Peach Mountain at Fushimi, covered with red and white blossoms as lovely as they were fragrant. At its base was the gayest imaginable medley of houses of entertainment and of theatre tea-houses, forming a perfect vista of roofs and towers,  

37 After the completion of the fortieth year, old age is suppose to commence.

38 The stork is the chief emblem of long life.

39 The peach-tree is a favourite of the elves, and emblematical of long life. Fushimi is a suburb of Kiyōto.

30 No English word exactly corresponds to the original here translated as 'tower.' The yagura, as it was called (for it has almost disappeared during the last three or four years), was a square room perched on the roof of a theatre, and forming the visible sign of its license as such. It is said to have been originally used by the beaters of the drums, but in later days it had become simply ornamental, or, rather, symbolic.
while the drums of the theatres and the guitars of the tea-
houses made a merrier noise than the Dōtombori at
Ōsaka, the Yojō at Kyōto, the Kobiki-Chō²¹ (293) at
Yedo, and the Miyajima²² and Kompira²³ fairs all put
together. There were conjurors doing the butterfly
trick, and striking stones and turning them into sheep;
raree-shows where a man would make a pony come out
of a pumpkin, or else blow a whiff of tobacco into the
shape of his own figure; quack-medicine vendors with
their gabble flowing ceaseless as the stream through
the valley; peep-shows with signboards showing garments
hung upon a willow-tree,²⁴ and bidding you enter to behold
a luckless wight, who, for having in a former state of
existence caused the death of a toad, had been born as a
toad himself in this; and, all the time, each showman, with
his handkerchief dapperly twisted round his head, and
crying out: "Walk in to see this famous sight! walk in
to see this famous sight!" On the other side was a
theatre (price of entrance-ticket ten mon²⁵ only), into which
you crept by a passage as narrow as the neck of a jar, and
found yourself in a spacious hall of a thousand mats,—at
least so 'twas said,—and could gaze on the most celebrated
actors, whether of male or female parts,²⁶ disputing the palm
of good looks and of public favour. The crowds of sightseers,
meanwhile, were pushing and elbowing their way forward;

²¹ Dōtombori, Yojō, and Kobiki-Chō are the names of streets famous
for their theatres. That in the Kobiki-Chō, however, no longer remains,
having been removed, first to Asakusa, and then to Shimabara in
Tsukiji, the present Foreign Concession.

²² An island in the Inland Sea, famous for its beauty and for the
sanctity of its temples. A great fair is held there at the end of July.
²³ A celebrated holy place in the province of Sanuki, in the island of
Shikoku.

²⁴ Souls on their way to Hell have to cross the river Sanzuzawa
（三途川）, containing the waters of Avarice, Cruelty and Envy, where a
crone named Datsuiba (貞衣姫) despoils them of their raiment, which
she hangs upon the branches of a willow-tree.
²⁵ A small copper coin.
²⁶ As in Europe during the Middle Ages, so in Japan down to the
present day, all parts, even the females ones, are taken by male actors.
red-pinafored tea-house girls were running hither and thither; dancing-girls wore their most fascinating smiles; grisettes were standing at the street-corners, while the fair Aspasia,\textsuperscript{37} beneath her stately parasol, marched past, perfumed and powdered like the pearly mists of spring, what time the nightingale winged his retreating flight at the sound of the melodious voice of the singing-girl, and the crescent moon, at the sight of her well-arched eyebrows, retired shamefaced behind a filmy cloud.

[The original continues in a similar strain for another page or more, detailing (294) the delights of this rather \textit{demi-monde} paradise. But the allusions to ancient Phrynes, Cagliostros, etc., would require so much elucidation to make them comprehensible, and when made comprehensible would still remain so little worth comprehending, that I omit the passage in the translation. The conclusion of it is:

\textit{Thus may it be seen that not even a land inhabited by sages and wizards can escape being the scene of the conquests of love.}

The text then continues:]

Two leagues and a half to the left of the Peach Mountain was a Camellia Mountain, whose flowers blossomed but once in every eight thousand years.\textsuperscript{32} Being thus, like the Hō-ryū-ji\textsuperscript{39} festival, a rare event, it was the sight to which, of all others, the greatest crowds would flock, all arrayed in their finest clothes, and each as his or her fancy might suggest; all, too, both men and women, mounted on storks, and making the gayest possible show, now darting along in straight files, now advancing in wedge-like shape, so that you might have imagined yourself in Japan in autumn when the wild geese fly across the sky.\textsuperscript{50} As for

\textsuperscript{37}For the specific name of the superior class of \textit{hetairae}, termed in Japanese \textit{taiyū} (太夫), there is no English equivalent.

\textsuperscript{32}The camellia tree is said to be very long-lived, and the expression "the camellia-tree of eight thousand years" is common in Japanese poetry. But that it should only \textit{flower} once every eight thousand years is an addition by our author.

\textsuperscript{39}A temple at Saga, in Kyōto, containing what is said to be the only genuinely Indian image of the founder of Buddhism ever brought to Japan.

\textsuperscript{50}One of the commonest and prettiest of the autumn sights in Central and Eastern Japan.
all the other pleasures and diversions of the country, words fail me to describe them.

Now you must know that, as in this country there were no such phenomena as death or disease, none of the people knew what death or disease felt like, though they were much given to speculating on the subject. Some few volumes of the Buddhist Scriptures, that had been brought over in ancient times from India and China, described heaven in such glowing terms that they were filled with quite a desperate admiration for death, and a distaste for their own never-ending existence;—so much so that when, as a rare exception, any of their countrymen chanced to die, he was envied in the same manner as in Japan would be envied one who should have obtained immortality. They studied the "Art of Death" as it were the Art of Magic, retiring to mountain districts and to secluded valleys, where they subjected themselves to all manner of ascetic privations, which, however, (295) rarely obtained for them the desired effect. In the matter of food, all such articles as ginseng, wild potatoes,\(^{31}\) eels, wild-duck, etc., which increase the action of the kidneys, and strengthen the spleen and stomach, were feared and avoided as being poisonously life-giving, whereas what people of rank and consideration highly prized and delighted in were such viands as were likely to cause the eater's death. Thus, mermaids\(^{32}\) were unusually cheap and plentiful,—plentiful as cuttle-fish on the coast of Izumi,—and you might see slices of them piled up on dishes, as well as whole ones hanging from the eaves of every cook-shop. But nobody who was anybody would touch with the tips of his fingers a fish so apt to poison you to life; and it was accordingly left to the lowest of the populace. The globe-fish\(^{33}\) was a much-esteemed

\(^{31}\)Dioscorea japonica.

\(^{32}\)This would appear to be the correct, as it is the literal, translation of the original characters 魚.\(^{33}\)The globe-fish, though partaken of by the lower classes, is such dangerous food that an edict has this year been issued totally prohibiting its sale. The Japanese have a proverb of wide application saying, "I want to eat globe-fish, but life is dear" (Pugu wa kuitashi, inochi wa oshishi).
fish, commanding a high price; and a favourite dish to set before the most honoured guests was a broth made of this fish and powdered over with soot. Buckwheat macaroni served up with water-melon-juice\textsuperscript{34} was another, while as similar dainties may be mentioned raw eels, spinach with a dressing of tooth-blackening,\textsuperscript{35} and sea-weed jelly sprinkled with \textit{wachisan}.\textsuperscript{36} A dinner of globe-fish sprinkled with soot, or of pickled cantharides, would not, of course, in this Land of Perennial Youth and Life, actually kill a man. But still the poison would have a certain slight effect, making him feel giddy for half an hour or so, and giving him sensations as pleasurable as those experienced by us Japanese after drinking rice-beer. "Ah!" he would exclaim, "this is what death must feel like! I feel my head turn round!" and he would clap his hands, and dance and sing, and believe himself to have attained the very acme of felicity. At New Year, also, and at the other major festivals, they would stand their screens upside down, (296) hang their shop-curtains inside out, wear light blue ceremonial dresses over white under-garments,\textsuperscript{37} while, in particularly superstitious families, the New Year's Day Visitors' Book would be inscribed with the words "A Record of Regrets." If, in trying to say something flattering about a friend's child, a caller were to remark on its apparent healthiness, both father and mother would remember his words with uneasiness; whereas, if he should say: "The little thing doesn't look as if it would live long," he would give the parents the greatest pleasure, and they would reply: "Ah! if only what you say may come true!"

Wasōbyōe, who, during the first twenty or thirty years of his residence in the country, had marvelled at, and inwardly ridiculed, the opinions of the inhabitants on this point, and had esteemed himself fortunate beyond all measure in having arrived at a country where disease and death

\textsuperscript{34}Said to be a particularly dangerous combination.
\textsuperscript{35}The \textit{o-ha-guro} (発黒), used by married women to blacken their teeth.
\textsuperscript{36}和中散, a medical powder.
\textsuperscript{37}These three things are indicative of mourning.
were unknown, was gradually converted to the native notions during a sojourn of two or three hundred years. The prospect of never-ending life, day after day and year after year, began to pall on him, while death became all the more attractive for being so difficult of attainment. Resolving to put an end to his existence, he threw himself backwards head over heels into a deep well. But lo! up he rose to the surface without the slightest hurt, and walked on the water so exactly as if it had been a road on dry land, that not all his endeavours to sink himself would sink him. So, seeing that this plan was of no avail, he climbed up a lofty mountain, and threw himself down from a peak several myriad fathoms high. But lo! down he came on his feet without even turning a somersault in the air, as if he had been a cat springing off a roof. Try as he might, until he grew weary of trying, nothing would succeed in making him die, till at last, while turning the matter over in his mind, he suddenly struck out a new idea: "No!" cried he, "what better fortune than this of perennial life? I will set out on a tour through the Three Thousand Worlds, and carefully study the various manners and customs of the inhabitants." So, urged by a new reason for thinking life precious, and caring nothing for the ridicule which would be cast on such a display of bad taste, he fell to eating, morning and evening, such life-giving substances as raw mermaid and ginseng salad; after which, leaving a (297) letter to thank Jofuku for his protracted hospitality, he purloined from the adjacent house a stork of more than average strength of wing, vaulted into the saddle, and rode off towards the South.

**Moral.**

The mimetic representations of Elysium with which we decorate our houses at the New Year, the _Adonis sibirica_ which we then bring out in pots, our avoidance at that season of the syllable _shi_, our predilection for the syllable

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32 This number of worlds is fixed by the Buddhist Scriptures.
and our desire to emulate the wrinkled crone and her spouse who, with so much labour, rake up the leaves beneath the pine-trees of Takasago,—all this springs simply and solely from the yearning after long life. Nor is this a specially human folly. The birds and beasts, and, indeed, all living creatures abhor death, and take delight in living. Yet, if you go to the root of the matter, and ask whence this preference,—why death should be thought a misfortune, why length of days should be esteemed a blessing,—you will find that there is, in reality, no reason. Men, during waking hours, toil with their bodies and toil with their minds; during sleep, they lay both body and mind to rest; and, arguing from analogy, we may well believe it not unlikely that, for all our oh's and ah's, death, when we actually reach it, is a thing so beyond all expectation delicious, that we shall only regret that we could not have known this sooner, and have gone to meet it.

If the moon and the flowers delight our eyes, it is because these soon fade, and that sinks beneath the horizon. Were the flowers to blossom on continuously from month to month, or the moon to shine nightly from dusk to dawn, or the snow never to cease falling throughout the year, no one would care to look at them. It is the same with the life of man. If we were to live on for ever, we should have no pleasure in living, and should naturally become as anxious for death as were the inhabitants of the Land of Perennial Life, about whom we have just been reading.

It is, of course, not to be wondered at that, carried away by the delights of the hour, we should wish that we might never die. But many, who allow themselves to be thus carried away too seriously, do, on the contrary, abridge

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Footnotes:

39 Because one of the meanings of shi is "death" (死), and one of the meanings of ju is "long life" (寿). The decorations which are set up and the ceremonies which are used at the New Year are many and complicated. They form the subject of a paper by Mrs. Chaplin Ayrton, B.Sc., in Vol. V, Part I, of these Transactions.

40 This sentiment constantly appears in Japanese poetry and literature generally. The "Kokinshū" stanza:
their lives. Thus, the Emperors Bokuō of Shū, Shi-kōtei of Shin, and Butei of Kan, for all they wore long beards and jewelled crowns, and put on airs of wisdom, were led by their yearning after immortality into the toils of successive impostors, and, far from obtaining from any of their elixirs and magic arts the slightest protraction of their existence, merely succeeded in handing down their names to posterity as signal instances of human folly. The *Honsō Gōmoku* gives a number of strange prescriptions as specifics against old age and death, and as elixirs enabling him who shall partake of them to fly about on clouds, walk on the surface of the waves, etc., etc.,—all arrant lies invented by impostors and immortality-mongers of by-gone ages. Even at the present day, we find many examples of rich men who get into the habit of taking drugs, being shampooed, and having the *moxa* applied when nothing is the matter with them, and of following many other practices injurious to health. But whether it be drugs, or whether it be the *moxa*, or acupuncture, or shampooing,—not one of them, however efficacious in the cure of sickness, has any power to lengthen out our heaven-allotted span, nor should any one of them be used by persons of sound constitution. When they are so used, and the system becomes impregnated with them, they lose most of their virtue as antidotes to disease. The proper course to pursue is always to call in the doctor, however slight the complaint, so as to get it treated by him with drugs, or the *moxa*, or

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*Nokori naku*

*Chiru zo medetaki*

*Sakura-bana:

*Arīte yo no naka*

*Hatē no ukereba*

is but one example of the treatment of a theme which almost every Japanese poet has made his own.


*47* 本草纲目, a Chinese botanical work.

*48* The *moxa*, shampooing and acupuncture are still the three favourite remedies of the Japanese for the most various ailments.
acupuncture, or shampooing, as the case may be, before it attains to any gravity. Many are they who, thinking their (299) ailment too trivial to necessitate the recourse to drugs, allow it to gather strength. A grave mistake this. For, when a malady has become serious, it too often happens that no treatment, whether by drugs or by the moxa, will reach it. Always take an illness at its commencement, in order not to pass through one day's more sickness than can be avoided; and then, if your frame be a sound one, long life will follow as a natural result. Taking instruction from the views of the natives of the Land of Perennial Life, to leave off yearning after immortality, to put aside all fear of death, and simply to keep a careful watch over the body while also preserving a peaceful mind, may be said to be the proper medical maxims for a man in health.

THE LAND OF THE GIANTS.

Wasōbyōe, who preserved his health and spirits amid every change of circumstances and of latitude, had now, beginning with the Land of Perennial Youth and Life, perambulated every country that the universe contains, but without meeting with anything particularly extraordinary. He, thereupon, thought of visiting the paradise presided over by Mida, and which lies one million degrees to the west of our earth; but desisted an account of the place having already been sufficiently described by Shaka ["Buddha"]. The Dragon Palace he gave up in like manner, because the boy Urashima's experiences have probably left but few novelties for any later traveller to discover. He determined, therefore, to extend his travels beyond the limits of this universe, seeking lands of which neither Shaka nor Confucius had ever heard any report, and then to return home, and put to shame all such as were puffed up with the notion of their own universal topographical information. So, bestriding his stork once

49 Generally called Amida (阿弥陀), the Indian Amitābha.
50 Čakya Muni.
more, he started off to pass (300) out of this world by the farthest boundary of the Southern Ocean, and flew straight on without ever casting a glance either to the right hand or to the left. On they went, the stork and he, a valiant rider and a noble bird, capable of doing their five or six hundred, ay! their thousand leagues a day; and, as they flew, many a country opened out before Wasōbyōe's gaze; but he would look at nothing comprised within the limits of this universe of ours. So the days passed by till they had been a good three months upon the road. By and by, the rays of the sun and moon waxed faint; then it seemed every day as if the sun were on the point of vanishing altogether; and, by the fifth month of their journey, their flight had led them into regions of absolute darkness, where day-light was no longer to be distinguished from the night. The stork began to utter cries of doubt and distress, and the courage oozed out even from Wasōbyōe's doughty heart, as there arose within his agitated breast the thought of the possibility of being swallowed up alive in the Hades of Darkness.⁵² "But no!" cried he, "if I am to pass out of this universe, of course I must expect to reach the limit of the space illumined by the rays of sun and moon. Once cross this region of darkness, and I shall soon arrive in some other world. One effort more, good stork! one effort more!" And the bird, apparently understanding the words addressed to it, shook itself and flapped its wings, and sped on like an arrow, flying and flying for four months more at least, though, to be sure, it was not possible to keep tally of the days in a region where the distinction of day and night was all unknown. Then it began to grow light again, and they arrived within the limits of another world.

⁵² Chinese and Buddhist ideas have caused the identification by the more modern Japanese of the "Dragon Palace" with the Palace of the Sea-god (Watasumi no Kami), though there is no authority for this in the ancient native literature. The original and beautiful legend of the boy Urashima's visit to the Sea-god's Palace will be found in the ninth volume of the "Mon-yūshū" whence it has been borrowed many times to be reproduced both in poetry and art.

⁵³ One of the Buddhist hells.
Wasōbyōe, feeling himself, as it were, born afresh, determined to fly down and inspect the country at his leisure. So, perceiving a broad road running through a large bamboo thicket, he sat down to rest, and closed his eyes for a few moments to collect his thoughts, which done, he opened them wide again, and turned to look about him. What was not his astonishment to find, on close inspection, that what he had at first taken for a bamboo thicket was nothing but a corn-field, where every stalk was the height of one of our largest Japanese bamboos! "A good wheat country!" said Wasōbyōe to himself, and continued his walk along the path. But he had only to go a few furlongs (301) to discover that it was not the wheat only, but anything and everything that was of a size exceeding the power alike of eye and mind to comprehend. The Hibiscus syriacus in the hedge dividing field from field had stems so thick that one of them was as much as Wasōbyōe could encompass. As for the pines, Cryptomerias and Chamaecyparis obtusa, they were beyond all powers of description, while even the most ordinary little trees would be, some a hundred and fifty, and some a hundred feet in circumference, and the dandelions and horsetails by the roadside were nearly as tall as a native of Japan.

It was, indeed, a land where the mountains, the rivers, and the vegetation exceeded tenfold anything to be found even in China or in India. Wasōbyōe was dumfounded, but nevertheless walked on for two or three leagues, till he came to what was apparently a large town, every house in which was higher than the halls containing the great images of Buddha, and had attached to it a godown that looked like a castle. Even the most insignificant hills were higher than Fujiyama, the gutters beneath

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55 Omne ignotum pro magnifico. The common people in Japan used to imagine that great splendour appertained to everything Indian and Chinese. Even at the present day, probably, many will be found who believe India to be situated above the heavens—a mistake arising from the Japanese name for that country, 'Tenjiku,' whose first syllable ten signifies 'heaven.'

56 Viz., those at Kyōto and at Nara.
the eaves of the houses were deeper than the river Yodo, while there were dust-heaps the height of Higashiyama, and ponds that might have been taken for important lakes. Look where he might, everything was strange, and everything exceeded in size the power of Wasōbyōe’s eyes to discern and of his imagination to comprehend. He simply stood aghast, and the idea struck him that he might himself have shrunk in size. But no! an attentive survey of his person showed him still to be a man of some five foot four or five, and only left him the more astonished.

So there he stood; and after a while there came out of the houses a crowd of people, none of them, whether men or women, less than fifty or sixty feet high, while some of the tallest men reached the height of seventy feet, and even the young urchins of nine or ten, with their heads still half-shaven, were at least twenty or thirty feet. The crowd gathered round Wasōbyōe, and viewed him with wonder and amaze. “What an extraordinarily tiny creature!” they cried, as they picked him up between their finger and thumb, and made him stand upon their hand, and turned him up to the light to look at him, first on one side and then on the other: “Where do you come from? “Are you a human being or are you an elf? What has brought you here?”

To which Wasōbyōe, stretching his legs wide apart, as he stood in the palm of the hand of one of them, and bawling out at the top of his voice, made answer: “You must know that I am a native of Great Japan, and that I have arrived here on a journey round the universe. If you despise me for my small stature, I will show you what feats can be performed by a fighting-man brought up in the school of Yoshitsune,” and he laughed a scornful laugh to make believe that he was not afraid.

55 Lit. “with cross-road hair and round over the eyebrows” [according to Japanese custom].

56 The great national hero, and brother of the Shōgun Yoritomo, by whom he was persecuted. The reference is here chiefly made to the celebrated encounter in which Yoshitsune, when still a boy, met the burly Benkei, whom he vanquished and then kept as his most trusty retainer.
At this they all smiled, and declared him to be the queerest and dearest of little creatures. They had heard, they said, in a vague manner of the existence of countries called China, India and Japan, but had never yet cast eyes on anything or anybody coming from those countries; and every one of them would fain have taken him home and kept him as we keep pet birds. But one sixty-five-foot man with an unshaven head, called Dr. Kōchi, picked him up, and, putting him in his left hand, and covering him up carefully with his right, as a child does who has caught a firefly, carried him off to his house.

This dwelling was evidently neither that of a merchant nor of a peasant, but wore rather the aspect of a retreat inhabited by a scholar retired from public life. Judged by the standard of the country, it was small. The owner entered a four and a half mat room, about the size (303) of a metropolitan temple of the Monto sect, where, over a desk some thirty-six feet by eighteen, he spread a piece of drugget; and then, placing Wasōbyōe upon it, took up a grain of rice about the size of a Japanese musk-melon, with a pair of chopsticks about as thick as a palanquin-bearer's pole, and began feeding him. Wasōbyōe, finding this pellet thrust in front of his nose, nibbled at it, feeling the while as if he had been turned into a young sparrow; and it was thus that he took his food, morning and evening, during the whole period of his residence in the country.

Attracted by the report of the extraordinary creature caught by Dr. Kōchi, crowds of people, both men and women, young and old, kept pouring in daily from the neighbourhood

57 The distinctive mark of a scholar.
58 The characters with which the name is written (広 知) signify “wide knowledge.”
59 The size of a room is always computed by the number of mats, as the latter scarcely vary in size, at least in the towns. The Japanese mat is five feet, nine inches long, by three feet wide. A four and a half mat room is, therefore, not much better than a closet.
60 The Monto or Ikkō, being the most popular and the richest of the Buddhist sects, is noted for the large scale of its places of worship.
to obtain a sight of it. They would try making the little thing stand in the palm of their hand or on their head, and would discuss its various peculiarities. "Certainly," they would say, "it is wonderfully tame. What? it requires no made-up food,—no hemp-seed? Why! it's easier to feed than a quail!" Wasōbyōe did not relish being made a toy of in this manner. But it was useless to be angry, and there was no good to be expected from resistance in dealing with such giants as these people were. And so the days and months slipped by.

Meanwhile, Wasōbyōe was busy observing the characteristics of the land and of its inhabitants. He could see that everything was ten times bigger than even in China or India; that the seasons were regular and propitious, the harvests abundant, the people prosperous; that, in short, it was a perfect land, endowed with every advantage. But, at the same time, he noticed that this nation had no philosophy, no moral code, no system of government; that they were not only entirely ignorant of the religious teachings of Confucianism, Buddhism and Shintō, but had not so much as words for the ideas of benevolence, righteousness, propriety, and wisdom, and, in short, that they were a nation without knowledge and without learning. The men simply worked in their fields and gardens, and manufactured various implements, while the women busied themselves with weaving and spinning. Beyond that, there was nothing; and when, from time to time, they would meet together for purposes of recreation, they had (304) no curious subjects of conversation, no personal discussions, no differences or contentions, but they simply talked about things in general. So Wasōbyōe fell a-thinking to himself, as he turned the matter over in his mind: "It would seem as if this foolish country were superior to the rest in nothing but size, tenanted, as it is, by such empty-headed folks. It is nothing more than a great overgrown asparagus⁶¹ of a country. Diminutive

⁶¹An approximate rendering of the word ūdo (個活), given in Hepburn's Dictionary as Aralia edulis.
as I am, why should I not, with my knowledge of the doctrines of the sages, aspire to the glory of becoming a guide to this nation, and of instituting and conducting a beneficent form of government, as did Koku-sei-ya in Formosa?" Filled with this idea, he one day, when a great crowd had assembled, strode up to his table, and addressed them all in a loud voice as follows:

"Though born in Japan, I have (to say nothing of visits to China and India) spent the last thousand years in travelling through the whole of the Three Thousand Worlds, and have made myself acquainted with the features, both physical and moral, of every one of them. Now, from my observations of this country, I gather that, while it exceeds all others in the dimensions of everything it contains, you, its inhabitants, know nothing of the moral and religious duties of mankind. What an inglorious and lamentable distinction is this! In the world from which I come, there is nothing but is comprised within the limits of the path of duty. Take China. Her Three Primordial Sovereigns and Five Ancient Emperors opened out the path, towards which it was successively the endeavour of such men as Lao Tsze, Confucius, Chwang Tsze, and Mencius to lead all mankind. In India, the blessed Shaka Muni preached the doctrines of retribution, heaven, and hell; and in my own native Japan we have Their Grandeur Izanagi and Izanami, the Great Goddess Amaterasu, and all the other gods and goddesses, who have condescended to teach us in all simplicity. From our obedience to such teaching spring the peace our land enjoys, and the prosperity and cheerful labour of the people; nor has a man any profit in

62國性翁, commonly called Koku-sen-ya. He went over to China towards the end of the Ming dynasty, on whose side he fought against the Manchou invaders. After the final overthrow of the Ming, he retired to Formosa, which he is said,—with how much truth I know not,—to have ruled with a patriarchal sway.

63伏羲, 神農, 黃帝, 大皞, 炎帝, 黃帝, 少皞 and 頑頑.

64 The word which I have, perhaps erroneously, rendered by 'blessed,' is nyorai (如来), itself a translation of the Sanskrit tathagata.
being born into the world as a human being, if he remain ignorant of Benevolence, Righteousness, Propriety, and Wisdom. From this day forward, I will commence explaining to each and all of you the doctrines of philosophy and religion."

And explain them he did, from his eminence on the table, beginning with the model governments of Gyō 65 and Shun, 66 Bun 67 and Bu, 68 and the Duke of Shū, 69 thence passing to the philosophical systems of Confucius and Lao Tsze, and concluding with an exposition of the doctrines of Buddhism, standing on tiptoe and shouting the while, as was but necessary when addressing such giants as were his audience. Moreover, with all the vast treasures of experience which he had gathered during the thousand years of his peregrinations, and with his unequalled acquaintance with all knowledge ancient and modern, Wasōbyōe felt no shame or hesitation in holding forth before so uncultivated an audience, but, on the contrary, kept daily pouring forth such masses of words and of arguments as should have drawn an assenting nod even from a stone image. 70 But, for all this there was not one single individual among the crowd who seemed to be in the least persuaded. On the contrary, far from condescending to argue with him, they would talk of him as people do of a pet bird, smiling and saying to each other: "What a queer little creature it is! It performs better than a lap-dog, and is more amusing than a parrot, saying such a lot of sentences without being taught them. Mind you take care of it, and don't kill it by overfeeding." Vainly, therefore, did Wasōbyōe, for the space of six or seven days, expound to them the blessed doctrines of Confucius and of Buddha. He might as well have tried driving a nail into bran, or applying the moxa to a piece of earth; 71 and, driven to despair, could only exclaim that their stupidity was as gigantic as their stature.

65 孤       66 俊       67 交       68 毅       69 周公
70 This expression is proverbial.
71 Both these expressions are proverbial.
One day he said to Dr. Köchi: "Great traveller as I have been, I have seen no country to excel this in size and natural advantages. Yet (306) nowhere else does their exist a land, however small and contemptible, but looks back with reverence to ancient sages and teachers, prizes the social virtues, and possesses some system of government. Nowhere else does there exist a nation ignorant as is this nation of the very distinction of right and wrong,—in fact, ignorant and unintellectual altogether. Thinking that, as a happy fate had brought me to your shores, I might teach your countrymen those doctrines by which alone men become reasonable creatures, I have done my best to expound them. But apparently you do not understand my discourse; for not one of you acknowledges himself convinced. Whence this unaccountable perversity?"

To this tirade the Doctor made no answer save a slight nod of the head. But as Wasobyoe kept repeating his question over and over again, he smiled gently, and, stroking Wasobyoe's head, replied:

"It is not generally discreet or wise to tell little creatures like you the whole truth. Yet, as you seem likely to understand me, I will tell you all about it. Listen to me attentively:

"Well; for the greater to comprehend the lesser is easy; for the lesser to comprehend the greater is hard indeed. The inhabitants of your world understand nothing of the existence of ours in this place, neither may they understand our intellectual grasp. But the inhabitants of our world, even down to the very women and children, have no difficulty in understanding your intellectual grasp. Moreover, when one of a lower degree of intelligence observes the conduct of one possessed of a higher degree of intelligence, that conduct appears to him mere foolishness. You, with your diminutive stature of five feet, your pitter-patterings through the tiny space of ninety thousand miles square, and your gaping visits to the scanty number

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25 A reference to a saying of the philosopher Chwang Tsze.
of Three Thousand Worlds, are naturally hindered by your arrogant assumption that you are acquainted with the length and breadth of the universe and by your narrow views as to the paramount reverence due to the doctrines of your sages, from comprehending what is truly great. Beings of wide intelligence discern the end of a business from its commencement. Beings able to discern the end of a business from its commencement fall into no errors. Beings who fall into no errors commit no wickedness. It is beings of narrow intelligence, (307) unable to discern the end of a business from its commencement, forgetful of the cold of winter when the heats of summer are upon them, careless of summer heat during the winter cold, and wanting the power of reasoning from what is near to what is distant, who fall into the commission of wickedness. In your world, the intellectual powers of the inhabitants are as limited as the space in which they dwell,—void of knowledge unless specially taught, ill at ease except when licking the dregs of antiquity, unruly except when under direction, difficult to persuade to virtue, easy to persuade to vice.

"Wherefore, Heaven has caused a kind of busybodies named sages to be born, who should lead the bewildered race on to better things. But each of these busybodies has his own special proclivities. The method of Lao Tsze and Chwang Tsze was that of the simile, and their doctrine was rooted in approval of human nature as it is. Confucius spread out a great net called by the various names of Benevolence, Righteousness, Propriety, and so forth, forbade the indulgence of individual caprice, and drew men towards the path of duty by a practical method of instruction. The point which Shaka thoroughly took in, was the existence in mankind of deep-seated evil passions; and he brought people into the true path by laying hold of their imaginations with all manner of tales, delightful and terrific. In fact, what these men, one and all, did, was to instruct and lead men by coaxing them like children; and thus will religious and philosophical
teaching have its appropriate sphere in the training of small minds, but of small minds only. Dogma is a box in which small minds are kept safe. Small minds disport themselves inside this box, not knowing the outside. Large minds disport themselves outside the box, knowing the inside. You yourself have been sporting inside the box of the Three Thousand Worlds, without knowing the outside. While you have been wagging your tongue during these last six or seven days, the natives of this land have let your clamour go in at one ear and out at the other, like the whinings of a peevish child. It is on account of the narrow intellects of your world, and its evil practice, that it has been furnished with all this paraphernalia of philosophy and religion. It is on account of the broad intellect of ours and its virtuous practice, that, Benevolence, Righteousness, Propriety and Dogma being useless, we have no such systems.

(308) "Do you now, Wasōbyōe, understand the mental conditions of the Land of the Giants? But if so, do you and your countrymen, with your tiny frames and your minute knowledge just sufficient to let you see in front of your noses, avoid pride, mischief and foolish ingenuity, and not fail quietly to continue in the paths that Shaka and Confucius have traced out, spending your lives in all tranquillity and happiness,"—and, with these words, the giant patted him on the back.

Wasōbyōe stood gaping in fear and abashment, and recognized how boundless are the extremes of the very little and the very great. Then, leaping on to the back of his stork, he set off, and returned safely to Japan after his long-continued absence.
### ANALYSES OF SURFACE WATER IN TŌKIŌ. (PARTS IN 1,000,000 OF WATER.)

**By R. W. Atkinson, B.Sc.**

<table>
<thead>
<tr>
<th>Location</th>
<th>Depth of Well in Feet</th>
<th>Solids</th>
<th>Chlorine</th>
<th>Ammonia</th>
<th>Oxidized Nitrogen</th>
<th>Total Mineral Nitrogen</th>
<th>Previous Sewage Contamination</th>
<th>Calcium Salts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hongō, Kinsukechō, No. 51 (Mr. Nomura)</td>
<td>31' 10&quot;</td>
<td>485</td>
<td>40.6</td>
<td>0.78</td>
<td>19.6</td>
<td>13.258</td>
<td>132.580</td>
<td>30</td>
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<tr>
<td>Hongō, Itchōme, No. 2</td>
<td>37'</td>
<td>932</td>
<td>64.0</td>
<td>0.55</td>
<td>10.9</td>
<td>5.13</td>
<td>4.8650</td>
<td>48.650</td>
</tr>
<tr>
<td>Hongō, Kaga yashiki, No. 6</td>
<td>39'</td>
<td>502</td>
<td>123.0</td>
<td>1.01</td>
<td>10.0</td>
<td>19.60</td>
<td>19.38</td>
<td>163.800</td>
</tr>
<tr>
<td>Yushimai, Mikumi machi, No. 7</td>
<td>8'</td>
<td>66.4</td>
<td>164.0</td>
<td>0.22</td>
<td>1.70</td>
<td>32.32</td>
<td>32.022</td>
<td>320.220</td>
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<tr>
<td>Dai Gaku, Hitotsu bashi-dōri</td>
<td>35'</td>
<td>1525</td>
<td>284.6</td>
<td>0.65</td>
<td>19.3</td>
<td>16.89</td>
<td>16.63</td>
<td>196.300</td>
</tr>
<tr>
<td>Rokubanchō</td>
<td>40'</td>
<td>167</td>
<td>12.0</td>
<td>0.85</td>
<td>21.0</td>
<td>1.00</td>
<td>1.53</td>
<td>15.300</td>
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<tr>
<td>Chigomi, Iwato chō, No. 6</td>
<td>46'</td>
<td>173</td>
<td>23.5</td>
<td>0.32</td>
<td>10.5</td>
<td>22.45</td>
<td>22.21</td>
<td>222.200</td>
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<tr>
<td>Akasaka, TANGO-machi, No. 1</td>
<td>49'</td>
<td>135</td>
<td>49.0</td>
<td>0.37</td>
<td>0.8</td>
<td>6.87</td>
<td>6.58</td>
<td>65.840</td>
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<tr>
<td>Akasaka, Hitotsugi, No. 57</td>
<td>40'</td>
<td>492</td>
<td>89.7</td>
<td>0.6</td>
<td>40.0</td>
<td>12.20</td>
<td>11.88</td>
<td>118.800</td>
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<tr>
<td>Awoyama</td>
<td>14' 1&quot;</td>
<td>696</td>
<td>100.0</td>
<td>0.36</td>
<td>35.5</td>
<td>11.3</td>
<td>11.04</td>
<td>110.400</td>
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<tr>
<td>Azabu, Roppongi</td>
<td>29' 9&quot;</td>
<td>740</td>
<td>149.0</td>
<td>0.43</td>
<td>93.0</td>
<td>14.6</td>
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<td>145.100</td>
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<td>Yamato yashiki</td>
<td>62' 7&quot;</td>
<td>708</td>
<td>157.0</td>
<td>0.34</td>
<td>19.1</td>
<td>18.81</td>
<td>18.81</td>
<td>188.100</td>
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<tr>
<td>Mita, Sanchō</td>
<td>8' 5&quot;</td>
<td>326</td>
<td>66.0</td>
<td>1.38</td>
<td>34.1</td>
<td>13.1</td>
<td>13.165</td>
<td>131.650</td>
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<tr>
<td>Fukagawa, Monzenchō, Maruta, No. 71</td>
<td>8' 7&quot;</td>
<td>165</td>
<td>49.0</td>
<td>1.32</td>
<td>12.0</td>
<td>9.2</td>
<td>9.195</td>
<td>19.195</td>
</tr>
<tr>
<td>Fukagawa, Naka Daiku machi</td>
<td>8' 7&quot;</td>
<td>537</td>
<td>24.0</td>
<td>1.77</td>
<td>17.1</td>
<td>4.5</td>
<td>8.57</td>
<td>8.570</td>
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<tr>
<td>Honjō, Arai machi, No. 7</td>
<td>8' 6&quot;</td>
<td>485</td>
<td>42.8</td>
<td>1.158</td>
<td>16.5</td>
<td>13.9</td>
<td>13.738</td>
<td>137.380</td>
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<tr>
<td>Mukōjima, No. 110</td>
<td>1' 9&quot;</td>
<td>356</td>
<td>27.2</td>
<td>0.27</td>
<td>17.1</td>
<td>4.51</td>
<td>4.2167</td>
<td>42.167</td>
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<tr>
<td>Yanaka Tennōji, Ueno</td>
<td>32'</td>
<td>356</td>
<td>140.0</td>
<td>0.65</td>
<td>26.9</td>
<td>1.66</td>
<td>1.403</td>
<td>14.035</td>
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<tr>
<td>Tennōji, Torii maye</td>
<td>34'</td>
<td>853</td>
<td>198.0</td>
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<td>0.87</td>
<td>6.5</td>
<td>6.286</td>
<td>62.860</td>
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<tr>
<td>Haneda mura</td>
<td>2'</td>
<td>118</td>
<td>249.6</td>
<td>0.79</td>
<td>26.0</td>
<td>13.83</td>
<td>13.205</td>
<td>132.050</td>
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<tr>
<td>River Water, Haneda mura, collected 12th November, 1878</td>
<td>95' 0</td>
<td>79</td>
<td>7.9</td>
<td>0.88</td>
<td>10.07</td>
<td>3.075</td>
<td>2.843</td>
<td>28.843</td>
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<tr>
<td>River Water, Haneda mura, collected 15th Nov., 1878, after rain</td>
<td>89' 0</td>
<td>8.47</td>
<td>0.890</td>
<td>15.6</td>
<td>3.275</td>
<td>0.344</td>
<td>0.3044</td>
<td>78.8</td>
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YUMOTO THERMAL SPRING.

<table>
<thead>
<tr>
<th></th>
<th>Grms. Per Liter</th>
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<tbody>
<tr>
<td>$\text{SO}_4$</td>
<td>0.06877</td>
</tr>
<tr>
<td>$\text{Cl}$</td>
<td>0.16088</td>
</tr>
<tr>
<td>$\text{Ca}$</td>
<td>0.03600</td>
</tr>
<tr>
<td>$\text{Mg}$</td>
<td>0.00041</td>
</tr>
<tr>
<td>$\text{Na}$</td>
<td>0.11870</td>
</tr>
<tr>
<td>$\text{K}$</td>
<td>0.02315</td>
</tr>
<tr>
<td>$\text{SiO}_2$</td>
<td>0.04450</td>
</tr>
<tr>
<td>$\text{Al}_2\text{O}_3$</td>
<td>0.00270</td>
</tr>
<tr>
<td>Org. Matter</td>
<td>0.02500</td>
</tr>
<tr>
<td>$\text{B}_2\text{O}_3$</td>
<td>trace</td>
</tr>
<tr>
<td>Manganese</td>
<td>&quot;</td>
</tr>
<tr>
<td>Iro</td>
<td>&quot;</td>
</tr>
<tr>
<td>Nitrates</td>
<td>&quot;</td>
</tr>
<tr>
<td>Nitrites</td>
<td>&quot;</td>
</tr>
<tr>
<td>Carbonates</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

**Sum**          | **0.48011**    |

Total residue dried at 190 °C | 0.5200 |
Sp. gravity                  | 1.0016 |
Temp.                        | 46.1 °C |

On evaporation to small bulk the liquid became alkaline to best paper.

Mitsuku Kuhara.
A General Meeting of the above Society was held at the Shôheikwan, Seidô, on Tuesday, 8th April. The Rev. Dr. Syle, President of the Society, occupied the chair.

The minutes of the previous General Meeting, having been published, were taken as read.

The Librarian reported the receipt of various periodicals.

Mr. B. H. Chamberlain read his paper entitled, "Wasôbyôe, the Japanese Gulliver."

The President conveyed to Mr. Chamberlain the thanks of the Society for his exceedingly interesting and very valuable contribution. The amount of imagination, wit, and happy expression which this tale contained was very creditable as well as very remarkable. The more he heard what Japan had done in an intellectual way, the more he was charmed. All the world over, such panaceas as the elixir of life had been sought after. The charm of change had been realized in the happiest manner by the Japanese; it would seem as if they thought change desirable in itself. In this tale there was brought out Confucius's fallacy of identifying knowledge with goodness.

In reply to a question of the President's, Mr. Chamberlain stated that Japan itself had been supposed to be the Land of Perennial Life, and one way of writing the name of Mount Fuji (Mt. Fù) signified "deathlessness." Whether, however, the belief gave rise to the name, or the name to the belief, seems difficult to determine. The belief that Mount Fuji was in some way connected with long life] was certainly very ancient; indeed it formed a main factor of the plot of the "Taketori Mono-gatari," the earliest Japanese romance that has come down to us, and which dates from the middle of the 10th century.

Mr. Amerman asked whether the Wasôbyôe of this tale was the same as Wasôbyôe.

Mr. Chamberlain replied that, as stated in the few introductory words prefixed to the translation, it was this tale of "Wasôbyôe" that had given to Bakin the idea of his "Musôbyôe," which was not composed till several years later.

Mr. Ewing referred to the remarkable coincidence in details between this and Swift's Gulliver, and suggested the possibility of the Japanese writer having heard something of the Western tale.

Mr. Chamberlain said that there happened to be more resemblance to our English Gulliver in the two chapters of Wasôbyôe which he had translated than in the remaining portion of the work, which as a whole, contained, be thought, too few such points of likeness to favour the idea of any borrowing on the part of the Japanese author. Swift's work was so infinitely richer in amusing (312) incidents that had it been known to the writer of Wasôbyôe through a Dutch
translation,—in itself a not very probable supposition,—he could hardly have failed to borrow much more extensively.

In reply to a question from Mr. Wright, Mr. Chamberlain stated that *Washōyōe* was composed in an easy, but sufficiently graceful style, and he also explained the signification of the name: 和 (Wa) means "Japanese;" 茁 (sō) is the first character of the name of the philosopher known in China as Chwang Tsze; and 兵衛 (byōe) is a species of termination used to form proper names, the purport of the whole being, therefore, "the Japanese Chwang Tsze," a title descriptive of the nature of the book, in which, as in the teaching of that sage, the method adopted was that of the fable.

Dr. Divers said he would like to hear from Mr. Chamberlain whether it was a common thing to meet with such philosophical ideas in Japanese literature as were contained in these tales. He had been much struck with the very great difference between the philosophy of this writer and that contained in the Buddhist sermon read to the Society at a recent meeting. It was interesting to notice in connection with this paper that, in one of the latest numbers from England of a scientific serial, a distinguished chemist and physicist had been writing a speculative article on what would have been the effect upon our knowledge of nature had we been framed in very different proportions to our surroundings to what we are. The writer there showed it to be highly probable that we should have overlooked, of giant proportions, many phenomena now familiar to us, whereas we should have long ago recognised and appreciated much that now escapes our attention, if we had been pigmies; and that in general we should hold largely different notions as to the nature of things from those we at present hold. Thus it would be seen, Gulliver's Travels had a scientific aspect besides its humorous one.

Mr. Chamberlain: The anonymous author of this book was, as his style and the allusions with which his book teem plainly show, an educated man. Few of the common treatises on morals are so amusing: indeed, dreary prosiness is a very frequent characteristic.

In reply to the President, Mr. Chamberlain said he feared that he could not promise to translate the whole work. Life was short here away from the Land of Perennial Youth, and there were so many more important native studies to occupy one's attention. He, however, gave a short sketch of the remaining chapters of the book.
THE CHEMICAL INDUSTRIES OF JAPAN.

No. 2.—AME.

By R. W. Atkinson, B. Sc. (Lond.).

[Read May 13th, 1879.]

Although the material which forms the subject of this note is best known to foreigners in the form of a sweetmeat much esteemed by children, it is also used to some extent in place of ordinary cane sugar for cooking purposes, and still more largely in the manufacture of mirin and shoyu, and also secretly, as a reducing agent in the common process of dyeing with indigo. Everyone has probably been struck with the peculiar method adopted for giving the sweetmeat such a form that it can be readily cut up and handled; at various places in this city two men may be seen industriously engaged in pulling at what, at a distance, appears to be a white elastic rope. After having drawn it out to a sufficient extent, so that it possesses a uniform thickness of about three-fourths of an inch, it is cut up into small sticks, and then sold as hard ame, either uncoloured, or coloured red with safflower (beni).

In this form it is only a sweetmeat; but inside the shops, coarse earthen jars containing a clear yellow substance, having a greater or less degree of viscosity, may be seen. This is termed "midzu-ame."

In Europe, of late years, a new kind of sugar has been shown to be produced when malt in solution is allowed to remain in contact with starch, and as the conditions which obtain in the manufacture of ame seemed favourable
to the production of this particular kind of sugar, it appeared to me to be worth examining from a chemical point of view.

(314) At first I found some difficulty in getting exact information as to the details of this industry;—those whom I first visited seemed anxious to keep the whole process as secret as possible, but when they found that my object was not to compete with them, they became sufficiently communicative. Not that there is any secret connected with the production of ame, but it appeared to be in this, as in some other cases, the smaller the secret, the greater the secrecy.

I have, however, prosecuted my enquiries in Ōzaka as well as in Tōkiō, and in the main points there is no essential difference between the processes made use of in the two places.

The starch-containing body used is either millet (Jap. awa), or mochigome, or the common kind of rice called uruchi. The finest and most esteemed variety of “midsu-ame” goes by the name of awa-ame, although not in all cases prepared from millet, but the term seems to be applied to those kinds having a clear yellow colour, those produced from either of the two kinds of rice being usually darker and less pleasing in appearance. The late Dr. Ritter, in a paper communicated to the German Asiatic Society in 1874 (Part V. pp. 4-5), stated that the ame prepared from millet is sweeter, but that that prepared from rice is preferred on account of its greater whiteness. This statement is in part incorrect, for, both from my own observations, and from the universal testimony of ame makers, it is certain that that prepared from rice is much sweeter than that prepared from millet. The latter part of Dr. Ritter’s statement is, however, quite true when hard ame is referred to, as rice-ame is said to yield a much whiter product when drawn out than millet-ame does. The latter produces a hard ame of a dull grey appearance, and is consequently seldom used to produce that substance.

In the preparation of the commoner kinds of ame, the broken grains which are formed during the cleaning of the rice to be used for the production of sake, are bought at
a cheap rate by the *ame* maker. At the brewery at Nishino-miya, near Ōzaka, I was told that the amount of broken grains formed amounted to 4 per cent. of the whole rice treated, and that it was sold at the rate of 4 yen per koku. At Itami at the same time it was sold at 5 yen per koku.

The starch-containing material, whether rice or millet, is first of all (315) soaked in cold water until it is sufficiently soft, rice requiring to be steeped a longer time than millet, after which it is steamed in the same way as the rice which is used in *sake* brewing. If the rice has been sufficiently soaked in cold water to begin with, the steaming of 5 to (about 20 galls.) will not require more than half an hour, or at most, one hour. After being sufficiently heated it is transferred to shallow wooden tubs, like those called *han-giri* in *sake* breweries, and covered with mats until the whole of the rice or millet to be treated at one time is ready.

The malt used is prepared from barley, and although the mode of preparation is the same as that followed in England, the growth of the plumule is allowed to proceed to a greater extent; in those specimens of Japanese malt which I have seen, the plumule has been about three times as long as the grain. By permitting the growth to go so far as this, a considerable part of the starch of the grain is rendered useless for conversion into sugar.¹

The proportion of malt used varies in different places, and also with the nature of the starch-yielding material which is to be converted into sugar. In some places, for every *to* of rice or millet, 1 *sho* of malt is used, and 5 *sho* are then steeped in water, and added, together with about 8 *to* of warm water, to 5 *to* of steamed rice or millet. In another place I found 17 per cent. of malt used, for millet

¹ The Japanese word for malt prepared from barley is *moyashi*, but while I was in Ōzaka I heard the same word applied by one or two workmen to what is properly known as *koji*. Foreigners are in the habit of calling the latter substance by the name of malt, but it does not properly bear any resemblance to malt, inasmuch as the vegetable growth in the case of *koji* is quite foreign to the grain itself. I know of no single word by which *koji* might be rendered into English.
and mochigome, and only 13 per cent. for the broken rice, the smaller amount used in the latter case being due to the more rapid action caused by the greater surface exposed. One workman whom I questioned about the process, said that if a larger proportion of malt were used in the case of the broken rice grains, the product would be sweeter, but that its colour would be inferior. This shows, therefore, that we may expect to find the composition of the ame made in different places to vary, and so I have found it. The statement of the workman as to the (316) greater sweetness of the product when more malt is used is quite in accordance with the knowledge we possess concerning the action of malt extract upon dextrine.

The tubs containing the mixture of rice or millet, malt, and warm water, are carefully covered up with mats to prevent the temperature falling too rapidly below the point at which the greatest action takes place between the starch and the malt. During the winter, at one of the places visited, the malt was added at 7 a.m., and the whole allowed to stand covered up until 3 p.m., by which time the conversion of the starch into sugar was said to be complete; in other places only 6 or 6½ hours were allowed, the shorter time being in those works where the proportion of malt used was greater.

The liquid having been left at rest for some time, allows the insoluble substances to fall to the bottom of the vessel, and the workman removes the clear liquid from the surface for the preparation of the best kind of ame, both liquid and solid. The latter portions of the decanted liquid are less pure than the first portions, and when afterwards evaporated yield the second quality of "midsu-ame." That which is left after the removal of the clearer portions is introduced into coarse hempen bags, and the liquid portions are separated from the solid residue by pressure. On account of the smaller scale of the operations carried on in this industry, the Japanese lever press is never used as it is in the separation of the liquid sake (moromi) from the unconverted grains of rice.
The liquids thus obtained are next boiled down in iron pans resembling those used for steaming rice, until they possess the required consistency, which takes from three to six hours in different works for liquid ame, and about 20 minutes longer when the hard white ame is desired. For the production of the latter the stiff ame is rolled out on boards, and handled by the workmen in such a manner that it does not adhere to the fingers, after which it is repeatedly drawn out and cut into lengths. By this treatment it loses its transparency and assumes the opaque white appearance so well known to the frequenter of the matsuri held in different districts. The workman also notices that it becomes much more bulky, and this seems to be correct, as the solid ame floats upon the surface of water, while the liquid kind immediately (317) sinks. This is no doubt due to a great extent to the imprisonment of bubbles of air during the kneading process, just as in the preparation of ordinary dough. But it may also be that by the mechanical treatment to which it is subjected, the sugar undergoes a species of crystallization, and if expansion took place as is usual, both the less density and the opacity of the solid ame would be accounted for.

Solid ame is said to be made invariably from rice, as when kneaded it produces a whiter paste, and I am told that they never mix rice and millet; but the results of my analyses throw some doubt upon this statement.

I have made analyses of a considerable number of specimens obtained from different places in Tōkiō, and embracing the different qualities sold. As before said, there are three kinds sold, "Awa-ame," "Mochi-ame," and "Uruchi-ame," and there are also two or three qualities of the first kind mentioned, Awa-ame. All the specimens examined were found to contain the sugar, recently isolated by Mr. O'Sullivan, called Maltose, mixed with an extractive matter—in most cases ordinary dextrine. The presence of maltose in ame was first proved by digesting the ame with alcohol, filtering from the precipitated dextrine, and examining the properties of the body dissolved by the alcohol.
It was found to have a specific rotatory power of 150°, and to reduce oxide of copper as though the solid matter in solution contained only 65 per cent. of glucose. These are the essential characters of maltose, and I have further confirmed these experiments by separating a quantity of the sugar in the pure state, by crystallization, a specimen of which is on the table. This substance agrees in all respects with the maltose as prepared by Mr. O'Sullivan. The numbers given in the accompanying tables were obtained in the following way:—About 20 grams of ame were dissolved in water, and then diluted to 500 cub. centim. The amount of solid matter in solution was found by evaporating 10 cub. cent. on a steam bath, and cooling in vacuo over oil of vitriol. The heating was continued in an air-bath heated to 100° C. alternately with cooling in vacuo, until the weight remained constant, which required a considerable time, and involved a large number of weighings. I found it impossible to adopt the method recommended by Mr. O'Sullivan—viz., to determine the sp. gr. and from that to calculate the amount of solid (318) matter present,—which he asserts is the best way, maltose and dextrine having the same sp. gr. in solution. I found on testing, that the numbers obtained by the two methods differed, and that the numbers obtained by calculation from the specific gravity varied according as more or less water was present. This I ascertained by taking a given solution, diluting it to different extents, finding the sp. gravity, and calculating the amount of solid matter according to his rule. The numbers found in each of these cases, when allowance was made for the different degrees of dilution, did not agree, and I was therefore compelled to adopt the more accurate, but certainly much more troublesome, method first described.

The amount of sugar present was determined in the usual way, in most cases both volumetrically and by weight. The number so obtained gives the equivalent amount of glucose, and to ascertain the amount of maltose, it was multiplied by $\frac{1}{0.53} = 1.538$. The difference between the number thus obtained and the amount of solid matter
gave the amount of extract. The percentage of water was obtained by deducting the percentage of solid matter from 100. An observation was also made in each case of the specific rotatory power, and the number thus found by observation was compared with the number obtained by calculation from the amounts of maltose and dextrine, previously determined. It was thus found that the numbers in most cases agreed fairly well, on the supposition that the extractive matter was wholly dextrine, but in other cases, and especially in the case of the hard ame, the number observed was considerably below the number calculated on this supposition.

In the first table I have collected the analyses made of the better kinds of what is called Awa-ame, all of which were of a pale yellow colour, like the samples on the table. In the first three columns the numbers represent the percentages of maltose, extract, and water, calculated on the original ame; in the fourth and fifth, the percentages of maltose and dextrine on the substance dried at 100° C. are given; in the sixth column, the numbers indicate the number of parts of maltose associated with one part of extract; in the seventh, the observed specific rotatory power; in the eighth the specific rotatory power calculated from the number in columns IV. and V. taking the specific rotatory power of maltose = 150°, and that of dextrine = 214°.

**TABLE A.—AWA-AME. BETTER KIND.**

<table>
<thead>
<tr>
<th>Obtained From</th>
<th>% of Original ame.</th>
<th>% of Dry Substance</th>
<th>SP. Rot. Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mikawa chô</td>
<td>1.</td>
<td>II.</td>
<td>III.</td>
</tr>
<tr>
<td>2. Shin Izumi chô</td>
<td>12.06</td>
<td>27.94</td>
<td>60.00</td>
</tr>
<tr>
<td>3. Mikawa ya (Hon Hachio bori.)</td>
<td>17.81</td>
<td>19.66</td>
<td>62.53</td>
</tr>
<tr>
<td>4. Tomita ya (Hon Hachio bori.)</td>
<td>16.62</td>
<td>23.18</td>
<td>60.20</td>
</tr>
<tr>
<td>5. Unknown origin</td>
<td>14.47</td>
<td>20.33</td>
<td>64.70</td>
</tr>
<tr>
<td>6. Unknown origin</td>
<td>14.95</td>
<td>22.05</td>
<td>63.00</td>
</tr>
</tbody>
</table>
In the preceding table, which represents the composition of the better kinds of *awa-ame*, it will be observed that the dry substance contains on an average about $26\frac{1}{2}$ per cent. of dextrine. In table B, the composition of the inferior kinds of *awa-ame* is given, all the specimens of which were of a dark brown colour, and gave a turbid liquid when dissolved in water. The percentage of dextrine is much less in these specimens than in the former.

**TABLE B.—AWA-AME. INFERIOR KIND.**

<table>
<thead>
<tr>
<th></th>
<th>% of Original</th>
<th>% of Dry</th>
<th>Ratio of Maltose to Dextrine</th>
<th>SP. Rot. Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ame.</td>
<td>ame.</td>
<td></td>
<td>Observed.</td>
</tr>
<tr>
<td>7. Mikawa chô</td>
<td>18.52</td>
<td>12.38</td>
<td>69.10</td>
<td>VIII.</td>
</tr>
<tr>
<td>8. Mikawa ya (Hon Hachio bori.)</td>
<td>17.69</td>
<td>13.93</td>
<td>69.28</td>
<td>156.2</td>
</tr>
<tr>
<td>9. Tomita ya (Hon Hachio bori.)</td>
<td>19.69</td>
<td>16.73</td>
<td>63.58</td>
<td>160.0</td>
</tr>
</tbody>
</table>

Table C contains the results of the analysis of two specimens of hard *ame* from different places, and we have here a case in which the observed rotatory power is very much less than that calculated on the assumption that the extractive matter is dextrine, and indeed agreeing very closely with that of the maltose alone.

**TABLE C.—HARD AME.**

<table>
<thead>
<tr>
<th></th>
<th>% of Original ame.</th>
<th>% of Dry ame.</th>
<th>Ratio of Maltose to Dextrine</th>
<th>SP. Rot. Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ame.</td>
<td>ame.</td>
<td></td>
<td>Observed.</td>
</tr>
<tr>
<td>10. Mikawa chô</td>
<td>7.50</td>
<td>18.07</td>
<td>73.53</td>
<td>VIII.</td>
</tr>
<tr>
<td>11. Unknown</td>
<td>12.00</td>
<td>12.12</td>
<td>75.88</td>
<td>124.0</td>
</tr>
</tbody>
</table>

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<th>SP. Rot. Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ame.</td>
<td>ame.</td>
<td></td>
<td>Observed.</td>
</tr>
<tr>
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<td>18.52</td>
<td>12.38</td>
<td>69.10</td>
<td>VIII.</td>
</tr>
<tr>
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<td>13.93</td>
<td>69.28</td>
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<table>
<thead>
<tr>
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<th>SP. Rot. Power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ame.</td>
<td>ame.</td>
<td></td>
<td>Observed.</td>
</tr>
<tr>
<td>10. Mikawa chô</td>
<td>7.50</td>
<td>18.07</td>
<td>73.53</td>
<td>VIII.</td>
</tr>
<tr>
<td>11. Unknown</td>
<td>12.00</td>
<td>12.12</td>
<td>75.88</td>
<td>124.0</td>
</tr>
</tbody>
</table>
The similarity in the composition of the solid ame to the inferior kinds of what is termed awa-ame will be noticed at once, while the difference between these two and the specimens of the better kinds is not less marked.

The analyses in Table D were made upon specimens given to me as certainly prepared from rice, from mochigome and uruchi respectively.

<table>
<thead>
<tr>
<th></th>
<th>% of Original ame.</th>
<th>% of Dry ame.</th>
<th>SP. Rot. Power.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Mochi-ame (Mikawa chô)</td>
<td>I.</td>
<td>II.</td>
<td>III.</td>
</tr>
<tr>
<td></td>
<td>23.17</td>
<td>6.83</td>
<td>70.00</td>
</tr>
<tr>
<td>13. Mochi-ame (unknown)</td>
<td>15.15</td>
<td>7.83</td>
<td>77.00</td>
</tr>
<tr>
<td>14. Uruchi-ame (Mikawa chô)</td>
<td>19.23</td>
<td>4.87</td>
<td>75.90</td>
</tr>
<tr>
<td>15. Uruchi-ame (Mikawa chô)</td>
<td>20.22</td>
<td>7.52</td>
<td>72.26</td>
</tr>
</tbody>
</table>

The large percentage of maltose in these specimens is worthy of note, and would lead one to infer from the analyses alone, that the substance from which they were prepared was different from that used in the preparation of the other kinds, the analyses of which are given in the preceding tables.

(321) A comparison of the amount of starch and albumenoids in millet and in the two kinds of rice does not appear to help us much in explaining the course of the reaction. Mr. Dwars communicated to the Society last year some analyses of rice, and I give below results which have been obtained in my own laboratory, which agree very fairly with those of Mr. Dwars.

² Calculated for maltose only.
The analysis of millet given below is taken from Prof. Church's Manual on "Food."

**Composition of Millet.**

<table>
<thead>
<tr>
<th></th>
<th>URUCHI.</th>
<th></th>
<th>MOCHIGOME.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From Isé.</td>
<td>From Mino.</td>
<td>From Koshigaya.</td>
</tr>
<tr>
<td>Starch</td>
<td>74.69</td>
<td>72.52</td>
<td>72.86</td>
</tr>
<tr>
<td>Water</td>
<td>11.96</td>
<td>13.02</td>
<td>12.41</td>
</tr>
<tr>
<td>Ash</td>
<td>1.46</td>
<td>1.53</td>
<td>1.61</td>
</tr>
<tr>
<td>Fat</td>
<td>0.90</td>
<td>1.21</td>
<td>1.30</td>
</tr>
<tr>
<td>Albumenoids</td>
<td>4.79</td>
<td>5.07</td>
<td>4.30</td>
</tr>
<tr>
<td>Cellulose and extract</td>
<td>6.10</td>
<td>6.65</td>
<td>6.09</td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td><strong>99.90</strong></td>
<td><strong>100.00</strong></td>
<td><strong>98.57</strong></td>
</tr>
</tbody>
</table>

There is considerable difference in the amount of starch and of albumenoid bodies in the specimens of rice and millet, but it does not easily explain how it is that the actual percentage of sugar contained in the ame prepared from the former is so much greater than in that prepared from the latter. It is certainly not due to over-boiling, for the percentage of water in the specimens of midzu-ame presents comparatively small variations, and where there is a decided difference, as in No. 3, the result is not what might have been expected, for long heating would convert a great part of the dextrine into maltose, whereas in this specimen, where the percentage of water is below the average, the percentage of dextrine is above the average. Moreover, in the (322) specimens of hard ame in which the percentage of water is less than in any of the remaining
kinds of *midzu-ame*, and where we know that the length of boiling is greater, we do not find a proportion of maltose at all comparable to that contained in the specimens prepared from rice. I think we must conclude that the action of malt upon millet differs essentially from its action upon rice, unless, indeed, the simples explanation of all be true, that the husk which encloses the seed in the case of millet prevents the access of the malt solution to it. I do not think that this is probable, for the operations of soaking and steaming would serve as a sufficient preparation.

A substance is now prepared in England for the use of brewers called Dextrine-Maltose, and contains on an average 33 per cent. of dextrine, and 66 per cent. of maltose. It is formed by the regulated action of dilute sulphuric acid upon starch. We have here, then, a substance which approaches certain kinds of *ame* in its composition, and the question naturally arises whether *ame*, when sufficiently diluted, might not be used for brewing purposes. At present, no doubt, it would be found to be too expensive, but with larger works it might be made at a sufficiently small cost to be able to compete with imported beer. It is not my purpose, however, to enter upon such a question; my only desire was to ascertain what occurred in the chemical processes involved in this wide-spread industry.

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*I have since learnt that the millet is always subjected to the same kind of husking which rice undergoes.*
H. M. S. "PHAETON" AT NAGASAKI IN 1808.

By W. G. Aston, Esq.

[Read May 13th, 1879.]

"History of the outrage by Anglians at Nagasaki." Such was the title which caught my eye as I was one day turning over the volumes on a book-stall in a back street of the city of Yedo. A few tempos placed me in possession of a little manuscript book which, on examination, proved to be a copy of the official diary kept in the Government House at Nagasaki during a visit made to that port by H. M. S. Phaeton in the year 1808. Of this volume the following narrative is a faithful résumé:—

It was now late in September, and all hopes of the arrival of the annual Dutch trading ship had been abandoned, when one fine morning, at 7 o'clock, a "white sail" was descried on the horizon by the coast-guards at the station near Nagasaki. Information was at once sent to the Governor, who took it for granted that this vessel was the Dutch ship which had at last arrived. The usual orders were issued for her reception. Officials were instructed to be in readiness to go out to meet her, and exchange the preconcerted signal by which Dutch ships were distinguished from others, which, in defiance of the national prohibition, might attempt to enter the harbour; and these were to be followed by other officers with a supply of Japanese money, and a letter authorizing the expected ship to approach the city. Notice was given to the native merchants in the foreign trade, and also to the "Kapitan," as the chief of the Dutch factory was called.

The news caused a joyful excitement among all classes at Nagasaki. There were few of the towns-people who had
not some share in the profitable monopoly of foreign trade enjoyed by that city, and although our manuscript is silent on the subject, we may be sure that (324) the Japanese officials had also good reason for satisfaction at the news. Of course, the joy was greatest in the Dutch settlement of Desima. After more than a year without news of Europe, without letters from friends and relations, and deprived of many a little comfort which the land of their exile could not supply, the delight of the Dutch residents may be easily imagined. The ship approached rapidly, and was already visible in the distance off the entrance to the beautiful inlet which forms the harbour of Nagasaki, when the interpreter who had been sent to convey the news to the Dutchmen arrived in Desima. He reported on his return that the Kapitan had taken him aside, and after expressing the joy which he and his countrymen felt at the arrival of their ship, had added, "There are, however, some suspicious circumstances. It is very improbable that she should have delayed her departure from Batavia until so late in the season. If she had left at the usual time and were only arriving now, she must have met with an accident, and lost one or two of her masts. But the ship we see approaching is not deeply laden. She sails well on the wind, and her masts and rigging are in excellent order. She may be a ship of some other country,¹ and it would be disloyal of me if I did not warn you to take every precaution."

The boats which had previously been got in readiness were now despatched. They were told that in consequence of the late arrival of the "Redhairs," as the Dutch were called, they were to be very careful and not to approach the ship until the proper signals had been exchanged. If anything suspicious were observed, they must lose no time in giving notice to the guard-houses, so as to prevent her from entering the harbour. Two clerks of the Dutch factory were included in the party.

¹ No wonder the Phaeton did not look precisely like a Dutch merchantman. She was a crack ship of the navy, and one of four frigates known as "the Saucy Channel Four."
At dusk on the same day intelligence was received at the Government House that after the first boat had, as was thought, exchanged signals with the foreign ship, that which contained the Dutch clerks approached her. A boat was therefore lowered by the foreigners, who proceeded to transfer the Dutchmen to it. One resisted, but was threatened with a drawn sword, and both were then seized and (325) carried on board the ship. No answer could be obtained to the letters sent by the Kapitan, so it was suspected that something was wrong, and the boats returned to Nagasaki.

A note to the diary gives another account of this occurrence, said to have been afterwards obtained from one of the Dutch clerks. Its Japanese colouring is, however, unmistakable.

"When the boat with the two Dutchmen neared the ship, a green leather batera (foreign boat), thirty feet in length and from twelve to thirteen feet in breadth, was let down by a lowering anchor (sio), an awning was spread, and the boat was rowed by only two men on each side with oars like rice ladles. As soon as they came alongside the boat with the Dutch, the planks of the deck were raised up, and from underneath there leaped out twelve men armed with swords and pistols, and waving in their hands lighted matches. They drew their swords, and, uttering loud shouts, seized the Dutchmen and forced them into their boat. The Japanese boatmen were so frightened that they leaped into the sea, and a confused outcry arose from the trading and fishing craft near, as they got up their anchors and took to flight. Some of their crews fell into the sea, and could be seen swimming about. Before the Japanese officers recovered from their consternation, the foreigners drew back to their ship, receiving the wind in the awning, and bringing their boat alongside with a bound. Here hooks were fastened to her, and she was swiftly hoisted on board. The ship was thirty-six fathoms in length. On her bows there was a dreadful painted figure of a bird with outstretched wings and eyes of precious stones. The
cannon were fifty in number, and at night were protected by a shield just like a plaster wall. At each gun stood a gunner with war hat on, and a great match in hand, ready to fire at any moment. The strictest discipline prevailed. It was just as if a fortress had been erected on a spur of the Inasa hill, or on the islet of Takaboko (Papenberg). On each mast there were three bastions (no doubt the cradles are meant), the lower one of which was eight mats (12 ft. by 16 ft.) in extent, and was surrounded by a screen. On its four sides eight cannon were planted, in such a way that they could be pointed freely in any direction. On the stern were posted four or five guns in a similar fashion. On the two upper bastions, look-outs were stationed, who surveyed the surrounding (326) country and noted the position of the batteries on shore. The Captain was a young man of 19 years of age. He sat on a chair day and night, and moved no more than a mountain. The crew numbered three hundred and fifty, all picked men, and as ferocious as tigers or leopards. There were all kinds of warlike engines; balls made of crooked iron nails hammered together, copper balls to be fired red-hot, etc., etc."

The news of the Dutchmen’s capture excited the utmost indignation in the Governor of Nagasaki, Matsudaira Dzusho no Kami. As the sequel proves, he was a high-spirited and resolute man, and he determined to administer speedy and condign punishment to the foreign ship which had behaved in such a high-handed manner. Summoning the chief officers of the Daimios of Hizen and Chikuzen, to whom the military protection of Nagasaki was entrusted, he informed them that “a strange ship had entered the harbour, and had seized two Dutchmen in the most outrageous and lawless manner. Immediate measures must be taken to recover the Dutchmen and to burn and sink the ship, as the Spaniard had been destroyed ninety years before. Combustibles and fire-ships should be provided, and a scheme of action drawn up on paper and submitted for his consideration.”

The note of warlike preparation was soon heard on all
sides. A small force of twenty men which acted as guard-of-honour to the governor was put under arms, the batteries were manned, the arsenal was emptied of its contents, which, however, proved miserably insufficient; and all the officials, from the Governor downwards, donned their helmets and coats-of-mail, and hastened to their posts. It was already night, and the writer of the diary tells us that "in the darkness the noise of the ammunition carts and the shouting of the coolies, as they dragged the guns to the batteries, reverberated among the hills like thunder."

Meanwhile the unlucky officials who had allowed the Dutchmen to be carried off from under their very noses, reluctantly entered the Government House to make their report. They were admitted into the Governor's presence by Tokuyemon, the writer of our diary, and with deep-drawn sighs and chattering teeth they told their story. They said that "all of a sudden, fifteen men with pistols and naked swords had sprung up out of the bottom of the foreign boat, captured the (327) Redhairs, and carried them off in the twinkling of an eye. The crew of this boat were like so many fierce tigers. They were so nimble in their movements, and looked so terrible, that it seemed in no wise possible to approach them. They nevertheless pursued them, and were about to put them to the sword, when they reflected that such a course would cause the Governor great anxiety, and might give rise to serious trouble. They therefore resolved to come back and report what had happened." The Governor drew himself up angrily, and said: "Listen well, you fellows, to what I say. You don't get much pay, it is true; still it is Government pay. You have disgraced yourselves before all the provincial militia. As I told you this morning the Redhairs were committed to your charge. You were enjoined to take the greatest care of them, and not to let them go forward in advance of you. What do you mean by talking of its causing trouble if you cut the foreigners down? When an insufferable wrong has been done, whether is it better to cut the offender to pieces, or to
come away without doing anything? Return immediately to the ship and bring back the Redhairs. Anxiety and hard work are to be expected at a time like this. I can't let you off. You must pluck up courage, and bring back the Redhairs at all risks."

They had not been long dismissed when news came that the foreigners had embarked in several small boats, and were making the circuit of the harbour. Scarcely had orders been despatched to the guard-houses along the shore to capture them at all hazards, when messengers in hot haste entered to Government House by the back and front doors simultaneously, crying out, "The foreigners have landed at the great jetty, and are nearly before the gate!" Tokuyemon rushed to inform the Governor, and requested his permission to go out and take the foreigners prisoners. "Go," said the Governor, patting him on the back, "and distinguish yourself." Tokuyemon ran across the courtyard for his war hat, and told his servant Heihachi to bring his lance, and another servant named Banzô to look after the house during his absence. Banzô, however, brought the lance, and on Tokuyemon asking him angrily where he was going, replied that he wanted to accompany his master and kill somebody. He insisted on coming, and would not be refused. As Tokuyemon was going out, he was stopped by one of his comrades, who expressed his fears that, as the foreigners were armed (328) with pistols, it would be useless to resist them without armour, and reminded him that the guard of the Government House had gone away. He caught Tokuyemon by the sleeve and pulled him back, beseeching him not to go. "You need not come," said Tokuyemon. Shaking him off, and so saying, he sallied out, shutting the gate behind him. But in his hurry he had forgotten his lance, so the gate had to be opened again. Four of five others then came forward and offered to accompany Tokuyemon, who accordingly took command of the party. At this moment, a great noise of voices was heard in front of them, and something red could be seen rapidly approaching. Tokuyemon, who imagined that the
foreigners were upon him, grasped his lance firmly, and prepared to receive their onset. He was undeceived by a voice, which he recognized as that of Nakayama, the Interpreter, calling out him. "Here are the Redhairs, who have came to you for protection against the attack by the foreigners." Tokuyemon, after ordering the Dutchmen to be shown into the office, proceeded to the jetty, when he was told that the foreigners had not landed there, but farther along the shore. He hastened to the spot indicated, only to be told that the landing had taken place still farther on; and in this way, poor Tokuyemon spent half the night in pursuit of foreigners who, as it turned out, had never even attempted to land at all. He found time, however, to describe in his diary the panic among the inhabitants of Nagasaki. "Suddenly," he says, "a great outcry arose in the harbour. In all the Chinese junks the sailors burnt fires and made signals to their countrymen on shore by beating great gongs. Several boats put off to their assistance. On board the Japanese vessels in harbour it was thought that a fire had broken out among the Chinese junks, or that they had been set on fire by the foreigners. On shore, a report was current that the Russians had landed, and many of the towns-people prepared to fly to the hills. Men and women rushed wildly about the streets, and the sound of voices by sea and land was like the noise of great waves breaking on the beach. Rumours of all kinds were afloat,—that a boat full of women had been captured at Inasa—that a fishing-boat had been taken at Kitasezaki—that Hizen (329) soldiers had been made prisoners at Fukahori—that all the provisions had been seized—that the water-gate at Mume-gasaki had been broken through, etc." And yet the only cause for all this alarm was the circumstance that some of the Phaeton's boats had been sent round the harbour to take soundings.

* Russian ships had made piratical descents in the north of Japan a few years before, burning and plundering the villages, and carrying off some of the inhabitants. An account of these raids was given to the Society in June, 1873.
When Tokuyemon returned to the Government House he found it almost entirely deserted. The only person he could find was one Baiyei, the Governor’s physician, who said that everybody was sick:—their loins were out of joint from cowardice, and he would like to have the chance of prescribing for them.

Most discouraging reports now came in from all quarters. One officer reported that he was so short of men that he could not get his cannon placed in position, and in reply to frequent demands, nothing but excuses could be got from the Daimiōs’ officers who were in charge of the principal military preparations.

The Governor, however, put a bold face on it. In spite of the remonstrances of an interpreter, who told him he might as well try to batter down a stone wall with eggs, he insisted on sending off a boat to demand back the Dutchmen, gave orders to cut down the foreigners wherever they were met if they did not promptly surrender, and commanded his own barges to be manned and armed. The equipment for each barge consisted of ten lances, five bows, and six matchlocks. The Dutch Kapitan was sent for, and told that his mind might be at ease about his captured countrymen, for that they would most assuredly be restored. The Kapitan took this opportunity to offer his own ideas on the subject. He said that “although this ship acted as if she cared for nobody, if he were in his own country and had the necessary materials, he could stop and sink her, or break her to pieces, as he pleased. But he was a stranger in a foreign land, and could do nothing.” Tokuyemon asked him what his plan was. Particulars are not given, but it seems to have consisted in preventing the foreign ship from leaving the harbour by a bar of iron chains stretched across the entrance, and then attacking her with fireships and by cannon planted on the hills. The Japanese officers seem to have adopted this idea, if indeed they had resolved on any plan at all, which may perhaps be doubted.

Towards morning, a message was received from the
foreign ship to (330) the effect that the Dutchmen would be
given back in return for a supply of wood, water and provi-
sions. Amidst all the warlike talk and preparation, it is
not a little surprising to find that this demand was promptly
complied with, at least in part, although the Governor
does not seem to have been consulted in the matter. At
the suggestion of the Kapitan, the boat with the supplies
bore the flag of the Dutch Trading Company.

On the morning of the day following the arrival of the
ship, which was now discovered to be an English man-of-
war, the Governor sent off a despatch reporting the occur-
rence to his Government. It was dated on the previous
day, in order to convey the impression of greater prompti-
tude, and was to the following effect:—"A foreign ship
has entered the harbour, and has seized some Redhairs.
The Redhairs will be brought back, and inquiry made into
the reason for this unwarranted visit, after which the ship
will be burnt, if necessary."

But the preparations with that object went on badly.
The officers sent to inspect the troops reported that the
guard-houses were short of men, and that things looked
unsafe. Another officer, who was ordered to the batteries
on a visit of inspection, replied candidly that he had no in-
clination to perform the duty of inspector, and that, besides,
he had no clothes suitable for such a service. His duty
had therefore, to be transferred to others. Tokuyemon
notes that for this behaviour he was afterwards condemned
to one hundred days' imprisonment in his own house.
Nothing could be heard of the reinforcements ordered from
the neighbouring provinces, and the chief Hizen general,
on being asked how the plan for burning the ship was
progressing, replied that he personally knew nothing about
it, but would instruct his lieutenants to furnish a written
report on the matter. The diary records numerous other
circumstances which illustrate the mismanagement and
cowardice which prevailed on all sides; but it is needless to
multiply details. The Governor himself was almost the
only exception. It is impossible to read without sympathy
the account of the struggles of this brave man to infuse some of his own courage and energy into the incompetent and cowardly officials by whom he was surrounded.

At four o'clock in the afternoon the officers despatched to the ship returned, bringing with them one of the Dutch clerks and a letter for the Kapitan. This letter was understood to contain a further (331) demand for beef, vegetables and water, accompanied by a threat that if these articles were not supplied, all the Japanese and Chinese vessels in the harbour would be set fire to and destroyed. The Governor was indignant at the tone of this communication, and refused to send the articles asked for. No sooner had he retired, however, than the Kapitan came and begged urgently that the provisions should be sent. A promise had been given, he said, under the seal of the Company, which should under no circumstances be broken. It was, therefore, arranged that the articles should be got ready and sent off to the ship in the course of the evening.

The Governor had now lost all patience with the inaction of the military officers. He declared that, ready or not ready, he would set out at once with such men as he could collect, and proceed to the scene of action. Flags, spears, drums, kettle-drums and other warlike gear were set out in order in the principal hall, the head cook was ordered to take charge of the commissariat, and repeated urgent messages were sent to the Daimiōs' officials, from whom only excuses and remonstrances were received in reply. One fortunate fellow forced himself into the Governor's presence, and besought him to think of the anxiety his poor old mother would suffer if he took the field. He got a very surly answer for his pains. But the Governor was at last obliged to yield. As Tokuyemon says:—"Such being the state of affairs, and being so short of men, all prospect of burning the ship became hopeless. On the contrary, any ill-considered project of that kind would only result in the destruction of our own junks." Orders were accordingly given to abandon the attempt, and to allow the ship to take her departure as soon as the articles demanded had been
 supplied and the remaining Dutchman recovered. His release was obtained without difficulty, and the Japanese now learnt for the first time the object of the strange ship's visit. The Dutch clerk told them that the Phaeton had left England eight months before. On arriving in Bengal, information had reached them that two Dutch ships were going to Nagasaki this year, and they had accordingly come with the intention of capturing them. Their reason for seizing the Dutchmen was that the language and written character of England being different from those of Japan, they had detained these men as interpreters. They said they had no wish whatever to insult Japan, and that now they knew the Dutch (332) ships had not arrived, they would sail at once, but as they were badly off for provisions, fire-wood and water, they had asked for a supply of these articles. They were about to sail immediately, and would not return to Japan."

With the safe return of the two Dutchmen and the news that England and Holland were at war, the desirability of "severely punishing the English" again suggested itself, but it was thought prudent first to hear what the Kapitan might have to say on the subject. His reply was characteristic, and evinces a shrewd appreciation of the circumstances, and of the character of the people he had to deal with. It was as follows:

"Inasmuch as the foreign ship has committed no violence towards Japan, and has sent back the two clerks unharmed, it is desirable that she should be commanded to depart at once. It is impossible to justify her unauthorized entrance into this port, but still it will be better to treat her with clemency. If severe measures were taken, greater feelings of hatred [towards Holland] would be kindled in England and Russia, who are allies. This would make trade impossible, to the great injury of our interests. Their hatred to Japan would also be intensified, and on the whole it is better that when, in future, ships approach the Japanese coast, they should be treated with kindness."

On the following day (the second day after the arrival of
the *Phaeton*), a letter in "cross (i.e. European) characters" was sent off to the Anglian ship, commanding her to put to sea. Some anxiety was felt lest she might not obey this order, as beef (one of the articles demanded) had not been sent. But the Japanese were relieved from all further apprehension about 2 o'clock in the afternoon, when, "a gentle breeze having sprung up, the ship swung round, and, setting three sails, went off like an arrow. As far as Cape Nomo three sails were set, at the Gotô Islands five, then ten, after which she was speedily lost to view."

Meanwhile troops had begun to pour into Nagasaki from the neighbouring provinces, and much zeal was displayed in keeping a strict watch on the departing ship from the shore, and from boats which were sent out to observe her motions. The military officers now reported by letter that, in accordance with the instructions received on the previous day, preparations had been made at Fukahori to burn the foreign ship, (333) fire-junks had been prepared, and they were on the point of reporting that everything was in readiness to carry out the plan without fail, when the message came ordering them to desist from the attempt.

At this point the official diary comes to a close. It is, however, supplemented by notes which Tokuyemon added at a later date from his recollection of what had taken place. Some of these have been incorporated into the preceding narrative, while the remainder enable us to continue the story a little further.

"I accompanied the Governor," proceeds Tokuyemon, "to his balcony, where we watched the ship sailing swiftly away. His vexation was plainly visible in his face. He soon came down again, and I followed him into the sitting room and tried to console him. 'Well, well!' said I, 'she has got away safe after all. But, as you said in your report, you would have burnt her, if possible. It was not your fault that the Daimiôs had withdrawn so many of their men, and that there no large junks here. You consulted the Kapitan, you looked to the arming of the batteries and the fighting junks, and in short neglected nothing.' "You
and your colleagues,' replied he, 'have done your best; but when I go back to Yedo, I may feel assured of dismissal with disgrace.' He turned away and busied himself for a while writing letters to his family. I moved aside, and was looking over some old archives, when the Governor suddenly came up close to me, and laid his hand on my knee. He began a speech of thanks for the faithful services I had rendered him, but broke down, and burst into tears. I was taken by surprise, and attempted to get out a few self-depreciatory words, but a choking sensation in my throat stopped my utterance, and we both wept together. The regret that the foreign ship had escaped, penetrated to our marrow, and, as it were set our whole bodies on fire. On that night, I sat with the Governor as usual, drinking with him from supper time until past ten o'clock. His physician and some others of his staff had been invited, and the Governor appeared in better spirits than usual. We all retired after ten o'clock. That night the town of Nagasaki was buried in profound slumber for the first time for several days. I returned to my quarters, where, overpowered by the heat, I fell asleep over my writing table, and my servants spread a mosquito net over me without my being conscious of it. I think it must have been midnight when Tanabe came rushing in by the front entrance, weeping and exclaiming, 'Haven't you heard that His Excellency has committed suicide?' I sprang up, not knowing east from west, or what I was doing. I then ran to the Governor's apartments; and, just beyond the sitting-room, in front of the image of the guardian god, and close under the hedge, I found that he had spread a carpet, seated on which he had made a long narrow wound below his navel, and had then thrust the dagger through his throat up to the hilt. It was a magnificent harakiri! The spirit had already departed. Watanabe tried to pull out the the dagger, but it was fast clutched in the dead man's hand. What a pitiable sight! Alas! the day, on which it pleased Heaven to allow so brave a gentleman to perish!"

At noon on the day following, General Kuroda, who
commanded a force of 8,000 men, furnished by the Daimiō of Chikuzen, came to the Government House and reported that, on hearing of the departure of the foreign ship, he had countermanded the troops which were on their way to Nagasaki by land, but that, as the naval force was expected very shortly, he wished to see the Governor in order to consult with him respecting the measures to be taken. Tokuyemon left the room for a little, and then, coming in again, said: "The Governor is much pleased with your promptitude in bringing your men from so distant a province. It would have given him great pleasure personally to compliment you on the energy you have shown, but since last night he has suffered greatly from spasms and is confined to bed, so that he is obliged to reply to you through one of his household. He has no business to transact with you, and he therefore trusts you will not hesitate to return to your province as soon as it may suit your convenience to do so."

This neat specimen of official unveracity was perhaps not intended to deceive General Kuroda, and at any rate it had not that effect. He thanked Tokuyemon for his courteous reply, but the tears rolled down his cheek. He had evidently divined from the countenances of the Governor's household the sad event which had taken place. Tokuyemon was deeply impressed by his behaviour. "I had no acquaintance with this gentleman," he writes, "but his tears seemed to me the tears of a brave man. His feelings filled his breast, and overflowed into his face. Even now, I often think of him with admiration."

And now the fleet which had been destined for the destruction of the English ship entered the deep inlet which forms the harbour of Nagasaki. Tokuyemon becomes quite poetical in describing the spectacle,

"Swift as an arrow, the squadron of eighty ships entered the great inlet seventeen miles long by seven miles wide. They approached the anchorage in line like a flight of wild geese, gradually coiling themselves up into a circular form

5Tokuyemon's figures may be divided by two, at least.
like a chrysanthemum, with the admiral’s ship in the centre. Unfolded, their array would have filled the whole harbour like a great sea-serpent. The signal for advance was a drum; for halting, a gong. The waters of the bay were stained with the reflections from their green and crimson screens: their flags waved to the wind, and the swords and spears glanced in the sunlight. The rows of matchlocks in sheaths of red cloth, which were leant over each ship’s side, reminded one of the claws of a lobster, while the gold and silver ensigns and standards dazzled all beholders. Every one was full of admiration."

Here ends the story of the "Anglian outrage at Nagasaki." In the concluding pages of his manuscript, Tokuyemon has affectionately treasured up his recollections of the master whom he loved so well. He enumerates the presents he had received from him, and dwells regretfully on the evenings which he and his colleagues had spent with him, reading in turn from some Chinese historian, or amusing themselves by capping verses. "But it must be admitted," adds Tokuyemon, "that we were often grievously tormented by mosquitos, and after a hard day’s work in the office, would rather have been in bed." He also mentions his ideas of extending Japanese trade to Anam and other commercial centres in the east of Asia, and of colonizing Yezo by means of the profits to be derived therefrom.

It only remains to add that the principal military officers who were responsible for the defence of Nagasaki paid the penalty of their cowardice and incompetence by an enforced harakiri, and that Tokuyemon was awarded a pension in recognition of the zeal which he had displayed.

It would be a mistake to draw any sweeping conclusion as to the Japanese character from the cowardice and incapacity shown by so many of the Nagasaki officials on this occasion. Not only their ancient, (336) but their most recent, history contains ample evidence that the Japanese are an eminently brave race. This story indicates rather that, even at the beginning of the present century, the
Taikunate was already far advanced in the process of decay which culminated in the Revolution of 1868. The account of the Russian descents at Hakodate, which has been already referred to, points the same moral. Ninety years is a short time in the life of a nation, and Japan may well be congratulated on the change which has been brought about during the interval. The jealous exclusiveness which formerly invited affront has disappeared; while on the other hand, if any real insult were offered, Japan would now be able so maintain her dignity far more effectually than was possible for Matsudaira Dzusho no Kami, the Taikun's lieutenant at Nagasaki in 1808.
A General Meeting of the above Society was held at the Shōheikuwan, Seidō, Tōkiō, on Tuesday, 13th May. The Rev. Dr. Syle, President of the Society, occupied the Chair.

The minutes of the preceding general meeting, having been already published, were taken as read.

The Recording Secretary announced the election of the following gentlemen as members of the Society:—Dr. Nelson, R.N., Mr. J. G. Kennedy, Rev. M. C. Harris, Mr. T. Alexander, Dr. Laurensen, R.N., and Rev. C. S. Malan.

The Librarian reported the receipt of various periodicals, etc., also a copy of "Yeigo Henkaku Ichiran," presented by the author, Mr. B. H. Chamberlain.

The following gentlemen were elected from among the members resident in Tōkyō, to serve on the Committee for drawing up a list of proposed officers for the ensuing year:—Mr. R. W. Atkinson, Lieut. A. G. S. Hawes, R. M., and Mr. F. F. Jewett.

Mr. R. W. Atkinson read his paper entitled, "Notes on the Composition of Ame."

Specimens of the different kinds of ame were exhibited.

The President said that the Society owed rather an unusual sort of thanks to Mr. Atkinson, as bringing before them a subject involving questions of public health. Sweetmeats had much to do with children's happiness and health. Some doctors said that most children's stomachs were ruined by the time they were seven years old. Excess relaxed and impaired digestive power, while the colouring matter so often contained in sweetmeats acted as a poison. This subject touched a good many important points. As an article of trade, ame had considerable interest. Then its use for beer, with a view towards the substitution of that liquor for sake, demanded consideration. In its various aspects, it had a not unimportant bearing on the national health and habits.

Dr. McCrate recognized the solid ame exhibited as identical with a substance prepared in China, from malted barley and glutinous rice, in precisely the same way as that described by Professor Atkinson. In China it was hawked about the streets, and exchanged for cast-off clothing, and various other second-hand articles. There was also a liquid, similar in appearance to some of the specimens exhibited, which was blown into various shapes for sale to children, but the speaker had never heard of any use being made of it in the arts in that country.
In connection with the subject of fermentation generally, he expressed a wish that Professor Atkinson would turn his attention to the use of the pulverized leaves of the Polygonum Alatum, in China, as a substitute for hops, in making bread, and (338) also in the fermentation of the rice wine or tsin of China, corresponding to the sake of the Japanese. The plant flowers late in August or in September, but the leaves are gathered in June, dried, powdered, and made up into cakes with wheaten flour. These are dried and kept for bringing about fermentation.

Mr. Atkinson, in reply to a question of the President, gave a short account of the history of the discovery of the new sugar, Maltose. Some chemists had refused to admit the existence of such a body, but he (the speaker) had proved, at least to his own satisfaction, that it not only existed, but was capable of being separated in the pure, crystalline condition, possessing then all the properties assigned to it by its discoverer.

Mr. B. H. Chamberlain then read Mr. W. G. Aston’s paper on “H. M. S. Phaeton, at Nagasaki, in 1808.”

The President, in returning the thanks of the Society, said this that paper spoke for itself. It was extremely interesting as showing a phase of Japanese character which had its charm. He referred to that exemplified in the conduct of the Governor. He asked Mr. Chamberlain what material there was for a history of Japan.

Mr. Chamberlain answered that the greater part of the historical writings consisted of mere annals, and were very dry reading.

The meeting was then adjourned.
A HISTORY OF JAPANESE ART.

BY W. ANDERSON, Esq.

[Read June 24th, 1879.]

In all countries the earliest manifestations of art appear fitfully through a hazy atmosphere of legend, now taking one form, now another; but its remote origin is always hid in prehistoric darkness, and the rare examples of apparently rudimentary results that time spares to us seldom provide food for more than empty speculation as to the period of conception of the primitive models. The difficulties of investigation are particularly great in Japan, a country peopled by at least two distinct races, of which the later and dominating must have imported into the conquered islands many relics and traditions of a fatherland possessing a civilization far in advance of that Aino aborigines of their new home. Speculations in this direction must, however, be left to the archæologists, who have already in recent times brought to light many suggestive facts.

At present we have only to conjecture that art, arising as an appendage to utility, was first applied to impress upon the rough earthen vessels, originally constructed without reference to æsthetics, such forms of symmetry and grace as would not interfere with their practical aim; a little later, the plastic clay of the potter would be made to imitate the contour of the simpler native objects; and, with a surface fitted to retain an impression, and a tool suitable to make a mark, recognizable outlines of familiar things would soon appear in a form capable of preservation. To such productions in the round and flat the dawning taste of the savage would add the crude pigments that nature placed at his disposal, distributing them in harmonies and
contrasts and in propriety of choice under the guidance of the teachings drawn by his unripened powers of observation from his surroundings in the animal, vegetable and mineral worlds. So much effected, the foundation of Art in all its phases exists ready for development by the few more highly gifted minds that the (340) ages may bring forth, aided by the advantages of the improved materials that industrial progress renders available. But this stage would be reached by slow and hesitating steps, and would be unlikely to present any grand epochs that could hold a place in the tradition-monger's stock. And thus we find in Japan that written records give no clue to the time or manner of inception of any section of artistic labour, but refer us back to simple fable, as though to show the hopelessness of more advanced research; and even when at length, the infancy of Art past, we meet with particulars of date, name, and circumstance, we still must stop to winnow from the grains of fact a dusty cloud of fiction before the results of our enquiry can be fitted to cohere into historic form.

The following arrangement of the subject will be adopted, but the frequent combination of one branch of art with another renders it impossible to draw a sharp line of demarcation between the different sections named:

1.—Pictorial art.
2.—Plastic art.—Clay figures, pottery and porcelain.
3.—Sculpture in wood, stone, metal, ivory and other materials.
4.—Engraving upon wood and copper for printing.
5.—Lacquer.
6.—Miscellaneous works.

It is necessary to inform the reader that the present sketch, the first portion of a general review of Japanese art, is limited to the chief historical facts in connexion with the development of the different branches. The consideration of characteristics and æsthetic qualities will form the subject of a separate essay.

Architecture is referred to only in connexion with its artistic decoration.
PICTORIAL ART.

The History of Pictorial Art in Japan, according to the Catalogue of Families (Shiyauzhiroku), begins as early as the 5th century of our era, with the arrival of a Chinese painter of Imperial descent, named Nanriu or Shinki, in the reign of Yuriyaku Tenwau (A.D. 457-479.) Intercourse with Korea is said, however, to have dated from about 147 B.C., and a circumstantial account is given of the advent in 285 A.D., of a (341) Korean savant named Wani who brought a number of Chinese books, and was appointed tutor to the Prince Imperial. If these stories be true, there is no doubt that something must have been learned of Chinese or Korean art before the 5th century, but no evidence of the existence of any such knowledge is now to be obtained.

Nanriu, like his somewhat apocryphal literary predecessor, was well received at the Court, and settled permanently in the new land, where he and many generations of his descendants found honoured employment. The fifth in succession from Nanriu attained so great a reputation as an artist that he received from the Emperor Tefji the title of Yamato Weshi (the painter of Japan), and from the Empress Shiyououtu, in 770, the surname Ohowoka no Imiki. The family is said to have boasted many skilled painters, but no account is preserved of any of their achievements.

In the sixth century flourished Shiyououtu Taishi, the famous son of the Emperor Youmei. In addition to his preëminence as a priest, scholar, and calligrapher, he was noted for artistic skill, and works still extant in wood-engraving, wood-carving, and painting are attributed, with more or less probability, to his hand. The Hoöteu Guwashi describes a life-size portrait of the great Buddhist, said to have been painted by himself, which is kept at Tenwauzhi in Ohosaka.¹

The Nihoögi (written in 720 A.D.) refers briefly to several painters, mostly Koreans, engaged at the Court in the 6th and 7th centuries, but gives no particulars of interest.

¹ The authenticity of this picture is very doubtful.
In the early part of the ninth century, the historical mists begin to disperse, and we find standing in moderate relief the figure of a Korean, Yofuku, afterwards called Kudarono Kahanari, reputed as a mighty bowman and dexterous painter, who held a prominent position at the Court of Saga Tošiwau. About this time, also, Kuukai (canonized as Koubofu daishi), a second Shiyaotoku Taishi, an energetic promulgator of Buddhism and secular learning, returned from a visit to China, bearing many specimens of the art of that country. He contributed many paintings of Buddhist subjects from his own brush, and in his nephew, Chishiyodaishi, and his pupil, Shišaisai, left worthy successors. These also had the advantage of a residence in China, and made many additions to the store of artistic models. It is related of the latter that after the (342) death of Koubofu daishi he commenced a portrait to perpetuate the features of his beloved master, and when his task was near its end, the ghostly form of the departed original appeared before the picture, and dotting the pupils in the yet unfinished eyes, at once consecrated and completed the work of reverential affection.

Whatever pictorial art existed in Japan up to this time could not be considered really Japanese, as the few native painters whose names have reached us were at best but skilful amateurs. During three hundred years Art was a cherished exotic, but had not struck root in the new soil, and it was not until the ninth century had begun to wane that its naturalization began. The first true Japanese artist was Kose no Kanawoka, a court noble of ancient lineage, whose name, handed down by history and fiction, receives in Japan as full a meed of veneration as that accorded in Italy to the fathers of the new art destined to replace the giant development that once existed in Greece. He appeared at a time when the cultivation of the arts of refinement had acquired an extraordinary prominence. For two hundred and fifty years Japan had possessed colleges, fully organized, teaching music, astronomy, mathematics, medicine, philosophy and other branches of knowledge. Poetic-
al composition on the Chinese model was the ambition of every educated mind, and although the palmy age of the great native poets was passing away, the influence of their works had reached its zenith. Hitomaro and Nakamaro had been dead upwards of a century. Narihira, the patrician Antinous, had been crowned king of poetry fifty years before. Wono no Komachi, as renowned for beauty as for literary genius, had long passed the time of triumph when her potent verse brought a famine-dispelling rain upon the parched fields, and had ended her days in self-imposed misery and destitution. Koubofu daishi, the apostle of letters, had been translated, like Elijah, living to the skies, but in Sugawara no Michizane (better known by his posthumous title of Teišiši Sama) learning still owned one of its brightest ornaments and art a warm patron and distinguished amateur. The third great representative of native calligraphy, Wono no Toufuu, whose name rivals that of Kanawoka, was yet unborn, but stories of the supernatural skill of Koubofu daishi hallowed the handicraft. Sculpture on wood and stone was largely practised for religious purposes, and three schools of painting had been made known by foreign intercourse, the (343) Kara-we or Chinese and Korai-we or Korean, which may be grouped together, and the Butsu-we or Buddhist pictures, wholly distinct in style from the others and probably of Indian birth. The Court, removed from Nara to Kiyauto about 80 years before, was in its heyday. The Emperors, leaving the cares of government in the hands of the Fujihara nobles, devoted their energies to the study of religious lore and the culture of letters, and had already favoured the development of art by establishing an office, called Wedokoro, which was to be filled by the most distinguished painter of the time. Of the people, now separated from the military class, nothing is to be learned; they appear to have always been too well disciplined to thrust themselves into disrespectful prominence in the history of their country, but it is to be feared that the charming pursuits engrossing the minds of their rulers left
them at the mercy of multitudes of official birds of prey. The day was certainly far distant when the artisan or trader might hope that learning or talent would place his name upon the list that fame had hitherto reserved for his superiors.

Kanawoka is first heard of in the court of Seiwa Tenwau, where, under the instruction of a Chinese emigré, named Gokiyoshi, "by studying the works of a great Chinese artist named Godaushi," he developed the remarkable skill that has made him one of the greatest as well as the first of the painters of Japan. Among his works, tradition speaks of many designs in landscape, animal life and figures; but the best known are the portraits of the learned men of China (painted in A.D. 888), said to have been copied from a Chinese original upon the sliding doors of the Imperial palace, Shishifdeki, at Kiyauto. One of his pictures, a kind of altarpiece in the style of the Butsu-we, representing Fudou with Seitaka Douzhi and Kōfūgara Douzhi, may be seen at the Temple of Daiyouzhi in Nishinokubo, Toukiyau; this, although conventional in treatment, compares not unfavorably in its bold expressive outlines and rich harmonious colouring with the productions of the old Italian masters of three centuries later. It is greatly to be regretted that so few monuments of his power are still remaining.

The estimation in which he was held by his countrymen is shown less by the honours lavished upon him by the five successive Emperors under whom he served, and by the devoted friendship of Sugahara no Michizane and many other of the leading spirits of the court, than by the wonderful legends invented by some, and firmly believed by the (344) rest, of his admirers. Every child in Japan has heard of Kanawoka's horse, painted on a screen in Niwa wazhi temple near Kiyauto: a strange picture, which so far exceeded the limits of mere imitative art that in the hours of darkness it would quit its frame and gallop wildly through the cultivated land around, till angry peasants, recognizing in the matchless form of the mysterious depredator the Kanawoka steed, and finding full confirmation in the damning
evidence of the mud that yet clung to its shapely hoofs after its return to pictorial existence, ruthlessly blotted out the eyes of the masterpiece; and thenceforth the nocturnal excursions ceased. A rival horse in the Imperial treasury, a creation of the same brush, was wont to devour the Lespedeza flowers, till by a happy inspiration it was firmly tethered to its panel by a painted rope.

He left three sons, Kištada, Ahimi, and Fukaye, all clever painters, and the Kanawoka riū was maintained by several descendants and pupils, who bore the name of Kose. Kose no Asomi Hiotaka, his grandson, was in especial favour at Court. He was noted as an earnest disciple of Buddhism and devoted his talents chiefly to religious art. One of his paintings, a representation of the tortures of the damned in Hades, still exists in the temple Chiyaurakuzhi near Kiyauto. It has a curious history that recalls the closing episode in the life of our own Hogarth. On commencing the gruesome work, the painter became inspired by a mysterious foreboding of approaching death, but with the same mournful perseverance that sustained Mozart in the composition of the Requiem fated to bewail its author's death, he laboured unceasingly until the sickening details filled the great sheet before him, when with the last touches, the strained energies gave way and the artist expired, brush in hand, in front of his ill-omened masterpiece.

The period following the death of Kanawoka was, however, one of art decadence, and for a time we hear of little else than the fabulous exploits of Minamoto no Yorimitsu, Watanabe, Kištoki and the other heroes who performed mighty quests to destroy ghouls and demons, to rescue imprisoned damsels from giant robbers, and to furnish future generations with nursery legends that rival those of Valentine and Orson and the Seven Champions of Christendom. It is not until the beginning of the eleventh century that anything worthy of record in art appears. At this time arose Moto-mitsu or Takumi no Kami, a pupil of Kose Kišmochi. His paintings were chiefly representations of court life, and (345) as they differed in motive and to some extent in style
from the works of previous painters, Motomitsu is spoken of as the originator of the Yamato-we (or Waguwa riu, the Japanese school). The distinctive characters of the Yamato-we were the great prominence, given by brilliancy of colouring, to mere details of costume (hence the title nishiki-we sometimes applied to the new manner), and the extreme conventionality and incorrectness of the human figures, which were ordinarily stiff and ungraceful in attitude and curiously imbecile in feature. In the same century appeared Kaku-yuu or Toba Souzhiyau, a high rank priest of the Tezai sect living at the Temple of Miwidera in Afumi province, who was celebrated for humorous sketches and originated the caricature pictures called Toba-we. His style was simple and original, and the drawing, as seen in an admirable specimen in possession of Mr. Ninagaha of Toukiyau, skillful and vigorous. His subjects and those of his followers are characterized by much genuine wit, but unfortunately too often in that primitive form which derives its chief force from the indecency of its suggestions. The cleverness of execution that distinguished the works of this school is rarely seen in the general productions of the Toba-we, in which carelessness and extravagance of design are apparently relied upon as an important element of the joke. Toba Souzhiyau must not be confounded with Wono no Souzhiyau, a priest of the Mitsushiu sect, who nearly a century later adopted a new style of drawing, to which the title "Wono riu" has been given.

The quiet reign of fine arts and polite learning at the Court of Kiyauto was approaching its term. Kiyomori, the actual ruler of the country, was himself a painter, but was too deeply occupied by his ambitious projects to lend any substantial encouragement to the development of art, and the civil discords which, in the latter half of the 12th century, raised Minamoto no Yoritomo to the Shiyaugunate and destroyed the Tahira clan, were very unfavorable to the progress of painting. It was not until long after the Ashikaga branch of the Minamoto family was fixed at Kamakura, and after the rivalry of the Northern and South-
ern Courts was terminated by the establishment of Go-Komatsu Tenwau at Kiyauto, that the languishing art began to revive. A few names of those who worked on in the troubled interim are still preserved. Fujihara no Nobuzane, whose father Takanobu was a pupil of the (346) Yamato riu, attained high repute for paintings of portraits and Court ceremonials in great elaborateness of detail. His most celebrated work is a portrait, painted in 1221, of the poet Hitomaro, who five hundred years after his death presented himself to the artist in a dream. The fidelity of Nobuzane's representation is said to have gained the admiration of the whole court, but whether the critics had the same opportunities as the painter of knowing the lineaments of the original we are not told. The portrait is engraved in the Wakan-mei-hitsu-guwa-we, but if the cut be a correct copy, the popularity of the work could scarcely have been due to its artistic merits.

At the same time lived Takuma Tameyuki, a court painter in the service of Go-Horikawa Tenwau. He is referred to as the chief of the Takuma riu, a school which, however, does not differ in any important respect from that of Motomitsu. Sumiyoshi Hofugen and Ahadaguchi Hofugen were celebrated painters in the style of the Yamato riu in the 13th century.

At the beginning of the thirteenth century commenced the great Tosa Riu, so called from the adopted name of its founder, Fujihara no Tsunetaka, the fifth in descent from Motomitsu. This school, which in a modified form exists at the present day, was really a development of the Yamato riu.

Painting revived under the Ashikaga dynasty about a century after the restoration of Italian Art by Cimabue, Gaddo Gaddi and Giotto. The Shiyaugun Takauiji was an artist as well as an art patron, but the impulse given by his example did not produce any important results till long after his death, and then only after an infusion of foreign blood in the person of Zhiyosetsu, a Chinese priest who came to Japan about the beginning of the 15th
century, and established a kind of monastic school at the
temple of Soukokuji in Kiyauto. So successful was the
instruction of the new comer that the names of three of
his pupils, Setsushiu, Shiubun and Kano Masanobu are
still venerated as those of the fathers of modern art in
Japan. His own pictures are very rare; one of them,
rather inferior in composition and drawing, is still preserved
at Soukokuji, but he is renowned rather as a teacher than
as a painter. His style was that of the great artists of
the Sung Dynasty.

(347) Teu Deüsu or Miyauteu, a Buddhist priest, shares
with Zhiyoseitsu the honour of ushering in the art renais-
sance of the 15th century. As a painter of Buddhist
pictures he is unequalled, and must be considered as one of
the most original artists of Japan. Child-like in simplicity,
profoundly religious, passionately devoted to his art, he
offers, in character as in talent, a remarkable parallel to his
European contemporary, Fra Angelico, the Italian painter
monk, and like him worked throughout a blameless life in
priestly poverty and seclusion, despising temporal reward,
and ended his days peacefully in the holy retreat that
formed his only home.

In commemoration of his youthful talent, the Hoüsteu
Guwashi relates that, on one occasion during his novitiate
at Toufukuzhi, when he had just completed in stolen
moments a portrait of Fudou, he heard the footstep of his
stern superior Daidau, who had hitherto repressed his
pictorial tendencies, and fearing reprimand he tried to
conceal the picture between his knees, but the flaming
environment of the god rose up and betrayed the presence
of the sacred work. The astonished Daidau, thus convinced
of the divine inspiration of the boy, thenceforth placed
no obstacles in the path of his artistic career. On the
same authority we learn that after many years of honoured
labour, when his patron the Shiyagushi Yoshimochi asked
what reward he would receive, he replied, "For money,

2 Some authorities claim him as a native of Kiushiu, but there
appears to be little doubt of his Chinese origin.
treasures and rank I have no need; one change of raiment
and a pot of rice suffice for my daily wants, but I humbly
ask that the cherry trees which the priests have planted in
the temple grounds may be cut down by my lord's order,
lest in future times the sacred garden may become degraded
to a park of pleasure." The Shiyauguñ, surprised at the
modesty and unselfishness of the request, did as the priest
desired, and to this day the wish of Teu Teñsu has been
respected by the monks of Toufukuzhi.

Some of his pictures are still in existence. An enormous
"Death of Buddha," 39 feet long by 26 feet wide, painted
in 1409, and the portraits of the Sixteen Rakñ, and of
some Chinese Señniñ were preserved in Toufukuzhi; and
other portraits of the Rakñ are in the temple of Yuutefizhi
at Meguro. Several of his paintings are engraved in the
Wakañ-mei-hitsu-guwa-we.

Setsushiu was a native of Bitsuchiyuu province, and a
member of (348) the Wota family. At the age of 13 he was
entered at the temple Haufukuzhi as a novice and afterwards
became a priest. His youth was passed in gaining instruc-
tion from various artist monks, including Zhiyosetsu, and
in his early manhood, seeking to complete his education,
he undertook the voyage to China. There, in the fatherland
of the only art of which he had heard, he sought out the
greatest living painters, but disappointed in their skill he
held himself superior to their aid, and proclaimed that "as
he saw no man from whom he could learn, his masters
should be the mountains, rivers, grass and trees of China."
During his stay he was indefatigable in his work, and soon
attracted the notice of the Emperor and many powerful
patrons. His countrymen consider it the highest honour ever
conferred upon Japanese Art that he received the Imperial
order in China to paint a picture upon a wall in the palace.

He is said to have followed no school, but invented a
style of his own, which in hence distinguished by the title
of Setsushiu riu; but his early teaching by Zhiyosetsu and
others had imbued him so thoroughly with the rules of
Chinese art, that notwithstanding his professed adoption of
nature’s teaching, his pictures have all the artificiality of the Kara-we. He is chiefly celebrated for landscape; but, like most of the artists of Japan, did not confine his brush to any single class of subjects. His works, singularly striking in effect, though untruthful, were boldly sketched in ink without any attempt at elaboration; colour was seldom introduced, and then consisted of little more than a light, sparingly distributed tinting of prominent objects.

Setsushiu’s skill, like that of the other great painters of old times, was embellished by the ingenious inventions of his admirers. The Hoiteu Guwashi tells us that when a novice at Haufukuzhi he showed more devotion to art than religion, and in consequence often got into trouble. One day, as a punishment for some act of neglect, left in solitude lashed to a temple pillar, with his hands fastened behind him, he passed the weary hours drawing with his toe as a pencil, and his tears as ink, the outlines of rats upon the boarded floor. His superior, returning in compassion to set him free, was surprised to see a number of long-tailed vermin scamper off from beneath the boy’s feet. These were the supernatural results of (349) Setsushiu’s skill, startled into life by the approach of the monk and flying to preserve their miraculously acquired existence. Another story, more in accordance with the ancient Grecian legends, speaks of a painting of a sparrow around which the living birds would flutter, their deceived senses giving them no warning that they were wasting their time on a thing of ink and paper.

He was in the habit of preparing for his daily task by playing an air upon the flute, or singing a verse of poetry, after which, says the Guwashi, “he would paint like a dragon refreshed by contact with water.”

His powers suffered no impairment from age. Many of his most valued pictures were executed after the age of fourscore. He died aged 87, in 1507.

His followers were very numerous. A large number of artist priests of subsequent periods modelled their style upon his pictures. The most celebrated of his pupils were
Setsusoñ of Hitachi, Shiugetsu of Satsuma, and Dauañ of Yamato.

Shiubuñ and Woguri Soutañ were celebrated contemporaries of Setsushiu. The former, also a priest, in the style of the Sung and Yuan dynasties, following Ma Yuen, Hia Kwei and Ngan Hwui (Bayéñ, Kakei and Ganky), three of the greatest artists of these periods, and was the leading supporter of the parent school. He was equally skilful in landscape, figure, flowers, and birds. His views, chiefly in ink with a light wash of colour, were not unlike those of Setsushiu. The chief painters of his time are said to have used him "as a ladder to enable them to climb to the height of the Sung and Yuan dynasties." His most noted followers were Nouami and Sauami, both celebrated professors of the Cha-no-yu or Tea drinking ceremonies. Woguri Soutañ also painted in the Chinese style of the same periods. His works are now extremely scarce.

Kano Masanobu, the ancestor of the Kano line, was a member of the Fujihara family and a retainer of the most princely of virtuosi, the Shiyauguñ Yoshimasa. He was a pupil of Zhiyosetsu, and afterwards of Shiubuñ and Woguri Soutañ, but his powers of brush attracted no special attention until Setsushiu, having seen one of his pictures, recommended him to the Shiyauguñ as the artist most competent to complete an unfinished work left by Woguri Soutañ (350) at Kiiñkakuzhi near Kiyauto. His style of painting was a modification of that of the Chinese school, but without any marked characteristics. His reputation, considerable during his life, was afterwards eclipsed by that of his eldest son, Motonobu, the real founder of the great Kano-riñ. He died at the age of 97.

Kano Motonobu was born in the latter part of the 15th century. Of his early education there is no account, but we hear that many years of his youth were spent in Bohemian rambles through the country with empty purse and free from all encumbrance beyond a change of clothing and a set of painting implements, stopping to sketch whatever
pleased his eye, and paying his way with the produce of his brush. His personal character appears to have been simple and unambitious. The Hōōtei Guwashi, in which many detail of his life are given, says that "even in the days of his poverty he would never flatter a lord;" and that once when Ota Nobunaga, a redoubtable personage in history, attracted by the rising reputation of the then poor artist, went in lordly fashion uninvited into his atelier, Motonobu administered a silent reproof by working on, ignoring the existence of his aristocratic visitor, careless alike of the advantages to be derived from the support of such a patron and of the danger that might attach to his enmity.

The fame of the painter spread widely, soon surpassing that of any of his predecessors except Kanawoka and Setsushima, and his position in the artist world was confirmed by his marriage with the daughter of Mitsushige, then leader of the Tosa riu, thus uniting the two schools that for more than three centuries afterwards almost monopolized the recognized art teaching of Japan. His wife was herself an artist of no mean powers, and the union resulted in the birth of three sons, Iusetsu, Shiyouyei and Sukeyori, who all inherited their parents' talents, and a daughter, whose husband Yauetsu was adopted into the Kano line.

During his career he received the title of Hofugen, an honour afterwards conferred upon many of his descendants. He is commonly called, for the purpose of distinction, "Ko-Hofugen," or the Old Hofugei.

He lived, like Setsushima, many years beyond the allotted time, and worked with undiminished vigour almost to the last. He died in 1559, at the age of 84. It is worthy of notice that he was born in the same year as Michael Angelo, and the short but brilliant career of Raphael sped (351) during the vigour of the age of the man to whom Japan points as the author of its greatest school. Motonobu is remarkable for the extreme simplicity of his materials and the absence of any indication of laborious work. His chief pictures are ink sketches, plain or slightly tinted,
dashed in with extraordinary freedom and rapidity, but dis-
playing a force and suggestiveness that we look for in vain
in most of the pupils of his Academy. His early education,
probably transmitted through his father from Zhiyosetsu,
was of Chinese origin, and like Shiubui he followed the
styles of the chief artists of the Sung and Yuan dynasties,
It cannot be said that he diverged widely either in rules or
motive from his models, but his works nevertheless bear
the stamp of unquestionable originality. His landscapes,
mostly imaginary Chinese scenes, possessed a peculiar
charm of composition, and an expressiveness of manipula-
tion that makes the spectator forget the artificiality of the
elements of the scene and the defects of perspective, to
wander in imagination in the mountain passes, or follow
the winding paths leading through rice-fields to the farmer's
cottage, in the spacious panoramas that the Old Hofugeī
has spread out before him. His sages and immortals were
those depicted by scores of his forerunners in China and
Japan, but every figure derived, like Rembrandt's portraits,
some intellectual spark from the fire of the painter's genius.
Even the ancient dragon, whose image traced back in end-
less repetition, becomes lost in the unfathomable perspec-
tive of the past, showed on Ko-Hofugeī's easel an individu-
duality that separated it from the rest of its mythical tribe,
and supplied a new model for the future myriad adaptations
of its composite outlines to decorative art.

His success is usually considered greatest in landscape,
but so near to the Japanese ideal of perfection did he attain
in all other subjects, that he is likened to the great Chinese
caligrapher Waugishi,3 who, not decidedly superior to cer-
tain among his rivals in any one class of letter, surpassed
all in the versatility which enabled him to execute with
equal beauty every section of the art.

The foreign critic, looking for the first time at the few
remaining works of the artist, listens in wonder to the
praise lavished upon them; but with patient and repeated
study their influence gradually grows upon the sceptic, till

at length he becomes able to understand, if not to share, the enthusiasm of the painter's fellow-countrymen when they dilate upon his preeminence.

(352) In Motonobu's time the age of marvellous legends was not yet ended, and as might be expected, he shared with other leaders of his craft in the mythical renown so freely bestowed even upon men of lesser note. The story best known has a different form from those previously related. As told in the Guwashi it runs as follows. The Shiyaugun dreamed that a priestly figure appeared to him and said, "I am the Souzhiyau of Kuramadera. I pray your Highness that my portrait may be painted by Kano Motonobu, and that it may be placed in the temple in which my life was spent." The sleeper awoke in surprise, and on telling the dream subsequently to Motonobu, learned that he too had had a similar visitation. The painter was commanded to execute the picture, but when his materials were prepared he could remember nothing of the Souzhiyau's form, and as no portrait was extent, he knew not how to begin. At that moment a spider was seen crawling upon the untouched sheet, and as Motonobu looked, the web woven by the insect marked the outlines of the ghostly supplicant. Thus guided, the painter completed the portrait. The frame on which the picture was stretched was more than six feet square, too large to pass through the gateway of his house, and as the building was very old, he broke the entrance, and the painting was removed to its destination; but the children and girls of his time averred that as soon as the portrait was completed, a great wind threw down the gateway and bore away the picture to the temple Kuramadera, where it remains at the present day.

While Masanobu and Motonobu were inaugurating the Kano riu, Mitsunobu and his son Mitsushige, of the Fuji-hara clan in Kiyauto, were developing the rival Tosa riu. Mitsunobu was the originator of the fine-lined drawing that characterized the latter Tosa-we, and appears to have held the same position in the older school that Ko-Hofugen won in the Kano line, and it is to him that the Tosa riu
owed its ability to maintain a position in the race with its more youthful competitor.

No jealousy of opposition appears to have existed at any time between the two schools. The subjects upon which they exercised their skill were usually distinct, and their spheres of action were far apart. The leaders of the Tosa school remained at Kiyauto, and were best known by elaborate illustrations of court life, while the Kano were for the most part retainers of the Shiyaugun or leading Daimiyau, and revelled in rapid sketches of landscape, bird, flowers, popular deities, and Chinese (353) sages and immortals. The marriage of Ko-Hofugetsu with the daughter of Mitsushige, moreover, is likely to have brought the two families into permanently friendly relations.

During the life of Motonobu the art of ornamental working in metal, previously in a very rudimentary condition, was greatly advanced by Yuuzhiyau, founder of the well known Gotou family and a personal friend of the great painter, and it is said that he and his descendants copied their designs upon sword guards and from the drawings of the Kano school.

In the early part of the 16th century, Ihasa Matahei, a pupil of Mitsushige, became distinguished as the first painter of a class of pictures representing popular customs. They were originally produced in Ohotsu, the ancient capital of Japan, and are hence known as Ohotsu-we. The drawings of Matahei are in the manner of the Tosa-we, and are of considerable interest to the student of the middle period of Japan; but the later specimens of Ohotsu-we, which may still be obtained in considerable numbers at Kiyauto and Ohosaka, lack the skilful execution of the founder of the style, and are generally little more than roughly drawn caricatures.

The early Kano riu artists were carrying on their school during the Shiyaugunate of Iheyasu, but the great founder of the Tokugaha dynasty, the Maecenas of letters, lacked either leisure or inclination to bestow active patronage upon art. On the other hand, the rough Taikafu was from first
to last the painter’s friend. Whether he was guided by inherent artistic tastes, by a desire to emulate the *dilettanti* Shiyaugun of the Ashikaga line, or by the policy of aiding the tea ceremonials in distracting the minds of the nobles and leading samurāhi from less peaceful ideas, it is to Taikafu’s* support of the Kano line that the great castles of the country owe the enormous pictorial embellishments of their gilded walls; the work of Yeitoku and Sanraku, the chief protégés of the terrible Kuwanbaku; and to him also Japan is indebted for the preservation of many of the most celebrated works of the early age of native art ⁴ and for the enormous impulse given to the ceramic produce of the country in the 16th and 17th centuries.

(354) The Kano school could not enjoy the favour of Hideyoshi without exciting some jealousy. Hasegaha Touhaku, a *soidisant* descendant of Setsushiu, had obtained a reputation for large pictures, but was dissatisfied with the notice taken of his productions, and combined with Sen no Rikiu, the great master of the Chiya no yu or Tea-ceremonials, to decry to Hideyoshi the works of the Kano, but without success.

Yeatoku, the grandson and pupil of Ko-Hofugen, proved worthy of his descent. His pictures, nearly all of large size, were painted in a coarse but vigorous style, and were considered among the chief attractions of the great castles in the decoration of which his services had been engaged.

He died at the age of 48, near the end of the 16th century. His sons Mitsunobu and Takanobu, and Kano Sanraku, his son-in-law, were all good artists. The latter, whose

⁴ "Hideyoshi or the Taikafu, better known to foreigners as Taiko Sama, was the great soldier of fortune who raised himself to the highest dignity of the Empire, and by reducing the local chieftains to the subjection which the feebleness of the Ashikaga Shiyauguū had allowed them to throw off, laid the foundation of the polity which was completed by Iheyasu."

⁵ Notably a screen painted in the 9th century by the Empress Fujihara no Akiko, the mother of Seiwa Tenwau, representing white chrysanthemums on a ground sprinkled with gold and silver. This was one of the oldest Japanese works of art in existence at the time.
real name was Kimura Mitsuyori, was taken while a boy into the service of Hideyoshi as a page. His master observing him on one occasion occupied, in oblivion of his duty and surroundings, sketching a horse in the sand, good-humouredly commented upon his pictorial tastes and afterwards ordered Yeitoku to take him in hand. It was by the same command that he entered the Kano family by intermarriage with the daughter of his teacher. Takanobu left three sons, Morinobu, Nahonobu, and Yasunobu, who under the instruction of Yamancto Kou greatly excelled their father is skill. Morinobu, more often called Taniu or Taniusai, was the most celebrated of the Kano line after Ko-Hofugen. He was appointed Wedokoro Adzukari, and received the signal honour of a command to paint from life a portrait of the reigning Emperor; the picture is still to be seen in the temple Hanshin-win, Kiyauto. A picture of the great Chinese sages in the South palace of Kiyauto is also from his hand. Genuine drawings by Tañiu are now becoming rare, but large numbers have been handed down by engravings and copies. They are generally distinguished rather by originality of design and freedom of outline than by any preeminence in execution, and appear to be in style intermediate between the works of Setsushiu and Ko-Hofugen, but the mode of handling the brush varies considerable in the different (355) examples. He seldom made use of pigments in his pictures, and like the rest of his family, he did not confine himself to any one class of subject. A valuable series of woodcuts from his sketches has been published in the Guwakou Sen ran (1776), representing the ten kinds of touch practised by the noted artists of China and Japan, and in the Kiyaguwu Wen will be found a number of caricatures of Buddhist saints and other grave personages who are usually held sacred, even by the Toba-we barbouilleurs.

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5 Two of the drawings have been reproduced in foreign publications under the erroneous impression that the figures are made up of the Kata-kana and Hiragana, to which of course they have no reference.
Nahonobu and Yasunobu were inferior to Tañiu, but their works are highly esteemed by connoisseurs. The landscapes of Yasunobu are very striking.

The three brothers were taught by a painter named Yamamoto Koui or Ukiyo, who received the rank of Hotsukiyau and was allowed to adopt the name of Kano in acknowledgment of the success of his pupils.

The chief remaining celebrities of the Kano school were Tsunenobu the son of Nahonobu, Tanshin the son of Tañiu, Chikanobu the son of Tsunenobu, Toun the son-in-law of Tañiu, and of the more modern representatives, Isen, Seisen and Kazunobu. The latter is the painter of the well-known pictures of the Rakkan in the temple of Zouzhiiayuji in Shiba.

The school numbered many noted names outside the hereditary line. In addition to those of Sanraku and Koui, Tsuruzaha Tanzan, a pupil of Tañiu, and Hanabusa Itsutefu (of whom more will be said hereafter) deserve special mention.

The reputation of the Tosa school was maintained during the progress of the Kano riu, but after the time of Mitsuoki, a grandson of Mitsunobu, nothing remarkable came from its alumni. The better known of the more modern artists were Mitsuyoshi, Wedokoro in the last century, his son Mitsusada, and Sumiyoshi Naiki Hirotsada, who died about 15 years ago, and whose pictures, still numerous, are marked by great delicacy of touch and taste in colouring.

At the end of the 17th century an original genius appeared in the person of Hanabusa Itsutefu, a pupil of Kano Yasunobu, who departed (356) from the traditions of his teachers so far as to draw most of his subjects from popular sources and to take liberties with popular religion. His sketches, mostly humourous, are in style not unlike those of Tañiu, and have the merit of decided novelty of conception and treatment. His school was named after him, Itsutefu riu.

About the same time lived Hishigaha Moronobu, a native of Kiyauto, who also cast off the shackles of tradition and
ventured to follow the example of Matahei in representing the people and customs of his day, in place of working the almost exhausted field of Chinese antiquities. His paintings resemble the Tosa-we in style, and are very careful in drawing and colouring. He had several followers, but none of great note; hence the "Hishigaha riu," as it was called, has fallen into obscurity, although its founder is still celebrated as the author of the Ukiyo-we or popular style, an honour which, however, should be divided with Matahei and Itsufu. After Moronobu and Itsufu arises the name of Honnami Kuwauyetsu, the most celebrated of the Japanese lacquer painters. His pupil Kuwaurin, chiefly distinguished in the same branch of art as Kuwauyetsu, founded a school of pictorial design known as Kuwaurin riu, which possessed at the beginning of the present century two noted followers, Hauitsu and his pupil Kiitsu. The pictures of Kuwaurin and Hauitsu have too much mannerism and too little resemblance to nature to please the European eye, but Kiitsu has left some clever works. Kenzan, the brother of Kuwaurin, was a well known ceramic artist.

The mass of the paintings executed in the eighteenth century merely swelled the old sluggish stream of pictorial platitudes, but at the end of the period a fresh and more healthful spring was opened by Maruyama Oukiyo, the first artist who had the boldness to demonstrate that something better might be learned from nature than from the orthodox teachers. The result of his labours was the foundation of the Shideu riu. The professed principle of the new school was to paint directly from natural objects: had it been fully acted upon the position of Japan in the art world would now have been a very different one, but Oukiyo had not strength to break the bonds imposed by the example of the great painters of his country, and the new element was seriously weakened by admixture with the old. The skill of the artist saved the school from the condemnation that the (357) heresy of its basis appeared to deserve, and his works became so greatly sought after that the demand soon ex-
ceeding the supply, and hundreds of barefaced forgeries were produced to supply the deficiency, a fact which the foreign collector will do well to bear in mind.

The originals are distinguished by great delicacy and freedom of execution, and by the absence of many of the conventional distortions of the Chinese school. The effects of Oukiyo's teaching were most prominent in landscape. The curiously inverted laws of perspective previously accepted could not withstand the test of the most superficial observation, and hence in most of the Shideu sketches and in those of the later popular school which adopted similar rules, fewer prominent errors strike the eye; but even the Shideu artist, when he introduces an object of mathematical shape, fails to see the necessity for vanishing points, and is satisfied with a parallel perspective. The only followers of Oukiyo who have done much to sustain the reputation of the school were Genki and Kikuchi Yousai. The latter, an artist of the last generation, is the author of the Zen-ken ko-zhitsu, a collection of historical portraits unequalled in truth and originality by anything of the same kind produced in Japan.

The foundation of the Shideu riu was accompanied by the formation of two new styles, both differing but slightly from the Kara-we, the Bunteu riu by Tani Bunteu and the Ganku riu by Utanosuke Ganku. Bunyo, Bunshin and Bunrin were noted followers of the first, Gantai of the second.

The pure Chinese school had been kept rather in the background after the rise of the Kano riu, and from the time of Shiubun and his pupils its chief adherents were found among the priesthood until the latter part of the eighteenth century, when some doughty champions of the parent art appeared in Zhiyakuchiu, Riu Rikiyou, Tai-gadau, Sou Shiseki, Uchida Gentai and Yuuhi. These were succeeded by Ohonishi Keisai, Haruki Nanko, Shuuzan, Kanrin, Chinzan, Sorin, Kuwazan, Shiuki, and a few others. The efforts of the revivalists succeeded in raising the Kara riu far above the stale mannerisms into which the rival
schools were beginning to degenerate, but not until a stronger opponent was at hand.

The beginning of the 19th century brought into the field a new set of artists whose designs, reproduced on lacquer, pottery and porcelain, in (358) bronze, wood and ivory, were destined to carry the fame of the decorative art of the Japanese over the whole of the civilized world. These men, simple artisans, with Hokusai at their head, formed the modern *Ukiyo-we* or popular school, and signalized themselves as the movers in the first assertion of the intellectual independence of their class. They had until that time been content to admire respectfully the works of their titled and two-sworded superiors, who, almost monopolizing the educational culture as well as the military and civil domination of the country, had hitherto found little difficulty in limiting the practice of art to their own body. It is true that a kind of popular art had been originated by Ihasa Matahei. Hishigaha Moronobu, and to some extent by Hanabusa Itsudosu; but all three of these painters were noted pupils of orthodox academies, and kept the new fashion within the *samurai* circle, while Hokusai, the soul of the Ukiyo-we, was a man of the people, and made no attempt to emerge from the station in which he was born. Perfectly contented with the appreciation of those with whom he lived and for whom he laboured, the chief aim of his ambition was the foundation of the great and essentially popular school, to which we owe directly or indirectly the artisan artist of the present day and the most truly characteristic art ever practised in Japan.

The only printed records of Hokusai's life are found in the prefaces to his works. The following facts were obtained partly from these and partly from a manuscript book of biographical sketches of recent artists and novelists, written in 1856. He was born at Honzhiyo in Yedo in the year 1760, and was the son of Nakazhima Ise, a mirror-maker. The first forty-five or fifty years of his life were spent in comparative obscurity. His public career did not commence until about 1810, when he was induced to take a wider range of action
by establishing himself in Yedo as an industrial artist and teacher of drawing. Pupils quickly flocked to him, and his original sketches being insufficient to provide them with models, he was led to multiply them by engravings, and to this end the publication of the Manguwa or Ten Thousand Sketches was commenced. The novelty and beauty of the wood-cuts attracted immediate attention, and the draughtsman and teacher became almost at once a celebrity in a wide though humble sphere. His fame grew as volume after volume of his book appeared and edition after edition sold, and there were not (359) wanting learned and clever men to write admiring prefaces to each issue, imitators to print rival works and a multitude of pupils of his own class to perpetuate his name and style. There was nothing in his pictures to shock the taste of the more aesthetically constituted of his admirers, no lack of gravity or dignity in his saints and sages, of might and fierceness in his warriors, or of artless beauty in his renderings of his gentle compatriots, but his real strength lay in the popular sketches in which the everyday life of the people was mirrored with a truth that could come only from one of whose life these things formed a part—a truth that on-lookers from another world, like Moronobu and Itsutefu, could never attain; a truth, moreover, brightened by flashes of the native humour of the artist and never defaced by coarse, ill-tempered, or misconceiving caricature. Their ceremonials and amusements, their historical landmarks, their folk-lore and the homely jokes that repetition could not spoil were there in characters that the most unlearned could read, while at every page a well known view, a common bird or insect, a household pet, a favourite flower, or some other of the thousand objects of daily familiarity found a graceful record in a few suggestive touches of the artist's magic pencil. It is impossible to conceive a work more calculated to influence those for whom it was intended, or to give the student of Old Japan a more complete view of the sentiments and tastes of the easy-going peaceful millions of the people.
Hokusai's invention was by no means exhausted by his "Ten Thousand Sketches." Book after book followed at short intervals, each bearing the stamp of the same quick perception and facile touch. But here only a few of his productions can be referred to. The Wehon Suwikoden, containing 108 portraits of celebrated Chinese heroes, appeared in 1828; the Fugaku Hiyakukei or hundred views of Fuzhi, in some respects the masterpiece of the artist, in 1836; the Wehon Saki-Gake, Musashi Abumi, and other works in the following year, together with the later volumes of the Manguwa. At this time he was nearly eighty, in robust health, and his eyes, clear and true as at the beginning of his career, were independent of the optician's aid. How little impairment of his faculties old-age had brought is proved by the production of many subsequent works, among the latest and best of (360) which were the Wehon Saishi Mitsu and the Wakan Homare. He died in 1849, at the age of eighty-nine.

Hokusai found his only reward during life in the warm admiration of his fellows, and never received any mark of recognition of his labours from higher quarters. While dozens of painters of mediocre ability but of gentle birth, bearing the warrants of the school of Tosa or Kano, gained rank and pension for insipid repetitions of academy traditions, Hokusai exercised his genius for the scanty pay of the book draughtsman, and had no title beyond that assumed by himself in his old age, Man rau zhin "the old man of a hundred centuries". But now, more than twenty years after his death, his fame is extending where the names of Kanawoka, Ko-Hofugen, and Setsuhiu, are unknown, and Japanese art gains its brightest luster from a man for whom compatriot connoisseurs scarce find a place in the roll of native artists. What he might have produced had his perceptions received all the advantages of an intellectual training by a Ruskin it is impossible to say; but it is probable that all he could have gained in solid fame would have failed to compensate for the sacrifice of

6 See the preface to the Musashi Abumi.
the marvellous and widely diffused influence exercised upon millions of his fellow countrymen by his multitudinous sketches. He has given life to a popular art which can hardly be said to have had any previous existence except in name, and which will always find admirers and students when the state of things it has registered shall have been swept away by the advancing tide of civilization.

A criticism of the thousands of wood cuts from his sketches would require a volume; of the original drawings nothing can be said, as they were sacrificed in the process of engraving, and few, if any, of his paintings are now in existence.

The contemporaries and successors of Hokusai in the "Ukiyo-we" are numerous. The best known of these are Keisai Hiroshige, Keisai Yoshinobu, Utagaha Toyokuni, Utagaha or Ichiyuusai Kuniyoshi, Hasegaha Setsutan, the artist of the Yedo Meishiyo and his son Setsutei, Riusen Shigenobu, and a few of the pupils of Hokusai, among whom may be named Wisai, Hokukei, Hokujiu and Hokumei. The best works after those of the Man rau zhin are the Keisai Ukiyo Guwa Fu, by Keisai Hiroshige, the Kuwateu Sansui Guwa Fu by Wisai and the Wisai Guwa Shiki, all in the style of the Manguwa; the Honteu (361) Suwikoden by Ichiyuusai Kuniyoshi, a model of native chromo-xylography, and the Toyokuni Toshida Mafude, by Ichiyuasui Toyokuni. The drawings which approach most nearly to those of Hokusai in grace and versatility are those of Wisai, with whose name our list, reaching but not including the present generation, must terminate.

It must not be supposed that the painters referred to in this short history form even as much as one-tenth of those of whom record is preserved with veneration by the art connoisseurs of the country, but it is impossible to include more than the most prominent names without swelling the sketch into an inconveniently arranged biographical dictionary. The list if complete would be seen to include many names known to fame in other spheres of
action, among which are those of the Emperors Seiwa, Uda, Reizei and Kuwazan, Sugahara no Michizane, the great Kuwanbaku Kiyomori, the Ashikaga Shiyaugun Takaui, Yoshimochi and Yoshimasa, the warriors Kusunoki Masashige and Takeda Shingen, the swordsman Miyamoto Musashi, the great priests Shiyaotoku Taishi, Koubofu daishi, Chishiyou daishi, Nichiren and Itsukiu, and court and feudal nobles without number, nearly all coming under the denomination of bunshin or amateurs, as distinguished from the professional painters.

Only a few of the fairer sex contributed to the pictorial treasures of their country. The Empress Fujihara no Akiko, the Nun Chiyuuuzhiyau Hime, the daughter of Kiyomori, the wife of Ko-Hofugen, the wife of Taigadau, and some others are named in books, but their works are seldom to be met with at the present day.

The European critic must not be astonished to find that many of the works which he considers among the most admirable, come from the brush of painters unappreciated or altogether unknown by their countrymen, to whom our standard of excellence is as yet a mystery.

During the past few years the tide of foreign thought has broken down the old barriers of isolation, and while it is sweeping away much that might well have been spared, it is removing the accumulated dust of tradition and prejudice that defaced or concealed many natural beauties in pictorial art as in most things else. The present period is one of transition, the older school of painting is disappearing, and the more inferior of the modern draughtsmen for the most part make a wretched compromise between the native styles and what they (362) consider the Western method, adding to the defects of outline of the former a feeble mimicry of the latter in a travesty of chiaroscuro and an unintelligent attempt at perspective, perpetrating a tawdry trash, that unhappily finds a too easy market in Europe and America. The ancient skill is by no means lost; there are yet workers who can equal in execution and originality of design almost anything that has been produced in former
times; but pictorial art, as seen in the Kakezhi and Makimono of the past, is doomed; the style can only survive for a time in the decoration of porcelain and lacquer, and then a curious and in many respects beautiful phase of ancient art will have changed its form. Let us hope that the European school recently founded in Toukiyau by the Imperial Government will meet the success the experiment deserves, and that the quaint, cleverly stunted art of Japan, released from its academical clippings and trainings, will develop into a natural and nobler growth, worthy of the soil in which it has been planted.

The subject will be brought within more easy grasp by a review of the relations between the art of Japan and that brought into the country from abroad. Before entering into this it will, however, be necessary to give a short account of the parent art of China and Korea, in order that the claims of Japanese art to originality may be fairly considered. The source of multitudinous errors in the writings of foreign authors is a want of knowledge of the older productions of the neighbouring country with which the history, and perhaps the very origin, of the Japanese are so intimately associated. No materials for a complete history of Chinese and Korean art appear to exist in Japan, but Japanese connoisseurs have collected the names of some thousands of the most famous painters of the two countries and have preserved large (363) numbers of the original pictures imported from time to time during intercourse with the Asiatic continent. Unfortunately the European and American residents in China who have done so much

7In the Gen Min Sei Shiyoguwa Zhinmei Roku (catalogue of calligraphists and artists of the Yuen, Ming and Ta'ing dynasties), published in 1777, over three thousand names are given, with a statement of the subjects (birds, figure, landscape, etc.) in which each painter specially excelled; and in the Kun-in Hoshiyan are printed several hundreds of fac-similes of seals used by the leading artists of Korea and China. The most honoured Chinese masters are Wa Taotsz' (Godaushi) of the Ta'ang dynasty, the Emperor Hwuitsung (Kisou Kuwautei), Ngan Hwui (Ganki),
to make known to the world the language, literature and religion of the country, have left the question of art untouched.

The origin of painting in China is lost in remote ages, but reliable historical information is of comparatively recent date. Little is known of the art of the T'ang dynasty, although it was during this period that painting and many other branches of art were introduced into Japan, and it is not until the beginning of the Sung dynasty (960 A.D.) that fact can be disentangled from legend.

The Kara-wei, as known in Japan, is nominally divided into the fashions of the four dynasties Sou, Gen Min and Sei (Sung, Yuen, Ming and Ts'ing); but a more practical classification separates it into the styles of Shin, Sau and Giyau, which have their graphic analogues, respectively, in the formal square character, the curvilinear character or "running hand," and the modification intermediate between these (examples of all of which may be seen in almost any Japanese printed book). Thus a drawing in the Shin fashion is characterized by the careful formation of every touch, the Sau sketch is rapidly dashed off with a free brush, while the style of Giyau is midway between these. The main characteristics of the older Chinese art, almost identical with those of early Japanese art (which will hereafter be described in detail), may be briefly summarized as follows:—Composition, nearly always good, though unguided by written laws; the grouping of figures and accessories contributing as far as possible to tell the story of the picture and to please the eye. Drawing, almost invariably conventional, except in the representations of monkeys, birds and certain specimens of vegetable

Hia Kwei (Kakei) and Ma Yuen (Bayen) of the Sung dynasty; Chao Tsz'-ang (Teusugau) and Muh K'i (Mokukei) of the Yuen dynasty; Wan Chingming (Bunchiyaumei), a celebrated calligrapher also, Wan Chin (Bunshin), Lü Ki (Riyoki), Cheu Chimien (Shiushiben) and Chang Ki (Chiyauki) of the Ming dynasty; and I Fuki, Ching Weip'eit (Teiibai) and Ch'an Nanp'ing (Chinnanpin) of the Ts'ing or present dynasty.
life; the outlines of human figures and of most mammalia incorrect, although the action is commonly truthful and spirited, and the proportions true. *Manipulation*, almost (364) invariably good, constituting, in fact, the most important element in the eyes of the native connoisseur, with whom painting was looked upon as a kind of caligraphy. *Laws of perspective*, unknown, but replaced by strangely perverted rules: thus the landscape painter finds it absolutely necessary to reduce the size of distant objects, but sees no inconsistency in widening the further extremity of any cubical object that may find a place on the picture; again, although he elevates the horizontal line, he draws the foreground from the level of the plain. He has of course no conception of vanishing points. *Colouring*, nearly always tasteful, the Chinese being masterly in the skilful distribution of harmonies and contrasts; the tints are seldom gaudy, and gold is more sparingly used than by the Japanese. Many of the greatest artists preferred to use black ink without intermixture with colour: drawings in silhouette, chiefly representing the bamboo or orchid, are constantly met with, and the rapid ink sketches which are oftener erroneously supposed to be of Japanese origin are of very ancient date in China. *Chiaroscuro*, entirely omitted, unless a little shading of the folds of garments or beneath the prominent markings of the face can be considered to represent it. Projected shadows are never depicted.

It will be seen that the Chinese artist, although taking the elements of his work more or less remotely from the real objects, seldom or never drew the entire picture from nature, and in most cases was content to accept without question from his predecessors the interpretation of facts that were perfectly open to his own observation. That he had at least a theoretical estimation of natural models is, however, shown by many well known legends; as in that which tells how Ch'an Hung, a celebrated painter of horses in the Sung dynasty, when the Emperor enquired from whom he had learned his art, replied, "From the horses in Your Majesty's stables." But the professed
recognition of such a principle unfortunately involved no obligation to put it into practice.

It is impossible to define any distinctions between the styles of the different dynasties, nor has any attempt to do so been made by Japanese writers, as the changes induced by time were very gradual and constantly interrupted by reversions on the part of leading artists to the types of previous ages. The tendency to laudation of the ancient in art as in literature led to an almost blind reverence for rules laid down by the great men of remote times, and although many modifications and a few (365) improvements are seen in later works, they are not of sufficient importance to afford a basis for a true separation of art periods.

The present position of pictorial art in China can be demonstrated only by residents in parts not overrun by foreigners. Of a few recent specimens brought from Peking by the Hon. J. Saumarez of the British Legation, Yedo, some bear a remarkable resemblance to the later Japanese Kano-ke and Kara-we, and fully equal the average of these in execution, while others, of a popular character, testify to the existence in the Celestial mind of a sense of humour which would surprise the Europeans who found their ideas of Chinese art upon a study of the designs on tea chests and willow-pattern plates. It is certain, however, that the modern productions which reach Europe and America through ordinary channels are immeasurably inferior to those of past centuries, and are altogether unworthy of comparison with the work of young Japan. In purely decorative art it is probable that the Chinese have for many years been distanced by their insular neighbours, owing to the creation in Japan of the educated artisan-artist by the Hokusai Ukiyo-we.

The Chinese school, almost in its purity, still exists in Japan. Introduced by the personal teaching of the Korean and Chinese artists, who entered the country in the period extending from the 5th to the 9th century, and by the passive influence of the paintings brought from China by
Koubofu daishi and others of the early travellers, it had strength to exist while the Butsu-we monopolized the best efforts of the native painters, and to survive the formal schools of Nobuzane and Takuma, that threatened to replace it by a showy pageant of costume and ceremony. Its revival commenced by Zhiyosetsu, carried on by Shibu-bun and his followers, and with slight modifications by Setsushiu, and by Ko-Hofugen and the Kano riu, was stimulated anew by the Chinese Ch’an Nanp’ing, I Fuki and others, who in the last century made a fresh art centre in Nagasaki, and it has during the past three or four generations produced many of the best specimens of Japanese pictorial skill. So far was the study of the Kara-we carried, that in the biographical accounts of distinguished Japanese artists we find that the majority avowedly modelled their styles upon the works of one or other of the old Chinese masters, such as Ma Yuen, Mu K’i, Hia Hwui, etc., and native critics can find no higher expression of praise than that implied in a comparison with one of these.

365. The Kaurai-we or Korean style is a sort of provincial first-cousin to the Kara-we, and, although usually a little coarser in execution, resembles it in all essential respects. The artist who accompanied the Korean ambassadors to Japan, in 1877, left a few of his sketches, two of which, in the possession of the writer, are indistinguishable from works of the Chinese painters of the Ming period, and would require a very well-trained eye to demonstrate that they are not from the brush of a Japanese of the Kara riu.

The Butsu-we or Buddhist style was undoubtedly the first with which Japan made acquaintance, and nearly all the early paintings referred to in the native historical works were of this class. Internal evidence shows that although brought to Japan and taught there by Korean and Chinese painters, its origin is distinct from that of the Kara-we and Kaurai-we. The features given to the pictured deities are not Mongolian in type; the horizontal direction of the fissure between the eyelids, the comparative prominence
and the delicate moulding of the nose chin, and the sensual but well-formed lips unprotruded by prognathous jaws, remind us of the Indian prince, but bear no resemblance to the Chinese mandarin. The colouring, too, in its richness, in its bold contrasts, in the use of bright body pigments, and in the overlaying of garments with scrolls and diapers of gold, recalls the decorative art of India, but offers no points of relationship to the comparatively sober hues of the best schools of Chinese painting.

The drawing of Buddhist subjects is strictly conventional, but in the better specimens shows signs in the outline of face, limbs and uncovered portions of the body, of a higher sense of the beauty of natural form than is observable in the secular schools.

In subjects the artist had little scope. He occasionally found an opportunity for displaying some little originality in the portraiture of a noted bishop or martyr, or in the writhings of the damned in the torture chambers of the hells that priestly ingenuity had invented to terrify the believers into piety; but as a rule he was limited to the repetition of Buddhas, Bôdhisattvas, Arhân, Asuras, and the rest of the saintly and demoniacal army of the religion, in attitudes, groupings and colours fixed by tradition; and although within the limits prescribed the painters commonly displayed extraordinary skill and patience, none, Teu Densu excepted, could make any claim to great eminence in the craft.

(367) The chief artists of the Butsu-we, like the mediæval illuminators of Europe, were monks who worked lovingly and untiringly in the seclusion of the temple, bequeathing the fruit of their life’s labour to the sacred place that had given them shelter. The names of many have failed to reach us, as the picture, hallowed by its motive, would have been considered desecrated by the imprint of other characters than those composing prayers, and hence bears no record of the painter. The Buddhist priesthood of the present day appears to receive little reverence in Japan, but it was different in past ages, when books were filled
with the lives of holy men who, careless of temporal reward, carried out in self-denial the grand principles that underlie alike the tenets of the Buddhist and the Christian creeds. With many of these the painter’s art was a form of prayer, and the devotee would set himself a daily task of industry that left his temple rich in curious works. They appear to have been favoured by extraordinary visions, some of these old artist priests, if we may believe such stories as those already related of Shinsai and Teu Densu; and others, equally wonderful, like that which tells how the blazing god Fudou, armed with his two-edged sword and binding rope, appeared to Chishiyou Daishi, that the monk might give to the world a true image of the terrific form of the deity, and how Taigen Miyauwau for the same purpose suddenly manifested his presence to Zhiyaugeu Azhiyari beside the sacred well at Akishino. But the race is nearly ended, and perhaps the last of the true Butsu-we has already left the monastic atelier. Yet even in these degenerate days we may sometimes see remains of the veneration formerly lavished upon such works in the formality and reverence with which the priest takes from the innermost box the treasured Amida, Fudou or Kuwanon, and raises the precious roll to his forehead before he proceeds to display its beauties to the awed or curious visitor; but foreign gold has tempted the more needy or avaricious of the brotherhood to disperse in thousands over the lands of the heretics, the possessions once held too sacred for the unhallowed gaze of common men.

Buddhist subjects were frequently painted by the secular artist in the style of the school to which he belonged, but these pictures are not classed with true Butsu-we, which were always distinguished both by the character of the painting and by certain peculiarities in the mounting.

(368) A review of the historical facts now collated is sufficient to show that the art of Japan can claim no higher position than that of an offshoot of the art of China. We find that the art laws brought from Korea and China, thirteen or fourteen centuries ago, have been followed more
or less closely even to the present generation, and that the most venerated painters of the country were those who imitated most successfully the models with which the foreign lands had provided them. Kanawoka, the earliest of the native artists (excluding the few amateurs referred to in ancient books), was a pupil of a Chinese immigrant, and adhered in every important respect to the rules learned from his teacher. Motomitsu, Nobuzane, Takuma Tame-yuki, Sumiyoshi Hofugen, Shiba Hofugen, Ahadaguchi Hofugen and Fujihara no Tsumetaka, who may be considered to have inaugurated a new style, the Yamato-wei, unquestionably sunk below the model, although they deserve the credit of having applied the knowledge derived from China to the registration of historical events, court ceremonials and the costumes of the period. Toba Souchiyau was an original and talented caricaturist, but the Toba-wei can scarcely be considered an important or distinctive section of Japanese art. The reversion to the pure Chinese school under Zhiyosetsu, Woguri Soutan and Shiuban, with whom we might almost associate Setsushiu, showed that the branch thrown out under the cultivation of the court painters had not weakened the parent stem. The Kano school, the influence of which was paramount from the time of Motonobu, diverged but slightly from the Kara-wei, and certainly did not improve upon its qualities in any respect. In the latest and perhaps best work of this academy, the sixteen Rakan by Kano Kazunobu, the manner of execution was almost purely Chinese. The Ganku and Bunteu riu are also simple modifications of the Kara-wei. In the Yamato-wei and its outcome, the Tosa riu, however, we find a difference in motive and unmistakeable characteristics of execution, but all the errors of the Chinese school are carefully preserved or even exaggerated, while much of its beauty is sacrificed. The artists of the Tosa riu sometimes painted animals, birds, flowers, etc., in the Chinese manner with great success, and some of the most spirited sketches of horses in Japan are by old masters in this school. The Kuwaurin riu is
little more than a caricature of the Tosa riu and old Ukiyo-we.

Matahei, Hishigaha Moronobu and Itsutefu extended the application (369) of the Tosa and Kano styles to subjects of a more familiar kind than those which had previously been selected, but we still look in vain for anything to replace the old false principles until the advent of Maruyama Oukyo, who at length showed a path to an entire reconstruction of the art of his country. Unfortunately he lacked either the courage or the talent to illustrate his principle in all its truth, and having to work at a time when the Kano and Tosa schools were strong in popular estimation, and the Chinese school under Ch’an Nanping, I Fukiu and others was drawing powerful adherents, the righteous cause of the Shideu riu declined for want of active support, and the style took only an insignificant place in the race with its older rivals. But at last the commencement of the nineteenth century gave Japan, in the new Ukiyo-we of Katsushika Hokusai, the right to boast a truly national art, which, although adapted from the old models, the only ones available, and still tainted with many antiquated errors, abounded in novelty and character, and showed unlimited capabilities of development. But the Chiya-zhin, the men who led the educated world in matters of literary and artistic taste, were all laudatores temporis acti, and closed their ears when the plebeian draughtsmen were spoken of, for to the critic painting was essentially an occupation appertaining to gentle birth and classical culture: its practice, once almost confined to royalty and nobility, never descended below the Samurai, and though not strictly hereditary, was so far transmitted by family descent and adoption that more than one half of the names known to fame belonged to a few ancient lines. Such a system had perhaps some advantage in favouring the development of inherited talent, but its supporters failed to perceive how seriously detrimental it had proved to the progress of art in
stereotyping erroneous traditions and in preventing the cultivation of the germs of greatness which as might have been learned from Chinese history, could spring up even in the shambles. But the Ukiyo-we became an established fact in spite of the contemptuous neglect of those who should have been its patrons, and its outcome, the artisan artist, has given to the world at large not only the wealth of strange ideas and manual skill so long imprisoned by the pride of seclusion, but has (370) added to it no small portion of the sum of originality to which it can lay claim. He is commonly nothing but a copyist, but he is a skilful one, and repeats with the eye of understanding the experiences of form and colour that have accumulated during the preceding ages: his models, with their absence of light and shade and of strict accuracy of detail, are far less difficult to imitate than would be the more advanced works of the European schools and, as a trifle supplies him with the necessaries of life, his skill may be exercised on the cheapest and simplest objects. But side by side with him we may find labouring diligently over a netsuke, colouring a vase or sketching a design for a wood cut, the inventor, gifted with talents of a very high order, telling us in his own manner the history and legends of his country, showing quaint touches of his own mother-wit, or putting into form an original observation of some simple oft-repeated motive of bird or flower. Many such men, even in the present day of money-making, have that artist love of their handicraft which leads them to add patiently, day by day, during months or years, little touches to the slowly growing work that haste or ill-timed devotion would spoil or render tasteless; and when all is done, the price yields him little more than the daily pay of a mason or a tailor, while the crafty middle-man or merchant may grow rich on the skill which is so little profitable to the producer.

The three greatest heroes in Chinese history, Chang Pei (Chiyauhi), Kwan Yu (Kuan-u) and Liu Pei (Gentoku), who lived in the 3rd century, rose from the occupations, respectively, of butcher, bean-curd seller and shoemaker. Their portraits will be found in every large collection of Japanese and Chinese paintings.
The estimation of pictorial art in Japan is perhaps as high as in Europe, and the power of intelligent criticism is not less widely diffused; but the canons of taste in the West and the Far East are so different that a few remarks on the subject are necessary.

The popular appreciation of a school or of an individual painter must not be overrated. It certainly indicates in the works admired the possession of certain marked qualities, but not necessarily those of a high artistic order, which are recognizable only to the cultivated few; and even the accepted oracles, as the history of art, like that of literature and science, constantly shows us, are not always among the enlightened, but too often set up an utterly false standard of excellence. In Japan the point upon which the judgment of a picture centered was caligraphic manipulation. Fidelity to nature was altogether secondary, and hence a sketch with scarcely a line of truth might be highly valued, while an (371) attempt at a faithful rendering of the aspect of an object might be condemned as "vulgar" or "without taste." This may enable us to realize the fact that caligraphy holds with the Japanese, as with the Chinese, a position at the least equal to that of painting; that Kose no Kanawoka and Wono no Toufuu, the great artist and the great writer of the ninth century, are honoured alike, and that a single character of Waugishi⁹ will command as high a price as a masterpiece by Godaushi. There is of course no point of comparison between the ordinary handwritings of England and Germany and the complex minutely proportioned characters invented by the Chinese. An ordinary Japanese or Chinese student will in a year or two acquire a power of writing our current hand as well or better than his teacher; but the foreigner who, after a decade of persevering effort, fails to produce a letter that could be mistaken by a well-educated

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⁹Waugishi (Wang Hiche) was a celebrated Chinese caligrapher of the fourth century, and Wu Taotsz' (Godaushi), his countryman, one of the great masters of painting under the T'ang Dynasty about four hundred years later.
native for the work of a skilled hand, will understand the prominence that the accomplishment holds in the educational system of the country. It is noticeable that the Japanese word *kaku* has, like the Greek *γραφεῖν*, the double signification of writing and painting.

Such terms as "life-like" and "natural" are constantly used in works upon Art, and most of the marvellous anecdotes of pictorial skill centre upon the preternatural fidelity of a painting to nature; but the significance of both the expressions and the stories is very limited, and is constantly contradicted by the details of native criticism upon the works of special painters.

The criticism of pictures as to age, authenticity and merit is much cultivated in Japan, and so great is the reliance placed upon the judgment of certain connoisseurs that their dicta are accepted as indisputable facts by the many who, finding satisfaction and repose in simple faith, delight to chant the strange tongue of "aesthetics" in unison with the voice of the orthodox high priests of Art. It is impossible to analyze the unwritten rules of native art criticism; they are handed down from man to man by direct demonstration, and are cultivated year after year by minute untiring study of all the specimens that eagerly sought opportunity can afford. And there is no doubt that certain men develope (372) remarkable powers of discrimination of characteristics too slightly pronounced to be susceptible of verbal definition; but such a capacity has its dangers, and unquestionably in many cases leads its possessor, unaccustomed to contradiction, to presume upon the faith of his audience,—a failing not altogether unknown among experts in other parts of the world.

The only written attempt to guide the unlearned that has been brought under the notice of the author is in the Guwakou seki raš, published in 1760. Some of the passages in this have so much the ring of true metal, and others indicate such a shrewd consciousness of the existence of counterfeit coin, that it may be worth while to give a few specimens.

"It is often very difficult, even for the experienced judge,
to pronounce an opinion upon a picture, and hence, if he feel a doubt in his heart, he should study the work again and again. In early times there was an artist—the best of his period—named Yen Libhan of T'ang (China). One day he went to Kiangling and was shown a picture drawn by Chang Sangyiu upon the wall of a temple. He was at first disappointed, and believed that the celebrity of the painting was due rather to the renown of the artist than to any intrinsic beauties; but on a second visit he perceived in it some indications of talent, and felt that it came from no common hand. He returned to his house reflecting upon what he had seen, and as his recollections gave him much pleasure, he went a third time to repeat his examination, and then he saw in every line and touch the evidence of skill and judgment, and that genuine taste reigned throughout, and he sat many days before it, forgetting to eat and sleep. We must hence remember that the works of great artists are not to be estimated by their attractiveness at first sight, but must be earnestly studied before they can be correctly appreciated."

A little further on we meet with some notable comments upon the false criticism dictated by interest or politeness.

"It often happens that a wealthy man wishes to buy an expensive picture, but being unable to form an opinion as to its authenticity, consults a person reputed as a judge. The adviser, misled by ignorance or actuated by bribery, may say falsely that the painting is genuine. Consequently the rich man buys at a high price and believing his possession an original, shews it with pride to his friends, (373) who praise it highly and talk of it to others. But when a man having 'real eyes' sees it, he detects its falsity and smiles inwardly. The picture is handed down to the descendants of the buyer, until at length one of these wishes to sell it, and then the deception is brought to light."

"In making an examination of a picture, the mind of the judge must be unbiased and free from self-interest in the decision: if his personal benefit be concerned, he may wilfully close his eyes to the truth or falsehood of the work,
perhaps pronouncing a counterfeit genuine to please a friend or to obtain a bribe; or, wishing to buy the painting cheaply, he condemns it as a forgery, though believing it authentic."

The practical rules given are as follows: "A picture should not be examined by the light of a lamp; or during times of feasting and drinking; or on a day on which there is rain, snow, wind, smoke, clouds or mist; or in the twilight; lest the intention of the painter be made invisible or the picture be injured. Ordinary people are ignorant of the manner in which a painting should be looked at: they put their hands upon it or bring their faces very close. But to study a picture properly it should be hung upon the wall and seen first at a distance—afterwards nearer—to observe the touch and colouring. The silk mounting need not be regarded, since counterfeits are always adorned with rich brocades to deceive the eyes of the onlookers. First distinguish whether the painting is Chinese or Japanese, then examine the silk or paper, then the effect of the painting, then judge of the period of its execution—whether recent or old—notice the colour of the ink, and lastly find the meaning of the artist; but do not look at the stamp. Roll up the picture and put it in its box, and later on—at midday—examine it again with care, and comparing the opinion so framed with the stamp, see if there be an agreement between the work and the name."

With these remarks the history of pictorial art may be concluded. The remaining sections will be taken up in the order named in the introduction.
NOTES ON ŌSAKA.

BY THE REV. J. SUMMERS.

(Read June 25, 1879.)

(375) Three great cities in Japan have in modern times claimed the attention of the outer world, as they have always held a foremost place within the Empire. Every one moderately well acquainted with geography had since the time of old Kämpfer heard of Miyako, Yedo, and Ōsaka (or as they were confoundingly spelt, Meaco, Jeddo and Osacca). It used to be stated that the first was the residence of the Spiritual Emperor, the next the residence of the Secular Emperor and the last the great commercial Capital of the Empire. But little was known beyond what the painstaking Kämpfer had related as to the exact proportions or the relative importance of the three places. The glory for some of the old palaces and temples had probably departed before the times of the Dutch embassies, but the earlier notices of Marco Polo may still be verified as to the golden roofs and decorations which delighted the imagination of the Venetian, for there is still a temple\(^1\) in this neighbourhood said to have golden spouts to carry off the rain from its roofs, and the lustre of gilt and golden ornaments in the Nishi Honguanji and other temples in Kiyōto may help to bear out his narration of the wonders of Zipangu.

A complete description of Ōsaka is a work of too great extent to be included in this paper. I have therefore limited myself to a description of some of the salient points of interest, and a few of the principal places which have some historical value. Although great care has been taken to secure accuracy, I fear that some errors may have crept in.

\(^1\) In a Miya at Yawata in Yamashiro, about 4 ri from Kiyōto.
Such as it is I beg to offer it for the consideration of the learned society of which I have the honour of being a member.

(376) The city of Ōsaka, once the most thriving and busy emporium of Japan, and which still retains much of its former mercantile activity, has had a strange, eventful history. Here the monied merchants resided who could supply the daimiyōs with cash for their revenue-rice, stored in the granaries in this place. Here the forces of rival daimiyōs have contended for the mastery or to obtain this key to the capital of the empire. Its history dates from the time of Jimmu (B.C. 660); but at that early period it is merely traditional, though certain statements occur in the Nihongi which have the appearance of veritable history. According to that highly respected work the place received the name of *Nami haya* from the emperor himself in consequence of the untoward character of the landing-place where His Majesty came to anchor after his voyage from the province of Hiuga in Kiushiu. There would seem to have been a heavy surf, which dealt rudely with his ships, and from this circumstance he gave the place the name *Nami haya*, or “The waves are boisterous.” The name *Nami hana*, later on corrupted into *Naniwa*, was derived from the appearance of the surf or breakers, which looked like white flowers upon the waters. There were two reasons for these appearances: first, the breaking of the waves upon the abrupt shore or rock *saka*, for at that period the sea, according to tradition, supported by allusions in ancient ballads, etc., washed the base of the high land which now forms the “Upper town” (*Uye machi*) in Ōsaka; and second, by the meeting of the great river, which there had the character of an estuary, and when its waters poured down from the upper country and met the sea-waves, much foam would naturally be produced. The name *Settsu*, by which the province has been known, was derived from the assembling here of shipping first in the time of Ōjin Tennō (cir. A.D. 270), when the Court was held in this place.

The name Ōsaka appears, according to old accounts, to
have been first used about the year 1492. At that time the town was confind to the small locality now called Tama-tsukuri. The scattered villages and places around had been previously called Ōye (the great river), and from Ōye no saka by contraction is derived Ōsaka. Indeed, so says the Settsu meisho (Remarkable Places in the Province of Settsu).

These statements are borne out by the nature of the country hereabout, for the land running north and south at the eastern end of the city is very high and the surrounding country is very flat, leaving no doubt (377) in the mind that the lower land was at one time covered by the ocean, the higher land being the saka or "hill-side" as above referred to. The Ōye or "Great River," now contracted into the Yodo, and its collateral branches may well have been the great stream that found its exit at this place.

It is a curious fact worth mentioning that the heir apparent of Nintoku Tennō (A.D. 310) received the name from the emperor of Ōye no Isao waki no Mikoto.

The castle of Ōsaka is built upon the site of an ancient monastery formerly belonging to the Buddhists known as the Honguwanji. The original temple was built by a certain priest named Kenjū or Renniyō, who had been settled with his confraternity at Yamashino in the province of Yamato. He subsequently removed with a few of his people to Ishiyama in Ōsaka in 1496, and hence the name of Ishiyama Honguwanji, by which the aforesaid temple is usually known. It was fortified in 1534, and became a stronghold of the Buddhists during the time of the bloody persecutions to which they were subjected by Ota Nobunaga. This body of religionists was very powerful in the stormy times of the latter half of the sixteenth century, when the country approached a state of downright anarchy. The Emperor was in a condition bordering on destitution, and the daimiyōs, who had assumed the title of kings, were constantly engaged in war with each other,—a state of things which affords a parallel to the disorders of the feudal times in Europe. The Honguwanji then supplied the Emperor's
wants from their coffers and received in return certain privileges. These Buddhists were allowed to use the Imperial crest or cognizances (mon), both the kiri and the kiku (the chrysanthemum), and they received the title of ōfun monzeki. Their power was so great that they were able to resist the forces which Nobunaga brought against them for eleven years,—from A.D. 1569-1580, when, on the recommendation of the Mikado, the monks gave way and agreed to remove entirely to another place—Sangi no mori, in Kishiu Province.

The present castle was built by Toyotomi Hideyoshi (Taiko sama), a brave man who had raised himself by his merits from being a mere zōri (straw sandal) carrier in the army, to the highest honours of the state. It is on the model of a famous Chinese fortress called the Kan-yō-kiu (咸陽宮), erected during the Han Dynasty when Chang-an (378) (Chō-an) (長安), was the metropolis of China.² It corresponds probably with this model, excepting with regard to some minor points and the addition of what was called the Sotobori or outer moat. This was in existence in the time of Hideyori, the son of Taiko, but was destroyed and filled up by Ieyasu when he took the castle in 1615.

The circumstances connected with the destruction of these works are that Ieyasu having besieged the castle for several months, the combatants were commanded by the Mikado to make peace in the last month of the 19th year of Keichō (A.D. 1614), and the conditions of surrender were then known by the name Sau-ga-jō. The history of this celebrated document framed by Ieyasu being closely connected with the history of the castle of Osaka, I think it may be interesting to mention it here, together with the first cause of the siege.

Ieyasu had, in order to weaken the power and resources of Hideyori, commanded him to restore the temple and statue of Daibutsu at Kiyōto, originally built by Taiko, his father, and which had been burnt in 1602. This command

² This story is said to be found in the Ōsaka jō (大阪砲) a work which I have been unable to procure.
went forth in 1610. It was in order to reduce the wealth of Osaka, which was now an opulent city, and the point whence revolution might easily arise. The Daibutsu was finished in 1614 under the direction of Katagiri, the officer appointed for the duty, and the great bell was cast and hung within its precincts. Upon the bell was an inscription, and there occurred in the said inscription the four characters 国家安楽 (koku ka an kō), the second and fourth of which are the characters used for the name "Ieyasu." At this Ieyasu took umbrage, conceiving that they were meant as an insult and as a spell to work against him.

When, therefore, the inauguration took place, at which many of the Osaka people were present, and in the midst of the rejoicing, officers arrived from Yedo to put an end to the ceremony, and so great was the feeling against the bell that it was never rung during the Tokugawa period, and this explains the cause of its present position on the ground outside of the temple. The anger of Ieyasu was only equalled by the wrath of the people of Osaka and of Hideyori. An embassy was, however, immediately dispatched to Sumpu (陸奥) in Suruga, where Ieyasu was then in (379) retirement (inkiyo), consisting of Katagiri and Ono, a man of great influence in the city at that time, and also two ladies, to treat with the Shōgun on behalf of Yodo-gimi, the mother of Hideyori. The object of the mission seems to have been to mollify the anger of Ieyasu and to assure him that no insult was intended. Katagiri and Ono preceded the court ladies. Ieyasu was exceedingly angry, and referred them to the reigning Shōgun, his son Hidetada in Yedo. From the latter they met with no better reception and had to return. The ladies were courteously received both by Ieyasu and by the Shōgun, and they returned. Katagiri overtook them on the Tōkaidō at Tachiyama, and stated that Ieyasu had stipulated that one of the three articles (the San-ga-jō) must be accepted by Hideyori; 1, That the Sotobori should be destroyed; or 2, That Hideyori should remove to another province; or 3, That Hideyori's mother, Yodo-gimi, should become a hostage in Yedo.
These were received with disapproval. Katagiri was blamed, and he retired to escape the vengeance of the party in Osaka.

The conditions were not agreed to, but Ieyasu immediately took steps to carry out the first, and thus the outer moat was destroyed in 1614. The siege went on for five or six months, and in the summer of 1615 the castle fell into the hands of the Shōgun's party. The particulars of this last act are pretty fully related in the *Nihonguwaishi*. Hideyori committed suicide, with many of his followers; and Yodo-gimi, too, with about twenty others who had taken refuge in a godown, were destroyed either by their own hands or those of their attendants, or by the enemy.

After this contest the castle passed into the power of the Shōgun, and it has remained as it was in those times until the present. A large moat protects the walls on the western side, and on the other side it is protected by the river. The keep of the castle is in ruins, the lower part only remaining. It was called *Ten shu dai* (天壽台 or 天主臺) or *Ten shu kaku* (天主閣), "The Heavenly lord's platform." Every year the usual offerings to the manes of Ieyasu are placed here. It consisted originally of a seven-storied tower. From the platform the whole neighbourhood is seen as on a map, and from this point the best view of the castle and its environs can be obtained. From a well near the keep, know from time immemorial as the *Ō-gon sui* (黃金水), "gold water," (380) from the belief that there was gold at its bottom, the castle has been designated *Kin-jō* (金城), though it is usually called the *Chin-dai*.

The strength of the place can hardly be exaggerated. It is built of huge stones and in a very massive manner. With modern appliances and powerful guns it would be impregnable to any attack by native forces, and under good engineers would be able to resist for a long time any foreign power.

The oldest temple in Osaka is that called Ikudama Jinja (生玉神社). Its original designation was Iku-kuni kuni-dama Jinja (生國國魂), and is said to have been built in the
first year of Jimmu Tennō, B.C. 660, when it was dedicated to Ikudama no Kami, and Ōkuni-tama no Kami. Its original position was near the site of the present castle, and its early form a very simple Miya. When in 1496 the Honguwanji was built where the castle now stands by Kenjiu (Renniyo), the Ikudama was removed a little way off, probably to some part of Tamatsukuri (玉造), the district to the south of the castle, which district took its name from a manifestation of the spirit of Ikudama in that locality, and it still retains the same name. Later on, between 1573 and the following years, when Nobunaga’s eleven years’ war with the Honguwanji was going on, the temple was burnt, and a small Miya only marked the place where it stood. Afterwards, in 1596, when Hideyoshi (Taikō sama) rebuilt the castle of Ōsaka, this also was rebuilt in its present position at his command and his expense. Its present site is one of the most commanding in the city. From the platform facing west we can view the whole city. It is therefore not only a place of worship, but a place of popular resort.

Before the recent revolution, Buddhist and Shintōist shrines were intermingled here; but since the first year of Meiji (1868) the Buddhist temples have been removed and the place has been adorned with cherry trees, etc.

The next temple of interest on account of its antiquity is Kōdzu no yashiro (高津城), as it is commonly known, its true name being Takatsu no yashiro. There is no record of its building, but tradition ascribes it to times anterior to Jimmu Tennō, when it was dedicated to Shita teru Hime no Mikoto (下照媛命) and who was worshipped there. Subsequently Nintoku Tennō, after his apotheosis, was reverenced also, and the (381) worship of the latter in course of time so far exceeded the other that it finally disappeared, Nintoku remaining master of the position. The site of the temple was originally near the castle, but in the time of Taikō sama, when the castle was rebuilt, he had it removed to its present position. The name Takatsu was an ancient one, and seems to have arisen from the fact
of this spot being "high," and from its jutting out, as it were, and it is therefore called in old ballads "oshi deru." To the north of it was the Yodo gawa, to the east the Yamato gawa, and to the west the sea. It is undoubtedly one of the highest points in the old city.

Nintoku Tennō was fond of this place, because it had been the residence in the mythical period (as they said) of Shita teru Hime no Mikoto, and so he chose this place to worship in, and when he built a palace there he called it Takatsu no Miya, the shrine of the ancient emperor being called Hime no Yashiro (比叡社). Nintoku was a very benevolent ruler, but the manner of his coming to the throne is rather curious. Although he was the rightful heir, being the eldest born of his father Ōjin Tennō, the latter had chosen his younger brother Waka Iratsu ko (雅多御子) to succeed to the throne. Upon the death of Ōjin, Waka objected to reign, and for three years kept up a contest with his brother Nintoku about the succession. Waka refused it, because, as he said, he was stupid and his brother was wise. Nintoku refused it, because, as he said, Waka was the appointed heir and ought to reign. Thus for three years Japan was without an Emperor. The end was that Waka committed suicide and his brother was then perforce placed on the throne, but the event no doubt shed a gloom over his reign and perhaps tended to increase his kindly feelings towards his subjects. Among the many stories related of Nintoku is one worthy of record, as it forms the subjects, too, of one of the old ballads. When, one day, he was looking over the villages from his lofty place at Kōdzu, he beheld no smoke arising from the houses of his subjects in the neighbourhood. He at once surmised that they were destitute, and forthwith proclaimed a general exemption from land-tax for three years. About the end of that time the Empress was complaining that he was poor, his clothing threadbare, and that the roof of his palace let in the rain; but he declared that he was rich, and to show Her Majesty what he meant (382) he pointed to the roofs of the adjacent villages, from which the smoke was rising,
and proving that his people were now well-to-do. Hence
the ballad,—

Takaki ya ni
Noborite mireba,
Kemuri tatsu
Tani no kamado no
Nigimai ni keri.

Which may be freely rendered:—"As I look from the high
roofs I see the smoke rising, and I know that my people
are rejoicing at their pots a-boiling."

The temple of Tennōji (天王寺), more properly Shiten-
nōji, i.e. the temple of the Four Celestial Kings, is a great
place of resort for the Buddhist population of Ōsaka and its
vicinity. Its history goes back to the time of Suiko, the
Empress who reigned about A.D. 593. It was then
situated at the back of the castle. The history of the
introduction of Buddhism into Japan is closely connected
with this temple's history.

In the 6th year of the reign of Bitatsu Tennō (cir. A.D.
578) Buddhist books were brought from the kingdom of
Kudara in Korea. Two year later teachers of the Indian
doctrines came and brought a golden image of Shakya from
Shiragi (Shinra, 新羅), another kingdom in Korea. The
image, the books and the teachers seem to have made a
strong impression upon the Court, for the Emperor, the
High officers and ministers assembled to inaugurate the
new religion. One man alone seems to have opposed the
introduction of the foreign doctrines. His name was Mono-
nobe no Moriya (物部守屋), and he appers to have addressed
the Emperor in words of the following purport:—"Our
country is God's country. From the foundation of the
world until the present day, the divine favour has been ex-
perienced and revered, and consequently all the people
have had peace and plenty. Now these Buddhist images
are only barbarians, and the doctrine is crooked and untrue;
if, then, contrary to sound doctrine, we do them reverence,
we shall, I fear, bring down upon us great calamities from
the gods. If, on the contrary, these barbarian gods have
any spirit and can send a plague upon as, I challenge them
to visit the whole of it on my person. Thus I respectfully offer warning."

The Emperor's judgment was shaken, and while he doubted what to do, a champion of the Buddhists arose—Soga no Umako (蘇我馬子) (383) by name—who attacked Moriya with calumny and falsehood. This enraged Moriya, but led the Emperor Bitatsu to establish Buddhism by building, in 586, two temples, the first *tera* erected in Japan, one called Guwangōji in Yamato, the other Kōgonji. Shortly afterwards Moriya, having created a rebellion, burnt these, together with all the images and books, sending away all the religious, male and female. Then nearly 300,000 of his followers assembled in Kawachi, remaining in and about Shibukawa, the castle of which was made the base of operations.

In the reign of Yōmei Tennō, on the 7th of the 2nd month, it was decided by a general council of the state officers to proceed against Moriya. This they hastened to do, but Moriya's forces gained further strength daily and the Imperial party had to give way. Yōmei's first son, Umayado,—then 16 years of age,—in after times always known as Shōtoku Taishi (聖德太子), was then in the army, and he determined to vanquish by God's power the enemy of Buddhism. So cutting a branch of the *Nuruda* (白腳木), the *Rhus Semialata*, which has some points in common with the *Rhus Vernix* or Varnish tree (*Urushi*), he carved four rude figures of the gods and placed them on the top of his head, covering them with his hair, and at the same time swore that if he conquered in the war in which he was engaged he would build a temple to these four celestial kings—*Shi tennō*. Having made this vow, he went immediately to war, and the story goes that a stalwart fellow, some eight feet high, ran by his side and with great vigour cut down the enemy on all sides. Moriya and his adherents were put to the sword, and Moriya himself died, being then 42 years of age. In fulfilment of his vow, Shōtoku Taishi built the first temple to the Four Celestial Kings on the shore of Tamatsukuri, at the back of the
present castle, and the property of Moriya and his relatives was taken for its endowment. This amounted to above 186, 890 koku.

Various stories are told of the destruction of this temple by a great wave, by flocks of red and white birds, and by wasps and flies. These evils were said to spring from the spirits of Moriya and his party, so Shōtoku Taishi is said to have transformed himself into a great eagle and to have driven away the evil birds—called Tera tsutsuki (寺嘴), and in memory of this circumstance two great eagles have been carved and are to be seen somewhere at the back of the Kondō or Golden Hall in the temple grounds.

(384) Tennōji was afterward rebuilt on its present site. It has suffered much in time of war. In or about 1334, during the civil wars in which Kusunoki Masashige was remarkable, Tennōji was a garrison. It was burnt on the 3rd of the 5th month of 1577, when Nobunaga was at war with the Ishiyama Honguwanji. Afterwards Hideyoshi ordered it to be rebuilt. Again it was burnt in 1615, during the Tokugawa and Toyotomi Hideyori war, and was rebuilt by order of the Shōgun in 1665. Its area was then from E. to W. 8 chō; from N. to S. 6 chō; and much of it was rebuilt in the ancient style, but the names of the numerous halls and buildings given in the Nihongo are not all found.

The principal hall is the Kon-dō or Golden Hall. In this is the original figure of gold and copper said to have been brought from Korea and presented to Japan by the King of Kudara. The name is Niyo-i-rin Kuwannon (如意輪観音), one of the emanations of Amitābha, corresponding with Avalokitesvara of Indian Buddhism.

The most frequented temple in Ōsaka is Temmangū (天滿宮). It is situated on the north side of the Yodo gawa, near Temman Bashi, the whole district being called Temma. The Honsha or Central Hall is devoted to Temman Dai jizai Tenjin (大自在天神). To the east of this are shrines; one to Tachikara-o no Mikoto, that celestial being who threw the (ama no iwa to) door of the cavern in which Tenshō daijin (the sun goddess) had immured herself in
mythical times, to Togakushi san (戸隠山) in Shinshiu; and the other to Hōshō-bō son-i (法性坊尊意). To the west are two other shrines dedicated to Saruda Hiko Daijin (猿田彦大神), and Hiruko no Mikoto (姫児尊).

The temple was built in the year 948 by order of the Emperor Murakami. It was erected in honor of Sugawara, Udaijin (second minister), who had been apotheosized under the title of Dai jizai tenjin. He had been maligned by the Sadaijin (first minister) Fujiwara Tokihira (藤原時平) and the Mikado had banished him to (筑紫) Chikushi (now Kiushiu), where he died A.D. 904. After his death he was much lamented, for he had been a wise and good man, and the diviners, according to the superstitious notions of those times, attributed the thunders and earthquakes of that period to the divine wrath on account of the Emperor's treatment of Sugawara. This led to his deification and the building of the temple of Temmangū in his honour. Another temple was also dedicated to him at Kitano in Kiyoto.

(385) On the 25th of each month multitudes go to worship at Temmangū, and every year there is a carnival of ten or twelve days' duration in honour of the various divinities whose shrines are in this place. During that season the show of figures of life size, and some of fantastic appearance, is wonderful, and attracts crowds of holiday folk from town and country. All the shops are closed and the people sit amusing themselves in front of the best biōbu (ornamental screens) they can afford. The shells of the bivalve shijimi (蜑) are strung in lines to represent the Fuji (Wistaria Chinensis) in blossom, which is done very effectively.

The neighbourhood of Osaka offers several objects and places of interest to the tourist. Foremost among these are Sumiyoshi, Sakai and Minō. Sumiyoshi (住吉), which is situated two ri (about 5 English miles) from Osaka, is noted for being the headquarters of the Shintō worship. A fine road runs all the way from Osaka to this place, and the place itself is a romantic spot, with the usual accessories of large teahouses, lofty trees, stone lanterns and street beg-
gars, common to all great temples in Japan. Sakai (界) is one ri further on the same road. This place contrasts favourably with Japanese towns in general. It strikes the traveller with its air of prosperity, well filled shops, broad streets, clean withal and well paved. The shops of cutlers are numerous, and the manufacturers of tools of various kinds supply the neighbouring places round. A short distance from the main thoroughfare is the harbour, chiefly used by fishermen, the shore being much frequented by holiday people from 京。There is a lighthouse for the coast hereabout at Sakai, and a gun factory, the first in central Japan, where rifles are turned out.

Minō or Minō zan (天面山) lies to the northwest of the town and is about five ri distant. After traversing three ri the country becomes interesting and the road rises gradually, until one comes to Hirano mura, to the north of which is the mountain and its ravines full of beautiful scenery, especially in autumn, when the maple is undergoing its rapid transformations of colour. From the village the way rises rapidly and then descends into a glen, where there is a temple situated and a few houses, whence it again rises for nearly a ri until the waterfall is reached. The hill-sides and the ravines are covered with most magnificent foliage, the Matsu (Pine), the Hinoki (Chamaecyparis) and the Moniji (Acer Polymorphum), the glowing tints of which are quite indescribable.

(386) This mountain of Minō is noted for having been the haunt of the originator of the Yamabushi sect of Buddhists, the shu gen shu (修験宗), whose name was Yen no Shōhaku (役小角). He had been banished to Idzumi Province by the Mikado in A.D. 698, and he subsequently made this mountain his retreat, and having perfected himself he fled to the Mountain Ōmine (大峰), in Yamato, where those who follow his tenets believe him to be still alive.

In 1596, by command of the Emperor Go Midzu-no-wo (後水尾), the Benzaiten no Yashiro was built at Minō. It is ranked as the first of the four chief Benten temples in Japan, the others being at Chikubushima, on the Biwa lake, Miya-
jima in Geishû, and another at Yenoshima near Kamakura. In this temple is a figure of Benzaiten, said to have been carved by Yen no Shôkaku himself. Its height is about 1 shaku and 5 sun (about 18 inches).

There is also a hall (dô) called Giyôja-dô (行者堂) dedicated to Yen no Shôkaku, in which is his image, two feet high, carved by himself. In the Kuwannon dô, or Hall dedicated to the Goddess of Mercy, is a figure of Kuwannon, which was cut by Chi-shô (智通), a priest of the Tendai (天台) sect. It is four feet and five inches high.

A curious and ancient custom is observed at this temple every year after the annual festival on the occasion of the new year (the 1st to the 7th), when the people go to pray for peace and plenty. It is called Tomi Kuwai (富會). On the 7th of the 1st month crowds from time immemorial used to assemble, and having purchased a wooden ticket for a small sum each person writes his name thereon. Then all the chiptickets are put into a box or tub, before which a priest stands with a stick, and with this he makes a stab into the heap and picks up a ticket which he exhibits to the crowd for their recognition, or he hails the person whose name is written on the ticket as the first, second, third tomi, or lucky fellows; and so on seriatim.

Thus the bonze, with his sleeves drawn up, proceeds to announce in a loud voice the happy individuals who have been favoured by Kuwannon with the 1st, 2nd, and 3rd drawing. Sometimes rich men buy the tickets for larger sums and the proceeds are always given to the temple. The Minô no tomi is generally known in Japan. It is one of those old customs which are so common among uncivilized nations, and may be compared with the Divination and the Oracles of Greek antiquity.

In addition to these temple and halls there are residences for priests and some tea-houses. One of these lodgings for priests was known by the name of Iwamoto bô (岩本坊). There lived the chief priest, who was always chosen by the Shôgo-In Monzeki (聖護院門跡) until the 1st year of Meiji (1868), when so many changes took place. In conse-
quence of these changes his reverence now figures as "Mine Host" at a refreshment hall in the neighbourhood.

About 18 cho (say a mile and a quarter) from the Benzaiten temple is the beautiful waterfall for which Minō is so much frequented. It is the second in Japan for its extent of fall and beauty. The water falls almost perpendicularly from a height of 16 jō (about 160 feet). Its rival is at Kumano in Kishiu. In the spring and autumn many holiday people pay Minō a visit, and after toiling up the lovely ravine which the varied foliage of the maple and other trees so richly adorns, they come suddenly on this grand fall. In the same locality are three pines called Sanko no Matsu (三鉄), so designated because, as the story goes, Yen no Shōkaku, when residing in the Katsuragi mountain in Yamato, threw his Sanko, a brazen instrument which the Buddhist priests use, and which is doubtless the Vajra of the Indian system, the symbol of Indra, the Thunderbolt of Jove, which fell in this spot, whence came a great light and where in due time these trees grew up.

There are several other myths connected with this mountain and with Yen no Shōkaku, but we must leave the notice of them for the present.

The story of Yen no Shōkaku is that he was born near Katsuragi in Yamato, that he spent 30 years in that mountain in order to perfect his walk (Shu dō 修道) after he was 33 years old; that he lived as a hermit, being clothed in the coarse garments made of the fuji (Wistaria) and the Katsura, and that he lived on the sprouts of young pines; that he had his attendant demons, and was able to walk upon the clouds; that he came finally to Minō, and lived in the mountain there nobody knows how long; but that he departed at last through the air to Ōmine in Yamato, and that there he still lives in eternal contemplation.

The temples at Sumiyoshi claim a further notice. The name of the great temple here devoted to Shintō worship is called Suminoye no on Kami no yashiro (稲吉大神社). This is in Sumiyoshi gōri. It was built by command of the
Empress Jingó Kògô. Many people go there to worship on the day called U no hi, or day of the hare (卯日), because (388) Jingó Kògô is said to have dedicated the temple on that day. Four deities are worshipped there:—1, Soko dzutsu ó no Mikoto; 2, Naka dzutsu ó no Mikoto; 3, Uwa dzutsu ó no Mikoto; 4, Jingó Kògô.

This empress was Chiu-ai tei's (A.D. 191-200) consort. Her posthumous name was Tarashi Hime no Mikoto. She is said to have been very strong when an infant, and thus were foreshadowed her future exploits. When the Emperor went to Chikushi (Kiushiu) to quell a revolt, the Empress followed, and Take-uchi, the Daijin, accompanied her. The Emperor was unfortunate and fell a victim to his unbelief in a story told by his spouse. She said that she had received a divine communication from a certain god, who told her that there was a kingdom in the west—Shiraki by name—where many wonderful productions were to be found, and bade her invade it. When she related the vision to Chiu-ai, His Majesty disbelieved her and died immediately in a fit. Jingó Kògô then proceeded to put down the rebellion and she set out for Korea, which she subdued and exacted a yearly tribute. On her return she landed near Sakai, and ordered the three temples above mentioned to be built to the three gods who had rendered her expedition successful.5

The name Sumiyoshi (極吉) is founded on a myth that those three gods once said to Jingó Kògô:—“At Ōtsu Nunakakura no nagao (大津堇中倉之長狭) our spirits live and we protect ships going out and coming in.” This place is the ancient name of Sumiyoshi (“Dwelling fortunate”). (Cf. Nihongi.)

On this account people who go down to the sea in ships worship and make votive offerings at Sumiyoshi. Even sailors and ship-owners from other provinces resort thither. An earlier name for the place was Ma-Sumiyoshi—“Truly a good dwelling place.” Afterwards the name was changed

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3 Tei ô hen nen shû sei (帝王編年集成).
to Sumi noye and Makoto ni sumi kiyoshi (庇住清). (Cf. Sumiyoshi Kammon, 标吉勲文.)

The name Sumiyoshi was not known before A.D. 900. (Cf. Settsu Meisho daizue.)

A place of remarkable interest lies a little to the south-east of Osaka, at a distance of about 4½ ri, near a village named Kōrigawa (郡川村), in the district called Takayasu (高安郡). According to Kaibara, a well known writer, author of the Wajishi (和事始), this place is (389) in the province of Kawachi, at the base of the mountain Ikoma ga ta (生駒嶽), and is known by the name of Sen dzuka (千塚) or the Thousand Barrows. I am indebted to Mr. Ogawa of the Osaka Semmon Gakkō for the following brief notes on the subject. He visited the place in April of this year and gave me the following approximate measurements. There are some fifty caves in the mountain side, constructed of stones and with huge slabs of stone for the roofs. The shape of the cave dwellings, for such they seem to have been, varies between

![Diagram](image)

entrances always facing towards the south. The distance from to a to b was found to be about 20 feet, and from b to c from 12 to 13 feet, and they were 20 feet high (Japanese measurement in shaku 尺).

There are other such caves in Yamato, in Yamanobe Gōri, and in many parts of Japan.

The people who lived in the neighborhood of these caves were, according to the oldest traditions, called Tsuchi gumo (土蜘蛛), which is the name given to a kind of spider which lives underground. The fair hypothesis is that this word is a corruption of Tsuchi gomori, which means "earth-dwellers," as this designation would accord with the fact, and helps to explain the uses to which these underground houses were adapted.

The modern city of Osaka lies upon the northern and
southern banks of the Yodo gawa, which rises in Lake Biwa and falls into the sea at Tempōsan, the entrance to the port of Ōsaka. The greater part of the city, perhaps five-sixths, is on the southern side of the river, and therefore claims our chief attention. The shape of the city approaches nearly to that form of parallelogram called an oblong, having its longest sides about half as long again as its short ones,—its greatest length being from east to west. If this oblong be divided into three nearly equal parts, the eastern portion will include the castle and its environs, and be almost conterminous with its ancient outer lines of fortification; the central portion comprises the richest and the business quarter of the town; and the western portion the business quarter most nearly related to the shipping interest.

(390) The city is intersected with numerous canals (hori), which necessitate a great number of bridges. Two of these canals run almost parallel to each other north and south, being supplied from the great river; and eight others, running east and west, and cutting the former at right angles, have communication with the Shiri-nashi gawa and the Kidzu gawa. The principal canals trisecting the city are the Higashi Yoko-bori (eastern cross-canal) and the Nishi Yoko-bori (western cross-canal). The others, running in the same direction as the Yodo-gawa, and debouching in the Shiri-nashi and Kidzu rivers are (beginning on the north side), (1) the Tosa-bori, which is really part of the Yodo; (2) the Yedo-bori; (3) the Kiyōmachī-bori; (4) the Awaaza-bori; (5) the Itachi-bori; (6) the Naga-bori, which extends through two-thirds of the city; (7) the Horiyegawa; and (8) the Dōtom-bori.

The Eastern division of the city is called Uyemachi (上町) or "Upper Town." This extends from Kōrai-bashi (Korea-bridge), which is the point from which all distances are measured, just as they are from Nihonbashi in Tōkyō. This is undoubtedly the oldest part of the city; the Central division, which extends from Kōrai-bashi westwards to the Nishi Yoko-bori, now called Semba (根境) (N.) and Shi-
ma no uchi (島内) (S.), this with the third division on the south of the Yodo, being the Lower Town.

There are three great bridges across the Yodo communicating with great thoroughfares, the (1) Tenmabashi, which communicates on the south with Tanemachi that leads on to the Temples of Ikudama and Tennōji; (2) the Tenjinbashí unites on the south with Machiyamachi and leads to Shin Kiyomidzu and Tennōji (3); the Naniwabashi, which by two divisions spans the river, where the Naka no shima lies in the stream and divides the Yodo into two courses, and which here take new names, the northern being Dōjima-gawa and the southern Tosa-bori.

The greatest thoroughfare in Osaka is the Shinsai-bashi dōri (or more properly suji, line) which leads from Kita ōma, the district lying on the southern side of the Tosa-bori, to the iron suspension bridge, Shinsai-bashi, over the Dōtom-bori, and afterwards leads on in the direction of Sumiyoshi and Sakai. The next most important thoroughfare is Sakai suji, which leads direct to Sakai. This runs parallel with the Shinsai-bashi suji and is between that latter and the Kōrai-bashi.

(391) A great deal remains to be said respecting the public places of Osaka, but they cannot be described within the limits of this paper. They can only be alluded to.

The Imperial Mint must not be omitted, as it forms one of the most striking objects of interest to a visitor to the city. It was built within the first five years of the present reign (A.D. 1868-1872). It is situated in the northern division of Osaka, in Kawasaki chō, and covers an area of some 50,000 tsubos, employs 600 hands, including two foreigners and the high officials. Since its commencement, 2,692,224:33 oz. of gold and 23,504,715:76 oz. of silver have been imported, and the coins struck, up to the 3rd of March last, are:

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<th>Yen</th>
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<tr>
<td>Gold</td>
<td>52,542,629.00</td>
<td>28,590,732.41</td>
<td>4,664,987.32</td>
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<td>Silver</td>
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<td>Total</td>
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<td>85,798,348.73</td>
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Sulphuric Acid is also manufactured and sold. The quantity sold between July 1878 and April 1879 was 1,983,316 lbs. The above figures may be relied upon, as they have been specially communicated to me by the kindness of the Commissioner, Mr. T. Ishimal.

The foreign Concession, which is situated at Kawaguchi, contains some very well built foreign houses. The roads are broad and well kept, and although there is not the same bustle and activity found as in the Foreign Concession in Tokio, the quiet little settlement of Ōsaka may well compare with Tsukiji, for it bears an aspect of tranquillity and an air of comfort wanting in its rival.

In close proximity is the Government House—the Fuchō—built in foreign style, with a cupola on the roof. Its internal arrangements I cannot speak of.

Quite near to Kawaguchi is the Custom House and the quays for the numerous small steamers which ply between Ōsaka and Kōbe, the various ports of the Inland Sea, Shikoku, etc. A mile down the river we find Tempōsan, where is one of the modern lighthouses. A few years ago this place was a common resort for pleasure-seekers and pic-nics; now the gay would patronize Sakura no Miya, the banks of the Yodo, opposite the Imperial Mint, where the cherry blossoms bloom in spring.

The theatres are situated in the neighbourhood of Dōtombori chiefly, (392) but two or three are in different quarters of the city. The Bunraku Ningiō shibai—a sort of puppet-theatre—is, I understand, only to be found in Ōsaka.

The markets are large and classified under Fresh Fish, Dried Fish, Vegetables, Fruits and Rice markets. The Zakoba or great fish market is near the Foreign Concession. To this, fish is brought very early in the morning by express boats from the neighbouring coasts, and sold by auction to fish brokers, and these retail it to small dealers. Ōsaka is furnished with a well conducted body of policemen, and the usual complement of courts of justice and summary jurisdiction offices. There are numerous small schools and many night schools. The Ōsaka Fu supports
one school in which English is taught; and the Educational Department of Tôyiyô supports the Osaka Semmon Gaku or Special School for Literature and Science (Natural and Medical). The Normal School was closed last year.

The only book which contains an account of Osaka in a compact form is a recent publication, issued in the beginning of last year, in the form of a catechism for the use of schools. It is called Osaka Fu Kuwandai Chishi-riyaku Mon dô (大阪府管内地誌略問答). It is a compilation from various sources,—descriptive works relating to the province, as the Settsu Mei-sho dzu-ye (備津名所圖會), in 12 vols.; and the histories, as the Nihongi (日本紀), or Nihon sho ki (日本書紀), and the Nihon guwai shi (日本外史). There are also a few smaller works from which help may be obtained, as the Naniwa no Nigiiwai (浪華賦飛), published in 1848, and the various Nendaiki (年代記) or chronological tables in which facts relating to the city are noted down.

In addition to these helps there are some old maps and new ones. Especially useful was the following: Naniwa jô-ko dzu setsu (浪速上古圖說), compiled by Nakamura Naomi.

This marks the changes the form of the city has undergone in past times, and proves these changes by references to old ballads, histories and traditions. The writer has also had an opportunity of using some old manuscript maps. Naniwa ko dzu (浪華古圖) dated cir. 1781, in which, however, no great difference was observable from the maps of the Naniwa jô-ko dzu setsu, above mentioned.

Two or three other old maps and a new one complete the apparatus used for this article.
ANCIENT JAPANESE RITUALS.—PART II.
(Nos. 2, 3 and 4.)

By Ernest Satow.

(Read June 30th, 1879.)

No. 2.—KASUGA MATSURI, OR SERVICE OF THE GODS OF KASUGA.

This ritual is comparatively modern, having been composed for use at a service which we are told was first celebrated in the year 859, A.D., and it contains, in fact, certain internal indications from which we should naturally be led to conclude that it was not of ancient origin. The earliest book which professes to give any information concerning the foundation of the Temple of Kasuga and of the services performed in honour of the gods to which it is dedicated is the Kuzhi kongen (叡事根源), written about the year 1422 by a noble named Ichideu Kaneyoshi, entirely from memory, and perhaps we can hardly be expected to place implicit belief in everything that it tells us. Its account of the foundation of the temple of Kasuga at Nara, one of the ancient capitals of Japan, is as follows:—

'In the year 767 (A.D.) Take-mika-dzuchi no mikoto, one of the four gods to whom this temple is consecrated, set out from Kashima in Hitachi, a province in the extreme east of Japan, in search of a dwelling-place. He rode a white deer, and carried in his hand a branch of willow, which he used as a whip. In this style he arrived in the department of Nabari in Iga, accompanied by the Nakatomi no murazhi Tokikaze and Hidetsura. From Nabari he shortly afterwards crossed over to Abe yama in Yamato, and finally arrived at Mikasa yama, close to the city of
Nara (which, if the date given by Kaneyoshi be accepted as historically, correct, was then the capital of the country). Having found a resting-place that pleased him, he announced the fact to the (394) other three gods, of whom Ihahi-nushi came from Kadori in the province of Shimofusa, Ama-no-koya-ne no mikoto from Hirawoka in the province of Kahachi, and the goddess, who is named last of all, came from the great temple of the sun-goddess in Ise. In the autumn of the same year, in accordance with a divine command, the Mikado sent an envoy to Mikasa-yama, to plant the foundations of the stout pillars of the temple on the rocks which lay deep in the earth, and so manifested due reverence towards the four gods.'

This story, which the author of the Kuzhi Kongen professes to have derived from the account given by the priests of the temple, explains the goddess to be an emanation from the personality of the sun-goddess, but Motowori argues with reason that she was in reality the wife of Amano-koya-ne, or as we should put it, of the ancient chieftain deified under that title, and that her worship, like his, was derived from the temple of Hirawoka in Kahachi. The whole legend is of course a fiction invented by the priests of the temple, at a date long posterior to its foundation in the ordinary way by the heads of the Fujiharas family in the name of the Mikado, in order to produce an effect upon the imagination of credulous worshippers, for it does not bear traces of being a genuine myth. It moreover appears to contain some anachronisms. Such names as Tokikaze and Hidetsura, formed by combining two separate words, had not come into vogue in Keiun, to which period the migration of Takemikadzuchi is referred. The real name of the man who, in 767, founded the temple of these gods at Kasuga was Uweguri Kuhimaro, a member of the Nakatomi tribe, who simply established at this spot the worship of his family gods. Tokikaze and Hidetsura were descendants of his who lived about the middle of the 9th century, when the Fujiharas, who were extremely powerful, chiefly through the marriage ties which bound successive Mikado to their
family, took advantage of their position to introduce an innovation by which the Mikado was made to worship the ancestral gods of his mother as well as his own.

I.

Take-mika-dzuchi, also called Take-ika-dzuchi, is one of three gods who, according to the version of the myth given in the Koshiki, sprang from the blood of Kagutsuchi, the god of Summer-heat, as it dropped (395) (395) from the hilt of Izanagi’s sword on to the stones in the bed of the River of Heaven (as the Milky Way is called in Japanese). According to the Shiyouzhi roku (姓氏錄) he was the ancestor in the 15th generation of a family called Yamato no Kahara no Imiki, who belonged to the province of Kahachi. It seems at first sight strange that the only persons who claimed descent from this god should be settled in a part of the country so remote from the original seat of his worship, and it would have been natural to suppose that the guardians of the temple of Kashima traced their lineage from him, as is the case with many other families of hereditary priests. This is not the case, however, for according to the Kashima Meishiyo Dzuwe, the Daiguuzhi, or Chief Warden, is descended from Ama-no-koya-ne, who here appears in a subordinate position as one of the ahidon'o gods or secondary deities of the temple.

A passage in the Hitachi Fudoki (常陸風土記), although somewhat obscure, appears to afford an explanation of the manner in which the Nakatomi tribe and the branch of it called the Fujiwara family 'came to worship Take-mika-dzuchi as one of their ancestral gods. The legend says that 'in the reign of the sovereign Mimaki (usually known as Suuzhin Tenwau), a spirit clad in white garments and armed with a white spear appeared on the top of a mountain and pronounced the following words: “If thou wilt order things aright before me, I will make the country which thou rulest tranquil, Oh Kikikatsu, and will grant unto thee large countries and small countries.” Hereupon the sovereign
summoned his followers and laid the matter before them. Kamu Kikikatsu of the Nakatomi tribe replied:—"This information has been given by the great god who dwells in the Kashima country, and promises thee the Great Many-Island country to rule over." The heavenly sovereign on hearing this was startled, and presented the above mentioned offerings at the temple of the god.' It is inferred from this extract, which purports to record the legend existing among the inhabitants of Hitachi in the beginning of the 8th century, that the temple of Kashima was founded in the reign of Suuzhin Tenwau, Kikikatsu being appointed the first high priest and bearer of the offerings spoken of, which are very nearly the same as those enumerated in the ritual. It would be natural for the peasant who repeated this legend to the official appointed to compile the Fudoki, to make Kikikatsu seem to say that the spirit who appeared was 'the god of Kashima,' (396) that being the expression which he was himself in the habit of using, while Kikikatsu simply said that the spirit was Take-mika-dzuchi. This sort of confusion in the report of another person's words easily happens in Japanese, owing to the absence of any means of distinguishing direct from indirect speech. For example, in Japanese the phrases 'he said that it was too late' and 'he said: "It is too late"' would be expressed in exactly the same manner, so that it is impossible to know without special inquiry whether the speaker is repeating the exact words of another person or is merely giving the sense of what he said. Another difficulty in connection with this passage is that the spirit apparently promises dominion over the country not to the Mikado but to Kikikatsu, but the explanation of this is that supernatural utterances are always essentially of an enigmatic character, and resemble rather the incoherent mutterings of a dreamer than the sayings of a person wide awake, and if the revelation made on this occasion had been clear there would have been no necessity for calling a council together to declare its meaning. In the present case, Kamu Kikikatsu is the only one who understands the oracle, and he expounds it to mean
that if he performs due rites in honour of the god Take-mika-dzuchi, the god will maintain the Mikado Mimaki as ruler over the 'Great Many-Island Country.' Perhaps the foundation in the east of Japan, as yet not completely cleared of its aboriginal inhabitants, of a temple dedicated to the conquering sword which, in the hands of the founder of the dynasty, had subjugated the western and central parts of the country, was emblematic of the assumption of sovereignty in that region by this Mikado. The people of later times, in repeating the explanation given by Kikikatsu, would then represent him as speaking of the 'god of Kashima,' and so the idea that the foundation of the temple was anterior to the legendary period, i.e. that it dated from the 'age of the gods,' would inevitably spring up. It became the hereditary function of the descendants of Kikikatsu, who succeeded him as high priests of Kashima, to worship Take-mika-dzuchi, and it is not difficult to see how they would come to look upon rites the performance of which had come down to them from their ancestor as a family duty. Hence, when a member of the Nakatomi tribe founded, in 767, the little temple of Kasuga in honour of his family gods, he naturally included among them the god of Kashima.

(397) The Yamato no Kahara no Imiki were no doubt a tribe of swordcutters, settled on the banks of the Yamatogaha, which flows through the province of Kahachi. There is no evidence to decide whether they regarded Take-mika-dzuchi as a famous sword or as the warrior who wielded it, but they no doubt found it convenient to adopt the fiction that they were descended from him.

In the Koshiki version of the myth, Take-mika-dzuchi is celebrated as the god who descended from heaven to subdue the chieftain whom he found ruling in the province of Idzumo, and thus prepared the way for the advent of the Sun-goddess' grandchild. According to other versions of the story he was accompanied and assisted by a god named Futsu-nushi, but doubt is entertained by the commentators as to the reality of Futsu-nushi's existence as a separate deity. Some think that Futsu-nushi is merely another
title for Take-mika-dzuchi himself; others take Futsu-nushi to be the name of the sword which he carried. It seems more reasonable to regard Futsu-nushi as the epithet of the warrior and Take-mika-dzuchi as one of the names of his sword. The Koshibi in one passage represents Take-mika-dzuchi to have been the son of a god named Ame no Wohabari no Kami, and in another place it says that Ame no Wohabari was the name of the sword with which Izanagi slew the god of Summer-heat, so that Take-mika-dzuchi must also have been a sword. Wohabari seems to mean broad blade; that is, a double-edged sword, and Taka-mika-dzuchi was probably a single-edged weapon. In the Kawachi Meisho Dzuwre, vol. 3, p. 20, there is a wood-cut representing a pair of old swords, one of which is two-edged, the other single-edged, both called Futsu no mitama, and similar swords are figured on the back of two curious discs of pottery under the name of 'treasures of Futsu no Kami,' and dated 730. (天平, 2nd year). It is clear that in that age Futsu-nushi was looked upon as the owner of the sword, and not as a sword himself. The name Take-mika-dzuchi is merely a title compounded of various honorific words, if we accept Motowori’s interpretation. Take is of course the root of the adjective takuki, bold, and is perhaps merely a secondary form of taka tall. The double meaning of 'stout' in our own language is an illustration of how a single root may signify both size and warrior-like qualities. Mika and its alternative both mean 'big'; the first form occurs in the word mikado, which originally meant 'big place,' and the second has survived to this (398) day in some parts of the country as the adjective ikai, big, numerous. Motowori expounds tsu to be the archaic generic particle, and chi to be an honorific word found in the names of several other gods, in the word woji, an old man, and reduplicated in chichi, father.

A much easier explanation is that ikadzuchi is the same as the modern word for thunderbolt, and is compounded of ika, great, and tsuchi, mallet or hammer, so that Take-fka-dzuchi or Take-mika-dzuchi would simply be the god
of thunder. And as a matter of fact the name is sometimes written 御雷之勇 (Mi-kadzuchi no, wo, august thunder man, in the Koshiki) and 鍼槌神 (Mika-dzuchi no kami or Great Hammer god, in the Nihongi, where 鍼 is evidently used as a sort of kana and the second character means ‘mallet’ or ‘hammer’). Further, the names of the gods who, according to the form of the myth in the Koshiki, were produced at the same moment as Take-mika-dzuchi, are Hi-haya-bi and Mika-haya-bi, epithets the most obvious interpretation of which would lead us to conclude that they were gods of fire, the sort of brethren that the god of thunder would be naturally supposed to have. Motowori, and Hirata following him, warn us against accepting any such easy commonsense derivations, which are of course contrary to the spirit of orthodox Shintau and opposed to the general preference of these and other modern writers for far-fetched supernatural interpretations. It seems on the whole most reasonable to suppose that this name of the Thunder god, who sprang from the blood of the god of Summer-heat, was also applied metaphorically to the famous sword which had subdued the foes of the Mikado’s ancestor.

The date of the foundation of the temple of Kashima is unknown, and in fact it is usually referred back to the ‘Age of the Gods,’ which precedes even the legendary period of Zhinmu Tenwau and his immediate successors. We have, however, seen reason to suppose that it took place in the reign of Suuzhin Tenwau, and we may fairly conclude that it is one of the most ancient temples in Japan. In fact only five Shintau temples are supposed to have existed before the time of that Mikado, namely, the Oho-yashiro in Idzumo and the four temples of Asuka, Kadzuraki, Unada and Ohomiwa in Yamato, mentioned in the Ritual of the Miyadzuko of Idzumo, all of which were dedicated to Ohonamuji and his children, who ruled Japan before it was taken possession of by the founder of the present dynasty.

(399) The second of the four gods of Kasuga, Ihahi-nushi of Kadori, in the province of Shimofusa, is identical with
Futsu-nushi, as is clear from a passage in the *Nihongi.*¹ But the meaning of either name is not so evident.² In the *Koshiki* we find mention made of a sword which had once done great service in subjugating Japan in the time of the sun-goddess’ grandchild. When Ihare hiko (Zhinmu Tenwau) was afterwards engaged in conquering the country for himself, in the course of an adventure in Kii, near Kumano, he met with a man who presented him with this very sword, in accordance with the command of Take-mikadzuchi, delivered to him in a dream.³ This sword was variously called Sazhi-futsu no kami, Mika-futsu no kami and Futsu no mitama, and was evidently supposed to be a god in itself. Hirata boldly supposes the god Futsu-nushi to be identical with this sword, but it is better to regard him as its owner. Both he and Motowori before him explain *futsu* to be an onomatopoeia denoting cutting off in a trenchant manner, without leaving anything behind, and compare it with the modern colloquial *puttsuri to kiru,*⁴ to cut clean off, so that *futsu no mi tama* would mean the “Soul of Sharpness.” Futsu-nushi is then the name of the owner of this sword, and Ihahi-nushi is that given to him to denote the fact of his worshipping the miraculous blade. Like Kashima, the temple of Kadori is said to date from the ‘Age of the Gods,’ and a family of hereditary arrow-makers who claimed descent from Futsu-nushi is recorded in the Shiyaouzhiroku as settled in Kahachi, like the descendants of Takemika-dzuchi. In the *Hitachi Fudoki* (常陸風土記 p. 5, verso) occurs a curious passage with reference to this god Futsu-nushi, to the effect that after subduing the violent gods of the mountains and rivers, he felt a longing to return to heaven, and so, leaving behind him his magic staff, armour, spear, shield, sword and precious stones, he mounted on a white cloud and ascended to the skies.

² *Ihahi* means ‘to talk together’ (*ihi-ahi*), and therefore to rejoice in company, to celebrate a festival, to worship; so that *Ihahi-nushi* means ‘the master who celebrates’ or ‘who worships.’
³ *Koshiki Den*, vol. xviii. p. 45. ⁴ Spelt phonetically.
What clearer proof than this legend can we have of his being simply a deified warrior chief? It is worthy of note that both these gods are worshipped in the form of swords.

(400) The meaning of the name Ama-no-koya-ne or Amatsu-koya-ne is even more obscure.\(^5\) Ama is of course the same as Ame, heaven, but there all certainty ends. Motowori suggests that koya is a corruption of woki-oya, the beckoning elder, which contains an allusion to the constantly recalled incident of the sun-goddess’ retirement into a cave in consequence of Susanowo’s misconduct, on which occasion it fell to the part of this god to invite her forth from her seclusion by reciting the “great ritual.” Ne is considered by both Motowori and Hirata\(^6\) as a merely honorific suffix to names of gods. Hirata takes koya to be an inversion of ya-ko, much heart or understanding, ko being the radical part of kokoro, which in old Japanese is used for mind, heart, intelligence, will and every other form or faculty of the immaterial part of man. Both of these derivations are extremely far-fetched, and it is much more likely that the god or hero from whom the Nakatomi were descended took his name from a place called Koya in the province of Tsu, in the department of Kahanobe, which belonged to the chief branch of the tribe even down to the time of Kamatari (b. 620, d. 675) in the 7th century. It was Kamatari who took the surname of Fujihara, the other members of the tribe retaining that of Nakatomi. His youngest brother was the ancestor of the Kannushi of Kasuga. Oho-Nakatomi was adopted as a surname by Omi-maro, a son of a first cousin of Kamatari. The Fujihara family gave up the service of the gods, and devoted themselves entirely to politics, while the Nakatomi still remained in the priesthood, which explains the fact that so many of them were officials of the Zhingi Kuwan, or Ministry of Shintau religion.

\(^5\) Motowori and Hirata call this god-hero Ame-no-koya-ne.

\(^6\) 古史傳 vol. xiii. p. 2.
II.

The temple of Hirawoka, whence the worship of Amano-koya-ne was brought to Kashima, is situated in the department of Kahachi in the province of the same name. To judge by the wood-cut at page 23, vol. v., of the Kahachi Meishiyo dsuwe, the buildings cannot be very magnificent, but a noteworthy peculiarity of the temple is the absence of a haiden or oratory, and the worshippers appear to prostrate themselves on the bare ground below a raised terrace on which the chapels are ranged (401) in line. According to the book just quoted, the other three deities are Oho-hiru-me (the sun-goddess), Futsu-nushi and Mika-dzuchi. Himegami, or Lady-god, is the official designation of the goddess in the national records, where she is frequently mentioned, together with Amano-koya-ne, as receiving some accession of rank and dignity in the divine hierarchy, but always two or three grades below him in rank, which is incomprehensible if we believe her to have been the Sun-goddess; and the explanation that the Hime-gami is the wife of Amano-koya-ne is the one which must be accepted.

A curious custom used formerly to be practised at this temple, called Mi kayu ura, or "Divination by gruel." On the 15th day of the 1st moon, a quantity of beans of the species called adsuki (Phaseolus radiatus) having been boiled in the presence of the gods, a roll of 54 tubes of fine bamboo, each inscribed with the name of a kind of seed-crop, was lowered into the semi-fluid mass, and from the way in which the beans entered the tubes, the priests drew inferences as to the probability of the particular crops being successful or the reverse. The peasants then knew what it would be best to sow during the year.

The temple of Kasuga is situated on the flank of a hill, and is surrounded by a wooden arcade, closed on the outside, and pierced by several gateways, the main entrance being on the south. Inside of this first enclosure is a second one, raised on a terrace, which is likewise surrounded by an arcade, with a principal gate in front, to
which access is given by two flights of steps. The ordinary layman performs his obeisance in front of this gateway and only priests are allowed to enter further. There is no oratory (haiden), but the four chapels of the gods are ranged in a row, beginning with that of Take-mikazuchi on the right, and then in the following order to the left, Futsu-nushi, Ama-no-koya-ne and the goddess. The material of which the buildings are constructed is chiefly wood, painted red, and pictorial decoration has been applied very sparingly, as must have been unavoidable in the case of a temple which used to be rebuilt every twenty years.

The temple of Oharanu, near Kiyauto, was founded in 850, after the removal of the capital from Nara to its modern site in the province of Yamashiro, and is dedicated to the same gods as the temple of Kasuga. The court apparently found it convenient to be able to invoke the gods (402) without having to make a long journey of two days to Nara and back on each occasion. The buildings are on an insignificant scale, which shows that the temple was a mere make-shift.

According to the Ceremonial Regulations (jiyugyawan gishiki) the service was performed twice in each year, namely, on the first day of the monkey in the 2nd and 11th moons.

Before the celebration of the service, orders were given to the Divination Office to fix a day, hour and locality for a "purification" to be performed. On the day preceding the purification a sort of tent was erected near the river (i.e. the Kamo-gaha at Kiyauto), and at the hour appointed the priestess who had been selected for the occasion proceeded to the place of purification in a bullock-car. The procession was magnificent and ordered with extreme precision. It consisted of nearly one hundred and forty persons, besides porters. First went two municipal men-at-arms, with white staves, followed by two citizens and eight officials of rank. They were succeeded by the bailiff of the priestess' official residence with four attendants, after whom
came ten corporals of the Guard of the Palace Gates and a few men from the other four Imperial Guards. Next came the car of the priestess herself, with eight attendants in brown hempen mantles, two young boys in brown, and four running foot-pages in white dresses with purple skirts. A silk umbrella and a huge long-handled fan were borne on either side of the car by four men in scarlet coats. Ten more servants completed her immediate retinue. Then came a chest full of sacrificial utensils, and two carriages containing a lady who seems to have acted as a sort of dueña to the priestess, and the Mikado’s messenger, surrounded by attendants in number suited to their rank. Close behind them were borne two chests full of food-offerings, and four containing gifts from the Mikado intended for those members of the Fujihara family who attended on the occasion. Seven carriages carried the female servants of the priestess, each of them being a lady of rank, and therefore accompanied by half-a-dozen followers of both sexes. Two high officials of the provincial government of Yamashiro awaited the procession at a convenient point, and conducted it to the spot chosen for the ceremony of purification. A member of the Nakatomi tribe presented the nusa, consisting of a white wand with hemp-fibre hanging from its upper end, the symbol of the primitive (403) offerings of greater value, and a Diviner\footnote{Miyashi, the term in the original here rendered “diviner,” is a contraction of miya-nushi, master of the House, the person who sacrificed to the hearth god in the Mikado’s palace. Toshi, the later meaning of which is woman, was originally the person who discharged the same function in the house of a subject. It was evidently the head of the household who at first performed these sacrifices and the office was afterwards delegated to another.} read the purification ritual. After the ceremony was over, refreshments were served out, and the Mikado’s gifts distributed. The priestess then returned to her official residence.

On her journey to the temple of Kasuga the priestess was preceded by various priests, diviners, musicians, cooks and other functionaries of inferior grade, who set out one
day earlier in the charge of an officer of the Minister of Religion. At the boundary of the province of Yamato she was received by officers of the provincial government, who accompanied her to the temporary building erected for her accommodation on the banks of the Saho-gaha. During the day the rite of purification was performed on the western side of the temple, and the offerings placed in readiness for the final ceremony. At dawn on the following day officials of the Ministry of Religion superintended the cleaning of the shrine by a young girl (mono-imi), who had been carefully guarded for some time previous from contracting any ceremonial uncleanness, while other officials (kandomo) decorated the buildings and set out the sacred treasures close to the shrines and by the side of the arcade round the innermost enclosure. Everything being now in readiness, the high officers of state who had come down from the capital for the service entered by the gate assigned to them, and took their seats in the outer court, followed by members of the Fujihara family of the 6th rank and under. The priestess now arrived in a palanquin, with a numerous retinue of local functionaries, infantry and cavalry soldiers, and followed by porters carrying the offerings of the Mikado, his consort, the heir-apparent and of the priestess herself. Next came race-horses sent by the Mikado's consort, by the heir-apparent and from the Six Guards of the Palace, the rear of the procession being brought up by a crowd of lesser officials and men-at-arms. The palanquin of the priestess was surrounded by a large body of guards, torch-bearers and running pages, umbrella and screen-bearers, and women and girls on horseback.

(404) After them came the chest of sacrificial vessels, a number of servants, three chests full of food-offerings, six chests of clothing for the gods, with carriages containing some of the Mikado's female attendants, the priestess' dueña and some young girls. On arriving at the north gate on the west side of the temple enclosure, the men got off their horses and the women descended from their carriages. The priestess then alighted from her palanquin,
and passing between curtains, held by her attendants in such a way as to render her invisible to the crowd, entered the waiting room prepared for her inside the court-yard, followed by the women of the Mikado's household. The Mikado's offerings were now brought forward by the Keeper of the Privy Purse, and laid on a table outside the gate, while the women of the Household entered the inner enclosure, and took their places in readiness to inspect the offerings. In a few minutes they were joined by the priestess, who had changed her travelling-dress for sacrificial robes. The Keeper of the Privy Purse now brought the Mikado's presents in through the gate, and placing them on a table in front of the midzu-gaki or inner fence, saluted the chapels by clapping his hands four times, alternately standing upright and bowing down to the ground. On his retiring, the same ceremony was performed by the persons charged with the offerings of the Mikado's consort and heir-apparent, after which the offerings of the Fujihara and other noble families were deposited on lower tables, with similar ceremonies. The Kandomo, or subordinate officials of the Ministry of Religion, next carried up the Mikado's offerings and delivered them to the mono-ini, who carried them into the chapel. The Kandomo then spread matting on the ground in front of each of the four chapels, and members of the Fujihara clan who held a sufficiently high rank carried in and arranged the tables destined to recieve the food-offerings. Two barrels of sake were then brought in and placed between the first and second and third and fourth chapels, in a line with the tables, a jar of sake brewed by the priests being also placed in front of each chapel. This over, every one quitted the enclosure, making way for the women of the household, who uncovered the food-offerings and poured out two cups of sake for each deity. The liquor appears to have been of the turbid sort called nigori-sake. All the preparation being thus complete, the high officers of state and the messengers sent by the court entered the enclosure and took their (405) seats. Four saddle-horses intended as offerings to
the gods and eight race-horses were now led up in front of the temple, preceded by a major-general of the Guards and the Master of the Horse. A superior priest, with his brows bound with a fillet of paper-mulberry fibre (yufukadzura), then advanced and read the ritual, bowed twice, clapped his hands four times and retired. The congregation afterwards withdrew to the Nahoraiki-den, or refectory, where the food-offerings were consumed by the participants in the solemn act of worship, and the sansai, or thanksgiving service, was conducted by the Kandomo of the Ministry of Religion.

The sacred horses were then led eight times round the temple by the grooms of the Mikado's stables, who received a draught of sanctified sake as their reward. The general of the body-guard next directed some of his men to perform the dance called Adzuma-mahi, and when they had finished, a meal of rice was served to them with much ceremony by the Mikado's cooks. At the command of the Vice-Minister of Religion the harpists and flute-players were summoned to perform a piece of music, called mi koto fuwe ahase, the concert of Harp and Flute; the flutes played a short movement alone, and were then joined by the harps, whereupon the singers struck in. An officer of the Ministry of Religion sang the first few bars, and the official singers finished the piece. This was followed by one of the dances called Yamato mahi, performed in turn by the principal priests of the temple, by members of the Fujiwara family and by the Vice-Minister of Religion himself. After the sake-cup had been passed round three times, the company clapped their hands once and separated. The priestess changed her robes for a travelling dress and returned to her lodging in stately procession as before. A Secretary of the Council of State then presented to the Minister of State a list of non-official persons of rank who had attended at the service, and the gifts of the Mikado were distributed to them as their names were called out by a clerk, after which everybody adjourned to the race-course and the day was wound up with galloping-matches.
The procedure at the half-yearly festivals of Ohoharanu was almost exactly the same.

(406) The *Yengi Shiki* gives lists of the articles required to be supplied at the two festivals of Kasuga, either as offerings or in their preparation. The cost was defrayed chiefly out of the revenues of the temples of Kashima and Kadori, which contributed between them 500 pieces of tribute-cloth (*tsuki-nuno* 諏布), 300 pieces of excise-cloth (*chikara-nuno* 諏布), 600 pieces of commercial-cloth (*aki-nuno* 資布), 600 catties of hemp and 600 sheets of paper. These articles were forwarded to the Ministry of Religion, and deposited in the government store-houses as a fund for the celebration of these services. Other offerings were provided at the expense of the several departments of the government, as for instance, the horses came from the Mikado's stables, and the matting from the *Kamori no tsukasa*.

In the ritual a mirror, sword, bow and spear are enumerated among the presents, but as no provision is made in the regulations for furnishing these articles, it seems probable that the same sword, bow and spear were brought out year after and used again, while the mirror was no doubt permanently placed in the temple in front of the gods. It must not be forgotten that in the beginning of the 10th century, when these regulations were drawn up, the practice of the Shinto religion had become a matter of form, and it seems likely that the mirror seen until a few years back in every Shinto temple had then already assumed its place before the shrine. In the regulations for the conduct of the service of the Wind-gods at Tatsuta, the use of the same saddle on the horse-offering year after year, until it became too old and ragged for the purpose, is specially ordered.

The 'bright cloth, glittering cloth, soft cloth and coarse cloth' consisted, according to the *Yengi* regulations, of 7 feet of *ashigiriu* (coarse silk), 23 feet of tribute cloth, 36 feet of bleached cloth and 12 pieces (each about 12 yards in length) of commercial cloth, all being fabrics of inferior
quality and representing a very small value in money. The ‘things wide of fin and things narrow of fin,’ i.e. large fish and small fish, are represented by bonito, *tahi* (Serranus marginalis), haliotis and cuttle fish (sepia), six cotties of each. ‘Weeds of the offing and weeds of the shore’ are represented by six cotties of *me* (Halanchlea. sp.). For ‘things of the mountains and plains—even to sweet herbs and bitter herbs,’ beans of two sorts (*daidzu*, Glycine hispida and *adzuki*, Phaseolus radiatus), (407) oranges and miscellaneous fruits were offered. Of ordinary rice and *mochi* rice 3 to (about 1½ bushels) each, and of *sake* 1½ koku (about 58 gallons) were allowed. Besides these offerings there were provided a large number of coarse earthen-ware dishes and cups of various kinds, the very form of which is now forgotten in most cases, nothing but their names having been preserved.

The principal service was followed by the *sansai*, or thanksgiving for the feast, at which the food-offerings were consumed. The *Yengi Shiki* states the amounts of the various articles supplied for this service, but we have no account of the ceremonies observed. Nor are any details given about the ceremonies of ‘purification’ (*harahi*), which preceded the brewing of sacred *sake* for use at the festival (properly called *mi ki*), nor of the service of the fire-places where the *mi ki* was manufactured, although we learn incidentally that such ceremonies were performed in connection with the principal service.

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**RITUAL.**

**[TRANSLATION]**

[Note.—The words in italics are supplied in order to complete the sense of the original.]

The sovran *who is called* “According to his great word” says in the great presence of the four pillars of sovran gods, namely, dread Mika-dzuchi’s augustness who sits in Kashi- ma, Ihahi-nushi’s augustness who sits in Kadori, Ama-no-koya-ne’s augustness and the lady-deity who sit in Hirawoka.
He says: In accordance with the request which the great gods have deigned to make, the builders have widely set-up the House-pillars on the bottom-most rocks of Kasuga's Mikasa yama, and have made-high the cross-beams to the plain-of-high-heaven, and have humbly fixed it as their Shade from the heavens and their Shade from the sun;—as to the divine treasures which are set-up, humbly providing a mirror, a sword, a bow, spear and a horse;—as to clothing, taking bright cloth, glittering cloth, soft cloth, coarse cloth, and ranging-in-rows the first-fruit of the tribute set-up by the regions of the four quarters; as to things of the blue-sea-plain—things wide of fin and things narrow of (408) fin, weeds of the offing and weeds of the shore; as to things of the mountains and wilds—even to sweet herbs and bitter herbs, as to liquor, raising-high the beer-jars, filling and ranging-in-rows the bellies of the beer-jars, and piling up the various things like a range of hills—namely the great offerings which he sets-up, having fixed upon such-and-such an officer, named so-and-so, as Kannushi (priest), he humbly fulfils the praises of the sovran great deities, by saying take them tranquilly and peacefully as peaceful and sufficient offerings.

He says I humbly fulfil your praises, saying: in consequence of my having done this, humbly praise the court of the sovran peacefully and tranquilly, and as a satisfactory and luxuriant age, and humbly bless it unchangingly and eternally, and deign to prosper also the princes and councillors of the various places and houses who share in the administration and serve, and cause them to serve tranquilly in the court of the sovran like the perpetual growth of luxuriant trees.

[Note.—The rituals of Ohoharano, Hirawoka, etcetera, are similar to this.]

NOTES.

5天皇我大命爾坐世, sumera ga oho mikoto ni mase, with which the ritual commences, presents considerable difficulty. Mabuchi got over this by simply changing mase into masu, so that the altered passage meant 'it is the great word of the sovran.' But apart from the
apparent want of connection between such a sentence and that which immediately succeeds it, the fact that this phrase *oho mikoto ni mase* occurs several times in the *Sen-miyau* (宮命) or Royal Announcements in the *Shiyoku Nihongi* (續日本紀) and in the *Ruwichiu Kokushi* (類聚國史), and always in such a context that it must be translated as a compound noun, prevents us from accepting his emendation. In an Announcement of Ohowi no Mikado (750-764) occurs the sentence *mata oho mikoto ni mase nori-tamahaku*, again the *oho mikoto ni mase* deigned to say, where the expression under examination is clearly used as a synonym for sovereign. An Announcement of Shiyamu Tenwa no of the year 743 opens with *天皇大命爾坐西奈區久*, *sumera (gr) oho mikoto ni mase mawashi tamahaku*, the sovereign's *oho mikoto ni mase* deigns to report, *i.e.* to his mother, the ex-Mikado Genshiyau. Besides these two undoubted cases of the use of this term to denote the Mikado, there are four other passages which are most probably to be read in the same manner. In the Announcement by which the Mikado Genmei Tenwa makes known her accession to the throne on the death of her son and predecessor Monmu, she relates first that in the previous year he had desired to abdicate on account of ill-health, and had addressed her in the following words: *Are ni mi tsukarashiku masu ga yuwe ni itoma yete mi yamahi wosametamahamu to su*. Kono ana tsu hitsugi no kurawi ha oho mikoto ni mase oho mashi mashite wosame tamafu beshi: (409) Because my Body is fatigued I intend to take leave and order-aright my disease. Thou shalt deign to be *oho mikoto ni mase* and order-aright the seat of the successor of heaven's sun, or more freely, "Thou shalt be *oho mikoto ni mase* and occupy the throne of the sun’s descendant." In all the copies of the *Shiyoku Nihongi*, MS. or printed, the Chinese characters are 大命爾坐母, but 母 is evidently a mistake, and Motowori is right in reading 世 instead. The phrase occurs again, 1st in a joint Announcement of Shiyamu Teiwa no and his daughter Kakuem Teiwa in 749, on the occasion of his resigning the throne to her, 2nd in an Announcement issued by Shiyamu Teiwa proclaiming his accession in 724, and 3rd in his Announcement of the year 729 by which the chronological style was altered from Zhihki to Teihiyau. In the first of these the MSS. and printed books have to instead of se, which is Motowori's emendation; but as the former makes no sense at all, while the correction does, it may fairly be accepted. There is no kana in either second or third of these cases, but in the second 天皇乃大命爾坐, is evidently the subject of the verb *noritamahaku* which follows immediately, and it is therefore necessary to read *sumera mikoto no oho mikoto ni mase*, by comparison with the first three examples concerning which there is no doubt whatever. In the third case we have 大命坐皇suffix without any kana at all. It would be possible to read *oho mikoto ni mase sumera ha*, and to translate, "I, the sovran, who am the great augustness," but there is absolutely no evidence in favour of such a reading.
I do not know of any passage where the Mikado is called a ‘great augustness,’ ‘oho mikoto,’ and the term mikoto is never used except as part of a title or as an abbreviated way of speaking of the person who bears that title, after he has been previously mentioned in the same passage. So that we are driven to read mase here, as in the other cases. In the Runwizhiyu Kokushi, bk. 36. p. 7, there is an undoubted case of the use of this term 天皇我大命爾坐世 石作乃山陵靈申絵久, sumera ga oho mikoto ni mase Isatsukuri no yama no misasagi ni mawoshitama-haku, “the sovrn oho mikoto ni mase design to report to the tomb on mount Isatsukuri,” and it is found also at the beginning of the Hirano Ritual.

It remains to inquire what is the literal meaning of Oho mikoto ni mase. The last word is the only one which presents any difficulty. Motowori suggests that 附 is merely a ‘borrowed character,’ used to express quite a different ma from that which it usually means, and that this ma is identical with the root which we find reduplicated in the expression ma ma ni, in accordance with, in ma ni ma ni, an old form of the same, and also in mase, to leave to, to submit to. The whole phrase would then signify ‘submitting to’ or ‘in accordance with the great command,’ and he supposes that it may have been so constantly used of the Mikado as to sink finally into the condition of a mere epithet, and so have become a title; just as some of the attributive phrases called makura-kotoba, abandoning their original function of epithets, came to denote the substantives to which they had originally been prefixed. This suggestion is not wanting in plausibility, especially as we find the term joined to the preceding word sumera (or sumera mikoto) as often by ga as by no. Though there seems good reason to believe that (410) no was a particle of apposition (not to say a verb) before it became a possessive particle, ga in the early Japanese is almost always a possessive particle, and never became appositive. In the passage quoted from the Runwizhiyu Kokushi, and in the two rituals where the expression under discussion occurs, the particle ga is used, with a sense, as it were, of the original meaning, while in only one place it is preceded by no, which might be understood either as possessive or appositive.

2Matsuri is here rendered by ‘humbly,’ its real character being that of an auxiliary verb, originally meaning ‘to serve.’ From being used as a verb expressing humility on the part of the speaker, it became a mere mark of polished speech, like safurafu and habedu of the written language, and masu in the modern colloquial language. (See Aston: Grammar of the Written Language, 2nd ed., p. 174.)

3 The words for sword and bow in the original are hakashi and tarashi. The authority for reading 矢 as hakashi is firstly the tradition among the Shintō priests that it is to be so read in this place, and secondly a passage in the Nihongi (see 集注 edtn. bk. 7, p. 12, verso) in a name 御刀毬 which is followed by the explanatory note 御刀此云極波逝志,
august sword is here called mikahashi. Hakashi is the root of hakasu, a form of haku, to wear, and means, therefore, a 'thing worn.' Tarashi is probably a corruption of torashi (which is adopted by Hirata as the better reading, in spite of the voice of tradition), which in like manner is the root of a 'lengthened form' of toru, to take, to grasp, and in the sense of a 'thing to grasp' might very well be used to denote a bow. The term 'lengthened form,' which Japanese grammarians are very fond of using to denote forms ending in afu or asu instead of u (only in the case of verbs of the first conjugation), must be cautiously used. There are examples in the modern colloquial language of the introduction of a redundant syllable ka, as in tsukarakasu for tsukarasu; fukurakasu for fukurasu; chirakasu for chirasu; fuyakasu for fuyasu; ikarakasu for ikarasu, which seems to be simply due to natural impulse towards the employment of emphasis, of which matsugu for masugu; matsuhira (pronounced mappira) for mahira are other examples. But the archaic forms in asu and afu may be explained in another way. In a certain number of verbs this termination in afu is due to the suffixing of the verb afu, to meet, used as a substitute for the adverb 'mutually'; thus tatakafu, to fight, is tataki-afu, to beat mutually; katarafu, to persuade, is katari-afu, to tell to each other; hakarafu, to manage, is hakari-afu, to weigh together, in the metaphorical sense; mukafu, to be opposite, is muki-afu, to be mutually turned towards; tsugafu, to pair, is tsugi-afu, to be connected together. Ihafu, to celebrate, is probably ihi-afu, to talk of together, and perhaps utafu, to sing, is uchi-afu, to beat time together. Just as the root aki-, which originally was prefixed to verbs in the same way as afu is suffixed, i.e. in the sense of 'mutually,' frequently occurs, sometimes even in the poems of the Mañyeifu, with no meaning at all, so it seems not improbable that the practise of adding-afu to the root of a verb and dropping the final vowel of the root, came to be pretty general, without the speaker having any consciousness (422) of its signification. To prefixes like aki-, uchi-, tori-, ma-, the original meaning of which is patent and so, i, the derivation of which is not yet known, the term ornamental prefix may be applied, and -afu in like manner might be called an ornamental suffix. In some cases the ornamental form has been accepted for ordinary use in the modern language, to the exclusion of the simpler, as negafu, to pray for, formerly negu, and tanafu, to deign, formerly tabu, while in sumu and sumafu both are used concurrently. The termination -asu seems to have come into use in a similar manner. Just as in the modern spoken tongue causative verbs are often inflected at the choice of the speaker, as if they belonged to both conjugations, so in the old language there was much confusion between verbs of the first and second conjugations (yo dan so hataraki and ni dan no hataraki), of which the confusion between verbs in -su and -seru is only a particular case. Such forms as
tatasu, to stand, to start;  
karasu, to reap;  
watarasu, to cross;  
kikasu, to hear;  
tohasu, to ask;  
shinubasu, to love;  
nagekusu, to lament;  
wemasu, to smile;  
omohosu, to think;  
marasu, to guard;  
kunasu, to draw (water);  
obasu, to wear (a girdle);

were probably at first causative verbs used honorifically, and as it is the well-known tendency of all honorific epithets and phrases to descend in the social scale, until they come to be used without distinction of persons, so it became a common practice to use this corrupted case form in -su indifferently, merely for the purpose of ornament. Innumerable examples are to be found in the Man'yôgishû, and because they are so common in the old poetry, it is considered a sufficient explanation to say that they are poetical forms; but it can hardly be supposed that in any language special forms were invented for use in poetry. The most reasonable explanation of 'poetical forms' is the fact that variety of expression is one of the principal means of giving ornament to a composition, and that synonymous and alternative forms were retained in poetic diction, after they had been discarded for the sake of convenience in plain prose and conversation.

4 Ni tsukahematsurite, here freely rendered 'taking,' is the equivalent of the modern conversational 'ni shite,' which is used in the sense of choosing one out of many things offered or present for selection. Tsukahe-matsuru is seen at once to be a compound of tsukaheru, to be employed, and matsuru, to serve, used as an auxiliary verb, as in the compound tatematuru, to set up humbly, to offer to a superior. In the modern form of this word the syllable he has been dropped, and it has become tsukamatsuru, used as a polite substitute for suru, to do.

5 The word rendered 'tribute' is mi-tsugi, a compound of the usual honorific prefix mi, and tsugi, root of tsugu, to continue (t.v.), used as a substantive, that which is continued in order to supply a constant want, i.e. anything supplied (without payment) for the support of another. In the modern language there is a verb mitsugu derived from mitsugi, which means to contribute towards (412) the support of a person whose income is insufficient for his needs. 'Contribution' best renders the etymological signification, but 'tribute' more fitly expresses the portion of produce paid to the sovereign by way of income.

6 By 'places' is meant departments of the government, and by 'houses' the families to which the princes and the Mikado's councillors belonged.
No 3.—HIROSE OHO-IMI NO MATSURI, SERVICE OF THE GODDESS OF FOOD.

According to the *Riyau no Gige* (令儀解), or Exposition of Administrative Law, there were two Oho-imi no matsuri, the object of which was 'to cause the waters of the mountain gorges to change into sweet waters and to fertilize the young rice-plants, so that a full harvest might be reaped.' One of these was at Hirose, dedicated to the goddess Waku-uka-no-me; the other at Tatsuta, dedicated to the Wind Gods. No satisfactory explanation has yet been given of the name Oho-imi. We learn from the *Yengi Shiki* that both services were celebrated twice in each year, on the 4th days of the 4th and 7th moons, first when the rice-plant was springing up, and afterward when it was ripe, but this can only mean the early variety called *wase*. The *Zhinhshiya Keimou* (神社啓蒙) identifies Waku-uka-no-me with the Food-goddess of the Gekuu temple in Ise. Other names of this goddess are Toyo-uke-bime, child of Waku-musubi the Vegetative Producer (*i.e.* the growth of plants personified), who was the offspring of Ho-musubi, god of Summerheat, and Hani-yama-bi-me, goddess of earth¹; Oho-getsu-bi-me, under which name she is regarded as the child of Izanagi and Izanami²; Uka-no-mi-tama, child of Susanowo and the daughter of the God Mountains, Ohoyama-tsu-mi³; Oho-mi-ketsu kami in the Praying for Harvest, Uke-mochi no kami⁴; Toyuke in the 'History of the Foundation of the temple of the sovrain deity Toyuke,' Toyourka no kami in the *Kozhiki*⁵, Toyo-uka-no-me no mikoto as the goddess of *sake*, which is prepared from rice, Oho-uka no kami in the Catalogue of Temples and Toyo-wokahime no kami in the Kagura-uta. Hirata⁶ and Mabuchi⁷ agree in identifying the goddess of Hirose with the Food-goddess of Ise.

¹ K. Zh. K. D. vol 5, p. 51.  
² Ib. vol. 5, p. 50.  
³ Ib. vol. 9, p. 50; *Nihongi Shisuchiyuu*, vol. i, p. 14 verso, p. 22 verso.  
⁴ Ib. p. 26 verso; p. 28.  
⁵ Vol. 15, p. 30 verso.  
⁶ 古史傳§ 13.  
⁷ Norito-kau, vol. i, p. 28 verso.
(413) The text of this Ritual is probably corrupt, at least the latter portion of it. The phrase "Sovran gods who dwell in the entrances to the mountains of the six Farms of Yamato" is nonsense, for the six Farms were not situated in the same localities as the temples of the entrances to the mountains, as can be seen from the passages in the 'Praying for Harvest,' where their worship is spoken of. The gods of the 'entrances to the mountains' were worshipped for the sake of the timber which grew under their care, and had nothing to do with the supply of water, for which the 'gods who dwell in the partings of the waters' are worshipped. Nor is it consonant with the functions of either the Farm or Forest gods that they should be besought "not to inflict bad winds and rough waters." It was natural enough in worshipping the goddess of food to offer up prayers also to the gods of the farms where the rice was to be grown under her protection, and likewise to the gods of water, without whose aid irrigation of the growing rice was impossible, and as the goddess of food was at the same time the goddess of trees, we can perhaps see how the worship of the forest gods may have come to be conjoined by mistake with hers. Motowori thinks that the original norito of this extremely ancient service must have been lost, and replaced much later with one composed by ignorant priests, who borrowed a piece from the Praying for Harvest and a phrase or two from the service of the gods of wind (i.e. about bad winds and rough waters), and mixed the Farms, Forests and Waters to together in one petition.

It appears from a passage in the regulations for conducting the regular services that a harahi or purification was performed in connection with this service, probably before its celebration, in order to purify the principal persons who were to take part in the ceremony, as we have seen was done before the Kasuga service, where the priestess ad hoc underwent lustration. The list of articles to be expended for the Hirose service contains the item "2 kin and 5 riyau (a little over 3 lbs.) of hemp, of which 5 riyau are for this service and the 2 kin for the purification." The re-
maining articles in the list were apparently intended either for offerings, or to be used in some way or other in connection with their presentation. Worship was also celebrated on the same day at the temple of the six imperial domains and at the fourteen temples of the Mikado's timber-forests, the allowance of cloth and (414) other few articles being extremely small, but each god received a spearhead and a mantlet. No account of the ceremonies is to be found in books.

RITUAL.

[TRANSLATION.]

He declares the name of the sovran god whose praises are fulfilled at Kahahi in Hirose. Declaring her name as the Young-food-woman's augustness (Waka-uka-no-me no mikoto), who rules over the food, he fulfils praises in the presence of this sovran deity. He says: Hear all ye Kañnushi and Hafuri the fulfilling of praises, by sending the princes and councillors to lift up and bring the great offerings of the sovran grandchild's augustness.

He says: Deign to declare in the presence of the sovran deity that as to great offerings which are set-up—he deposits in abundance and offers up, as to clothing—bright cloth, glittering cloth, fine cloth and coarse cloth, the five kinds of things, a mantlet, spear and horse; and as to liquors, raising-high the beer-jars, filling and ranging-in rows the bellies of the beer-jars, in soft grain and in coarse grain; as to things which dwell in the mountains—things soft of hair and things rough of hair; as to things which grow in the great-field-plain—sweet herbs and bitter herbs, as to things which dwell in the blue-sea-plain, things wide of fin and things narrow of fin, down to weeds of the offing and weeds of the shore.

He says: Declare in the presence of the sovran deity that if the sovran deity with peaceful and tranquil heart accepts as peaceful offerings and sufficient offerings the great
OFFERINGS thus set-up, and if the sovran deity will deign to perfect and bless in many-bundled ears the sovran deity's harvest-fields in the first place and also the late-ripening harvest which the children, princes, councillors and great people of the region-under-heaven, shall make by dripping the foam from their arms and drawing the mud together between the opposing thighs, in order that it may be taken by the sovran grandchild's augustness with ruddy countenance as his long food and distant food he will draw hither the (415) first-fruits both in liquor and in husk, even to a thousand plants and many thousand plants, and piling them up like a range of hills, will offer them up at the autumn service.

He says: Hear all ye Kañushi and Hafuri. He sets-up the great offerings of the sovran grandchild's augustness, bright cloth, glittering cloth, soft cloth and coarse cloth, the five kinds of things, down to the mantlet and spear, in the presence of the sovran gods also who dwell in the entrances of mountains of the six farms of the province of Yamato. As to the setting-up of offerings in this way, if the water which the sovran gods deign to send boiling down the ravines from the entrances of the mountains which they rule be received as sweet water, and ye will deign to bless the late-ripening harvest which the great people of the region under heaven have made, and deign not to inflict on it bad winds and rough waters, the princes, councillors, functionaries, down to the male and female servants of the six farms of the province of Yamato, will all come forth on the [number] day of the [number] month of this year, to set-up the first fruits in juice and in the husk, raising-high the beer-jars, filling and ranging-in rows the bellies of the beer-jars, piling-up the offerings like a range of hills, and plunging down the root of the neck cormorant-wise in the presence of the sovran gods, will fulfil praises as the morning sun rises in glory.

NOTES.

1Kahahi, the name of the village in Hirose department where the temple stands, is evidently a contraction of kaha-ahi, the meeting of streams.
The Yamato-gaha runs past the back of the grove, and is met by a small brook which flows along the side of the temple.

9 Motasuru: Motowori object to the final syllable -ru, but if the so-called lengthened forms are primarily honorific, then the regular causative verb belonging to the 2nd conjugation must have been the original form, and motasu, for which he contends, a corruption. See note 2 on hakashi in the Kasuga Ritual. Mochi, to rule over, in the sense of having a certain department committed to one's charge; as Yama-tsu-mi no kami rules over the mountains and Wata-tsu-mi no kami over the sea, so this goddess has charge of the Food, i.e. the Mikado's food.

3 The phrase rendered 'the five kinds of things' might also be 'the things of five colours,' and in the list of articles to be furnished as offerings we find the entry 'thin coarse-silk of five colours, 15 feet of each,' which seems to correspond closely to the language of the Ritual. But it is hardly safe to draw too strict an inference from such a coincidence, for in many cases the norito speaks of offerings which are not provided for by the Yengi Shiki, and omits to mention several of those that are actually presented.

(416) 4 'Soft grain' is the grain of rice divested of its husk and ready to be boiled for food; 'coarse grain' is paddy, or rice before it has been hulled.

5 Birds and beasts, that is, game of various kinds.

6 Mi-ko, august child, is the old Japanese designation of a child of the Mikado, and is used as the equivalent of the Chinese Shin wau (親王), Prince of the Blood.

7 The Chinese characters (公民) here translated 'great people' are variously read by different editors and commentators. Nobuyoshi and Mabuchi have ohotakara, the Deha-bo edition of the Yengi Shiki has okonu takara, while Motowori and Hirata both adopt the reading oho mi takara. The solitary passage in support of this last reading, quoted from the Gouka no Shidai, in reality proves nothing at all. This is part of a proclamation of amnesty for ordinary offences, which says: 'In consequence whereof he (the Mikado) deigns to pardon. Let each return to his own home, and not repeat his offence, but becoming oho mi takara (御財) duly furnish tribute.' It is clear, however, that the char. 御財 might be translated literally, 'imperial treasure,' loyal subjects who pay their taxes regularly being naturally regarded as treasures by their sovereign, but we need not infer from this single example that this was the usual term employed to denote the Mikado's people. Hori suggests oho mi tami, great people, which is a more likely reading.

8 The original of this passage can only be construed by omitting, as Motowori suggests, the seven char. 取作御財御領者 (in the Norito Kan, vol. 1, p. 31, line 3; in the Norito Shiyankun, part 1, page 9 verso, line 3).

9 The gods who dwell in the entrances of the mountains are gods of
the forests, to whom altogether fourteen temples were dedicated, named in the Catalogue of Temples, and all situated within the province of Yamato. See note 47 to the Praying for Harvest. They had nothing to do with supplying the ricefields with water or protecting them from wind storms. This last section is evidently a hash of the three petitions at the end of the Praying for Harvest, made by a priest who was ignorant of their real meaning and purport. This is one reason for thinking that the art of composing norito had been quite lost by the time when the Yengi Shiki was compiled.

Na ga mikoto, lit., thy augustness, must be taken as addressed to the gods of the mountains, and therefore rendered by the plural pronoun. The older texts and Mabuchi read Minashi mikoto, which seems hardly so good.

In the original is the char. ร soru no, which is used in Japanese just as we leave a blank to be filled up with the required number.

No. 4.—TATSUTA KAZE NO KAMI NO MATSURI, SERVICE OF THE GODS OF WIND AT TATSUTA.

In the Catalogue of Temples contained in vol. ix. of the Yengi Shiki are two entries of temples at Tatsuta, in Heguri department of the (417) province of Yamato; firstly, one containing two shrines to Ame no mi hashira and Kuni no mihashira, both นิไง or 'famous gods' (natataru kami) and ranking as greater shrines (see Praying for Harvest p. 105) entitled to take part in the Tsuki-nami, or so-called monthly services, and in the Nishi-name or Harvest Festival; secondly, a smaller temple containing two shrines dedicated to Tatsuta hiko and Tatsuta hime, Youth and Maiden of Tatsuta. The first of these is evidently the temple at which this Ritual was used, and it exists to this day on the same spot, at a village called Tatsuno, marked on most of the maps of the province of Yamato. Other temples to the gods of wind are in Naka department in the province of Idzu, called Kuni no mi-hashira no Zhiš-zhiya, at Yamada in Ishikaha department in the province of Kahachi, called Shinaga no Zhiš-zhiya, and in the grounds of the temple of the Sun-goddess in Ise there is also a shrine to the god of
wind. In the Koshiki\textsuperscript{1} only a single god of wind is mentioned, Shina-tsu-hiko no kami, said to have been begotten by Izanagi and Izanami. The Nihongi\textsuperscript{2} on the other hand says that "after Izanagi and Izanami had begotten the country of many islands, Izanagi said: "The country which I have begotten is completely beclouded and filled up with morning-mists." The breath with which he then blew away the mists became a god, called Shinatobe no kami and also Shinatsu-hiko. "This is the god of wind." But the text of the Ritual shows clearly that there were two wind-deities, one male and one female, who are first called Ame-no-mi-hashira and Kuni-no-mi-hashira, Heaven's Pillar and Country's Pillar, and are afterward called the youth-deity and maiden-deity (hiko-gami and hime-gami). From this it may safely be concluded that Shinatsu hiko is the name of the male and Shinatobe that of the female god of wind, be being the equivalent of me, woman (b and m being constantly interchanged), to=tsu, the generic particle. To and tsu are also interchangeable, as shown for instance in several passages in the Manyefushifu, where mato is written with 松, a pine tree, usually read matsu. Shina is for shi-naga, long breath, shi being an obsolete word for breath, seen in tama-shi-hi, soul=precious-breath-fire, shinuru, to die=shi inuru, breath departs, shinaga-dori long-breathed bird, applied to a species of duck.\textsuperscript{3} Long-breathed youth and Long-breathed maiden, (418) as we may most euphoniously render these names, are very appropriate epithets for gods of wind, which is always blowing and never seems out of breath, but the teachers of Shii Tau are not content with such an obvious idea. They base their explanation of the name upon the assumed verity of the myth, and say that it was necessary for Izanagi, in blowing away the mists which obscured the land, to continue the emission of breath for a long time, and hence the appellation given to the gods who were evolved from his breath. It is more difficult to explain the names Heaven's Pillar and Country's Pillar. Heaven

\textsuperscript{1}K. Zh. K. D. vol. 5, p. 41. \textsuperscript{2}Nihongi Shifu Shiyuu, vol. 1, p. 15. \textsuperscript{3}The 日本紀蘇疏 is the original authority for this explanation of shina.
and Country are more often used as correlatives in the earliest Japanese literature than Heaven and Earth. The ancient Japanese must have imagined the sky to be extremely light and buoyant by nature if they looked upon the wind as the sole agent which prevented it from falling to the ground, yet this is the explanation given by Motowori, and adopted by his followers. If hashira originary meant pillar, then the epithet 'country's pillar' is not easy to understand. The wind might be supposed to support the sky, but not the earth. The only way out of the difficulty is to conjecture that the first idea was to call the wind ten chi no hashira, as being a pillar planted on the earth and bearing the heavens on its summit, and that this phrase when translated into norito language became ame no mi-hashira and kuni no mi-hashira, thus bringing the names into harmony with the more ancient recognition of the winds as a pair of gods. It seems clear from the Ritual itself that these names were given to the wind-gods by the Mikado who founded the temple of Tatsuta, and who, there is reason to believe, was Tei'mu Tei'wau (673-686), so that there would be nothing surprising in the epithets having in reality originated from the Chinese expression ten-chi, heaven and earth.

It is true that that the word hashi in the sense of 'bridge' and 'ladder' (the ordinary word hashigo for staircase or ladder is compounded of this hashi and ko, an archaic form of ki, tree or wood), and hashira seem to be closely allied, and at first to have signified generally anything which fills up and bridges over a gap. 'The Japanese do not seem to have held the theory that the sky is shaped like an inverted bowl placed over a flat surface, but rather that it was a flat thing generally equidistant from the earth. Inhabitants of flat countries might naturally adopt the former view, while it would be a fact daily making (419) itself patent to a race of active mountaineers and huntsmen that there was no real limit to the horizon, whenever they climbed a hill and saw lying at their feet localities and objects which were invisible to them before
they ascended. Thus they might have conceived of the wind as a something that filled up the gap between earth and heaven, and also as the means of transit from one to the other, by observing the flight of birds for long distances borne by the wind, and the elevation in the air of dust, dead leaves and other objects. For this reason it appeared quite natural to believe that the Sun-goddess, when sent forth from the earth by her father Izanagi to assume her sovereignty over the kingdom of heaven, should travel thither by the Ame no mi hashira, the thing that bridged over the distance from heaven, in other words the wind. The interpretation which makes out this ame no mi hashira by which she ascended, to have been a solid pillar of earth, which in the early days of the world united it to the sky, but afterwards fell flat on its side and became a sand-spit in the province of Idzumo, is a modern invention for the purpose of the explaining the cosmogony of the teachers of 'pure Shinte.'

The institution of the worship of the wind gods is usually attributed by the commentators to Suuzhī Teiwa, although no such fact is recorded in either the Nihongi or Kozhiki. They found this view upon the phrase Shikishima ni ohayashima-guni shiroshimeshishi su me no mikoto in the Ritual, which they take to mean 'the Sovran GRANDCHILD's augustness who ruled the great-eight-island-country at Shikishima,' and they say that Shikishima is the same as the ancient department or hundred of Shiki in Yamato, where the residence of that Mikado is said to have been situated. There was another Mikado, namely Kiimei Teiwa (540-571), whose palace was called Shikishima no Ohomiya, the great House of Shikishima, and it would be more reasonable, if the question were to be decided by the mere name, to attribute the foundation of the temple to this sovereign. In the Manyefushifu we find Shikishima used as the makura-kotoba, or recognized epithet, of Yamato no kuni, which in those passages means the whole of Japan, and not the province of Yamato by itself. If we give to this expression its most natural and obvious meaning of
spread-out islands,' then its employment as an epithet for the whole country is seen to be extremely apt, and its application to Oho-ya-shima-guni, another of the (420) poetical names of Japan, would be perfectly natural. We should of course expect to find the particle no after Shikishima in such a case, but there was a certain indefiniteness in the use in early Japanese of the particles no and ni, which appear to have been more or less interchangeable. The phrase in the original might consequently be used to denote any Mikado who ever sat on the throne of Japan. Mabuchi and Motowori were led to interpret this passage as referring to a previous Mikado by the verb shiroshimeshi being put in the past tense, shiroshimeshishi, but this termination shi is evidently an error. Even if it were necessary here to denote past time, shi would not be correct, and under any circumstances shiroshimesu must have been the original form used, just as we have tsukuru mono and not tsukurishi mono just afterwards. They took the first part of the Ritual to be a recital of events which had occurred long previously to its composition, but it was clearly composed for the first celebration of the worship of the gods of Tatsuta, and used without alteration ever afterwards. In the Nhi-longi (Shifuchiyuu, bk. 29, p. 8 verso) we have the positive statement that Tei-mu Tei-wau in the 4th year of his reign (676) 'sent two persons from the court to worship the Wind-gods at Tatsuno in Tatsuta, and two others to worship Oho-imi no kami (the goddess of Food) at the bend of the river in Hirose,' the meaning of which is probably that the temples of the Wind-gods and the goddess of Food were then founded at those places. Some Japanese scholars think that they recognize in this Ritual indications of its having been composed about the time of Tei-mu Tei-wau, and certainly neither it nor the Hirano Ritual appears to belong to the oldest of these compositions. The few archaic words which it contains are to be found in poems of the Manyefushifu fifty or sixty years later.

It is interesting to note that we have in this Ritual a legend (for it is nothing more) of the way in which the
winds first came to be worshipped. During a succession of years violent storms, such as even now frequently visit Japan in the autumn and do considerable damage to the ripening rice, had destroyed the crops, and after the diviners had in vain endeavoured to discover by their usual method who were the workers of the calamity, the gods revealed themselves to the sovereign in a dream, and directed that temples should be raised in their honour and certain offerings made to them. The offerings demanded are of course (421) such as would be acceptable to human beings, it being beyond the power of insight of the first worshippers of the unseen to suppose that the beings whom they dreaded and desired to propitiate could wish for anything different from the articles usually offered at the graves and shrines of departed ancestors, namely, whatever was most useful to mankind itself in that primitive age.

We know nothing of the ceremonies and forms observed in the worship of the Wind-gods previous to the 10th century, when the rules contained in the Yengi Shiki were framed. From them we learn that the envoys sent by the Mikado to represent him at the celebration of the service were a prince and a minister of the 5th rank or upwards, and two officials of the Ministry of Religion, of not above the 6th rank, accompanied each by a diviner and two Kandono. Either the governor of the province or his lieutenant had charge of the arrangements. Each department (kohori) in the province of Yamato had to take its turn in furnishing a couple of loads of food-offerings. The cost, as well as that of rice, sake and rice in ear, was defrayed out of the taxes of the province, but all the other articles were supplied by different departments of the Mikado's household. The list of articles in the Shizhi-sai shiki (四時祭式) corresponds very nearly with the offerings named in the Ritual. The 'bright cloth, glittering cloth,' etc., are represented as in the preceding Ritual, with the addition of China-grass. In addition to the spear and mantlet, for which the iron and deer-skins were needed, it appears that bows and arrows were offered up, and a certain quantity of slender bamboo
stalks, feathers for winging them and horn for arrow-tips was therefore supplied. Each deity received a horse and saddle; new saddles were not presented every year, but the old ones were made to last as long as possible on successive occasions. The varnishings mentioned in the directions were intended for the ‘golden thread-box, golden tatari and golden skein-holder,’ which so far from being made of the precious metal were merely painted wood. Lastly, the food-offerings of the produce of mountain, plain and sea are the same as on all other occasions.

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RITUAL.

[TRANSLATION.]

He says: "I declare in the presence of the sovran gods whose praises are fulfilled at Tatsuta.

(422) "Because they had not allowed, firstly the five sorts of grain\(^2\) which the sovran grandchild’s augustness, who rules the spread-out islands\(^2\), the country of many islands\(^5\), takes with ruddy countenance as his long and lasting food, and the things produced by the great\(^4\) people, down to the least leaf of the herbs, to ripen, and has spoilt them not for one year, or for two years, but for continuous years, he deigned to command: As to the heart of the god which shall come forth in the divinings\(^5\) of the men who are learned in things, declare what god it is."

"Whereupon the men learned in things divined with their divinings, but they declared that no heart of a god appears.

"When he had heard this, the sovran grandchild’s augustness deigned to conjure them, saying: 'I thought to fulfil their praises as heavenly temples\(^6\), without forgetting and without omitting, but let the gods, whatever gods they be, that have prevented the things produced by the great people of the regiod under heaven from ripening and have spoilt them, make known their heart.'
Hereupon they made the sovran grandchild’s augustness to know in a great dream, and made him to know their names, saying: ‘Our Names, who have prevented the things made by the great People of the region under heaven from ripening, and have spoilt them, by visiting them with bad winds and rough waters, are Heaven’s Pillar’s⁷ augustness and Country’s Pillar’s augustness.’ And they made him to know, saying: ‘If for Offerings which shall be set-up in our presence there be furnished various sorts of Offerings, as to Clothes, bright cloth, glittering cloth, soft cloth and coarse cloth and the five kinds of things, a mantlet, a spear, a Horse furnished with a Saddle, if our House² be fixed at Wonu in Tachinu at Tatsuta, in a place where the morning sun is opposite and the evening sun is hidden, and praises be fulfilled in our presence, we will bless and ripen the things produced by the great People of the region under heaven, firstly the five sorts of grain, down to the least leaf of the herbs.’

Therefore hear, all ye Kaïnushi and Hafuri, my declaring in the presence of the sovran gods that, having fixed the House pillars in the place which the sovran gods had taught by words and made known, in order to fulfil praises in the presence of the sovran gods, the sovran grandchild’s (423) augustness has caused his great Offerings to be lifted and brought, and has fulfilled their praises, sending the princes and councillors as his messengers.”

He says: “As to the great Offerings set-up for the youth-god⁹, I set-up various sorts of Offerings for Clothes, bright cloth, glittering cloth, soft cloth and coarse cloth, and the five kinds of things a mantlet, a spear, a Horse furnished with a Saddle, for the maiden-god¹⁰ I set-up various sorts of offerings, providing Clothes, a golden thread-box¹¹, a golden tatari¹², a golden skein-holder¹², bright cloth, glittering cloth, soft cloth and coarse cloth, and five kinds of things, a Horse furnished with a Saddle; as to Liquor¹⁴, I raise high the beer-jars, fill and range-in-a-row the bellies of the beer-jars; soft grain and coarse grain; as to things which dwell in the hills—things soft of
hair and things coarse of hair; as to things which grow in
the great-field-plain—sweet herbs and bitter herbs; as to
things which dwell in the blue-sea-plain—things broad of
fin and things narrow of fin, down to the weeds of the offing
and weeds of the shore. And if the sovran gods will take
these great offerings which I set-up, piling them up like
a range of hills, peacefully in their hearts, as peaceful
offerings and satisfactory offerings, and the sovran gods,
designing not to visit the things produced by the great
people of the region under heaven with bad winds and
rough waters, will ripen and bless them, I will at the
autumn service set-up the first fruits, raising-high the beer-
jars, filling and ranging-in-rows the bellies of the beer-jars,
and drawing them hither in juice and in ear, in many
hundred rice-plants and a thousand rice-plants. And for
this purpose the princes and councillors and all the func-
tionaries, the servants of the six farms of the country of
Yamato, even unto the males and females of them, have all
come and assembled in the fourth month of this year, and
plunging down the root of the neck cormorant-wise in the
presence of the sovran gods, fulfil their praises as the sun
of to-day rises in glory.

"Hear, all of ye the mandate: Kañnushi and Hafuri,
deign to receive the great offerings of the sovran grand-
child's augustness, and set them up without omission."

NOTES.

1 The five sorts of grain of the Japanese are rice, millet (panicum
Italicum), barley and two sorts of beans, adzuki or Phaseolus radiatus,
and daidsu or Glycine (424) hispida. This differs from the Chinese
enumeration, in which hemp is given instead of one of the sorts of bean.
In the Koshiki the five kinds of grain are said to have sprung from the
dead body of the Goddess of Food, Ohogetsu-hime; rice from the eyes,
millet from the ears, adzuki from the nose, barley from the private parts
and daidsu from the fundament. Hirata in the Koshi Seibun gives a
slightly different form of the myth. The expression 'five sorts of grain'
is evidently an imitation of Chinese phraseology, and its occurrence
here is an indication of the comparatively late date of this norito.

2 Spread-out islands, Shiki-Shima. This is generally explained to
mean the palace of Suuzhiñ Teñwau, which tradition says was in the
department of Shiki in the province of Yamato, now divided into Shiki
no kami and Shiki no shimo. Reasons for thinking this view erroneous,
and for regarding Shikishima as a general epithet of Japan, and hence
able of being used with respect to any Mikado, have been given in
the introduction to this ritual.

5 Oho ya shima guni, the Country of Many Islands. Ya originally
signified 'many,' but was afterwards adopted as the numeral 'eight,'
and hence in the myth of the birth of the Japanese archipelago eight
islands are always mentioned, though not the same set of eight in each
form of the myth. In the Kozhiki the gods Izanagi and Izanami beget
in succession, 1st, Ahaji, or the island on the road to Aha; 2nd, Iyo, an
island with one body and four faces, i.e. the island of Shikoku, divided
into the four provinces of Aha, Tosa, Iyo and Sanuki; 3rd, the triplet of
Oki, a group which lies north of the province of Idzumo; 4th, Tsukushi,
an island with one body and four faces i.e. the island of Kiushiu, or Kiu-
koku, originally divided into four regions, namely, Tsukushi, which now
forms the modern Chikuzen and Chikugo, Toyo, the modern Buzen and
Buzo, Hi, consisting of the modern provinces of Hizeh, Higo and a
part of Hiuga, and Kumaso, the modern Satsuma, Ohosumi and south-
ern half of Hiuga; 5th, Iki; 6th, Tsushima (which probably means 'port
island,' as containing the port of call for boats going from Japan to
Korea); 7th, Sado, formerly famous for its mines, and 8th, last of all,
Oho-yamato-Akitsushima, i.e. the main island of Japan. It is worth
while nothing how many of these names have in the course of time come
to be extended in application. Tsukushi and Iyo were parts only of the
islands which were afterwards called by their names; Kumaso was the
modern department of So in Ohosumi, and Yamato, applied later to the
whole of Japan, originally meant only the province which still bears
that name. Yamato-kotoba is the old Japanese language (or rather the
words of which it is composed), and not, as some persons still seem to
imagine, the language spoken in that province. Six forms of the myth
are given in the Nihongi with slight variations, such as the birth of
Koshi (now divided into the five provinces of Wechizeh, Kaga, Noto,
Wetsuchiu and Wechigo) separately from the main island, the inclusion
of Ohoshima, which is one of the departments of Suhau forming an
island by itself, and Kibi no Kozhima, a part of Bizen, also formerly an
island. (See 国史考; Kozhiki Den, vol. 5, p. 1, et infra; 日本紀集註,
vol. 1, p. 6 verse, et infra.)

(425) 6 Great' (oho) is a mere honorific, like mi (rendered by 'august'),
applied to the people because they belong to the Mikado. A little fur-
ther on the same epithet is applied to the dream in which the wind gods
make themselves known to the Mikado.

6 The word uta, which in one of its secondary uses signifies divination,
means primarily that which is behind, and hence is invisible, e.g. the
mental feelings of a person, in which sense it is equivalent to kokoro
which may be employed to denote the mental part of man and most of its modes of operation, such as will, sentiment, intention, meaning. The art of finding out that which is hidden was called urawasa or uragoto, and then for shortness' sake simply ura. Thus from this use of ura to mean 'heart,' it was transferred to the means of discovering the intentions of another, especially the intentions of a god, i.e. divination, and the verb ura-nafu, to divine, was formed from it by adding nafu, to spin. (See note 20 to the Praying for Harvest.) Various modes of divination were in use among the ancient Japanese, of various degrees of solemnity. One of these has already been described in the introductory remarks to the service of the gods of Kasuga. Another, to which allusion is made in the Manye’fushifu, consisted in stepping out into the road, and listening to the fragmentary talk of passers-by, from which omens might be interpreted. This was called Tsuji-ura, or divinings in the roads; the word has lost its primitive meaning in the present day, and is now applied to the 'mottoes' placed inside sweetmeats, with which we are familiar in Europe also. As this sort of divination was usually practised at night it was also called yufuke tohi, 'questioning the evening passers-by,' and yufu ura ‘evening divination,' under which names it is frequently alluded to in the Manye’fushifu. In its earliest form the ceremony consisted in planting a stick upright in the ground to represent the god of roads, who according to the ancient myth was the transformation of the staff of Izanagi, which he threw from him when returning from the lower regions, in order to prevent the demon from pursuing him any further. Offerings were then made to this god and he was besought to give an answer to the question propounded. A passage alludes the custom of carrying a stick when going out to perform the yufuke tohi.

I go and question the evening oracle, (unconscious) whether I carry a stick or not.

Tsune tsuki mo
Tsuken no yukite
Yufuke tohi

_Ahanaku ni
Yufuke wo tosu to
Nusa ni oku ni,
Wa ga koromode ha
Mata zo tsugenbeki._

The meaning of tsugen is not quite certain. One commentator thinks that the lover has ripped up his clothes and reduced them again to the state of mere cloth (426) to offer to the god, and that tsugenbeki means that he will sew the pieces together again after obtaining an answer. But the other view, with which the translation above given accords, namely, that as he is unable to meet his love, it will be necessary to
continue the offering until he gets a favourable answer, is more plausible. Sometimes the answer was deceptive.

\[
\begin{align*}
\text{Yufukeni} & \text{mo} \\
\text{Ura ni} & \text{mo noreru} \\
\text{Koyoki} & \text{dani} \\
\text{Kinasanuki} & \text{mo} \\
\text{Itsu to ka} & \text{matamu.}
\end{align*}
\]

When may I expect you, who do not come, even on the night which was told by the evening oracle and by the divination too.

The woman in this case has tried both ways of finding out when her lover will come, the ‘evening oracle’ and divination by scorching either a deer’s shoulder-blade, or a tortoise-shell, and both have promised that she will see him on a certain evening, but he disappoints her after all. The following extracts also illustrate this practice, which seems to have been very common in ancient times, ten or eleven centuries ago. The poet Yakamochi in reply to a lady writes:

\[
\begin{align*}
\text{Tsukuyo ni} & \text{ha} \\
\text{Kado ni} & \text{idetachi} \\
\text{Yufuke} & \text{tohi} \\
\text{A ura} & \text{wo zo seshi} \\
\text{Yukamaku} & \text{wo hori.}
\end{align*}
\]

On a moonlight night
I stood at the house-door,
questioned the evening oracle
and performed foot-divining
because I longed to go to you.

(M. Y. S. 4, pt. 2, f. 21 verse, l. 1.) A ura is the same as ashi ura, which Baï Nobutomo thinks may have consisted in walking up to a string stretched across the road, and drawing omens from the position of the feet when the string stops further progress, but this is simply a conjecture.

\[
\begin{align*}
\text{Kotodama} & \text{no} \\
\text{Yaso no} & \text{chimata ni} \\
\text{Yufuke} & \text{tofu;} \\
\text{Ura-masa} & \text{ni norc} \\
\text{Ino ni} & \text{akama yoshi.}
\end{align*}
\]

I question the evening oracle
in the many road-forkings
of the language-spirit;
tell me truly
how I shall meet my love.

(Bk. xi, pt. r, f. 34, l. 6)

\[
\begin{align*}
\text{Ima sara} & \text{ni} \\
\text{Kimi ka} & \text{wo yobo,} \\
\text{Tarachine} & \text{no} \\
\text{Haha} & \text{no mikoto ka} \\
\text{Mono} & \text{tarazu} \\
\text{Yaso no} & \text{chimata ni} \\
\text{Yufuke} & \text{ni mo,} \\
\text{Ura ni} & \text{mo zo} \text{tofu} \\
\text{Shinubeki} & \text{wa ga yuwe.}
\end{align*}
\]

Does he now call me
after all, or does
my august mother
who suckled me,
ask the evening oracle for me
in the many road-forkings,
or ask by divination,
for me who must die.

(M. Y. S. 16, f. 19, l. 8.) This is part of a lament by a lady whose husband is far away. She pictures herself dying broken-hearted, and wonders whether he is near her pillow to call her back, as the Japanese custom is, in her last moments, and whether her mother, anxious about
her welfare, is at this moment consulting the oracle or inquiring of the diviner. In bk. 17, pt. 2, f. 8, r. 5 we have the following extract from a naga-uta written in kana.

Shita gohi ni
Omohi urabure
Kado ni tachi
Yufuke tohitsutsu.

Feeling melancholy with
hidden longing,
I stand at the house-door,
questioning the evening oracle.

(See also vol. 14, pt. 2, f. 5 verso, r. 12). Generally, however, this sort of divination was performed by going away from the house, as in the following naga-uta.

Ki no kimi no
Hama ni yoru tofu
Ahobidama
Hirohanu to ihite,
Imo no yama

Se no yama koyete,
Yukishi kimi ha
Itsu ki masanu to
Tamaboko no
Michi ni idetachi
Yufu ura no
Wa ga tohishikaba,
Yufu ura no
Ware ni noraku;
Wagimoko ya
Na ga matsu kimi ha
Oki tsu nami
Ki yoru shira tama
He tsu nami no
Yosuru shira tama
Motonu to zo.
Kimi ga ki masanu.
Hirofu to zo.
Kimi ha ki masanu.
Hisa naraba,
Ima nanuka bakari;
Hayakaraba,
Ima futsuka bakari
Aramu to zo.
Kimi ha kikoshishi,
Na kohi so wagimo.

When I went out
and stood in the road,
and asked the evening oracle
when he would come back
who went over the sweetheart’s mount
and the lover’s mount,
saying that he would
pick up the ahabi shells
which come ashore
in the “Region of woods,”
the evening oracle said to me:
“Sweetheart!”
“he for whom you wait
“is searching for
“the white shells which
“come near on the waves
“of the offering, the white shells
“which the shore waves
“bring near.
“He does not come,
“he picks them up.
“He does not come.

“If he be long,
“twill be but seven days;
“If he be quick,
“twill be but two days.
“He has heard you.
“Do not yearn,
“my sweetheart.”

(M. Y. S., bk. 13, pt. 2, f. 15.)

In the Ohokogami (vol. 5, f. 6 from the end) an instance of yufuke tohi is related as follows: “Her mother, impelled by some unknown
motive, when she (428) was yet quite young, went out into the Second Broad-street and performed the yufuke tohi (questioning the evening oracle), when a woman with dreadfully white hair who was passing by stopped, and said: 'What are you doing? If it is questioning the evening oracle that you are bent on, then may everything you can think of fall out as you wish, and may your fortunes be broader and higher even than this Broad-street:' and so saying she departed altogether.'

The book from which this is taken dates from the beginning of the 11th century. In the Shifu gai seu, or collection of Rubbish (拾芥抄) is preserved the following stanza used by women in addressing the god who gave the oracle:

<table>
<thead>
<tr>
<th>Funadosahe</th>
<th>When we ask things</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yufuke no kami ni</td>
<td>of Funadosahe,</td>
</tr>
<tr>
<td>Mono toheba,</td>
<td>the god of the</td>
</tr>
<tr>
<td>Michi yuku hito yo</td>
<td>evening oracle,</td>
</tr>
<tr>
<td>Ura masa ni se yo</td>
<td>deliver the oracle</td>
</tr>
<tr>
<td></td>
<td>truly,</td>
</tr>
<tr>
<td></td>
<td>ye who go along the</td>
</tr>
<tr>
<td></td>
<td>way.</td>
</tr>
</tbody>
</table>

The woman used to go out in threes to the nearest cross-road, and repeat this stanza thrice. They marked out a certain portion of the road, and scattered rice about it as a charm against demons. Then each turning towards a separate road drew her finger along the edge of a box-wood comb which she carried, and they inferred good or evil fortune from the words uttered by the first person who happened to pass that way. The use of the box-wood comb was a sort of pun, the word tsuge meaning both 'box-wood' and 'tell,' and drawing the finger along the teeth was a request to the god to speak out. Bañ's work on divination, the 正 卍, mentions several other ancient methods, such as kama no wa no ura, divining by the boiler-bed, kome ura, rice divination, ashi-ura and iishi-ura, foot and stone divination, of which little more is known than the mere names.

Shitodo dori was a method of divination in which a species of bird played a prominent part, but whether it resembled the Chinese method of divination by observing the direction in which certain birds fly and their number, is not known. Another method, koto-ura, was employed at the temple of the Sun-goddess in Ise, with the object of ascertaining whether the priests who are to take part in a religious service and the tables and vessels used in presenting the offerings are pure or not. At midnight on the night preceding the service a priest (called a mi kanu no ko no uchindo, evidently a person of peculiar sanctity) sat with a harp outside a certain gateway of the temple. Turning towards the shrine he prayed that the goddess would enable him to discover by divination whether the above persons and things possessed the requisite purity. He then struck the harp thrice with a piece of yew wood in the form of a shiyaku (Chin. 矢胡), a loud "Hush!" being uttered each time, and then uttered the following three verses, by which all the gods were besought to descend from heaven and give answer to the question put.
The names of all the priests were then called over one by one, and the question was asked, "Is he clean or unclean?" The same priest as before repeated the words, and striking the harp again, tried to whistle by drawing in his breath. If the whistle was audible, the person whose name had been called was considered to be free from impurity, and vice versa. The same proceeding was observed with respect to the persons who had prepared the offerings, and the boxes, pails, ladles, tables, pottery and food-offerings. Afterwards the priest struck the harp again three times, with a solemn "Hush!" and intoned similar verses, in which the gods who had been called down were asked to return to their abodes. This ceremony is first mentioned in the Calendar of the Sun-goddess' Temple drawn up about the end of the 8th century, but the minute details are taken from a Calendar of the end of the 12th century, and there is nothing surprising in the use of the Chinese shiyaku or courtier's tablet, which had been part of ceremonial dress for several hundred years. Everything else in the proceedings, and certainly the verses, seem purely Japanese.

The most important mode of divination practised by the primitive Japanese was that of scorching the shoulder-blade of a deer over a clear fire, and finding omens in the direction of the cracks produced by the heat. It is alluded to in the following verses from the Maitôyefushifu.

**I.**

*Ahari ya*

*Asobi ha su to mausanu,*

(429) *Asakura ni*

*Ama tsu kami kuni tsu kani,*

*Orimashimase.*

<table>
<thead>
<tr>
<th>Ah! ah!</th>
</tr>
</thead>
<tbody>
<tr>
<td>we do not merely amuse ourselves;</td>
</tr>
<tr>
<td>on to your splendid seat</td>
</tr>
<tr>
<td>gods of heaven and gods of the country</td>
</tr>
<tr>
<td>descend.</td>
</tr>
</tbody>
</table>

**II.**

*Ahari ya*

*Asobi ha su to mausanu*

*Asakura ni*

*Naru Ikadzuchi no*

*Orimashimase*

<table>
<thead>
<tr>
<th>Ah! ah!</th>
</tr>
</thead>
<tbody>
<tr>
<td>we do not merely amuse ourselves;</td>
</tr>
<tr>
<td>on to your splendid seat</td>
</tr>
<tr>
<td>sounding Thunderbolt also</td>
</tr>
<tr>
<td>descend.</td>
</tr>
</tbody>
</table>

**III.**

*Ahari ya*

*Asobi ha su to mausanu*

*Asakura ni*

*Uha tsu oho ye shita tsu oho ye*

*Mawiri tame he.*

<table>
<thead>
<tr>
<th>Ah! ah!</th>
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</thead>
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<tr>
<td>we do not merely amuse ourselves;</td>
</tr>
<tr>
<td>on to your splendid seat</td>
</tr>
<tr>
<td>upper great elder brother and</td>
</tr>
<tr>
<td>lower great elder brother (?)</td>
</tr>
<tr>
<td>b' deign to come.</td>
</tr>
</tbody>
</table>

*Musashi no ni*

*Urahe kata yaki*

On Musashi moor

I burn the divining shoulder-blade,
Masade ni mo
Noramu kimi ga na

Ura ni ide ni keri.

Urahe is explained to be a contraction of ura ahase, hase being naturally contracted into he and two a coalescing; but it is simpler to regard ahe as the transitive verb corresponding to the i.v. ahi to meet. The meaning of the (430) expression is that the seeker after divine guidance as to the right conduct to be followed, by means of the process called divination ascertainst whether his own mind is in harmony or unison with that of the god or gods appealed to. The verse is supposed to have been the composition of a girl whose parents are about to give her in marriage, but refuse to disclose beforehand the name of her husband, and she has recourse therefore to divination by scorching the shoulder-blade of a deer. Being written entirely in kana, with the exception of the words musashi no and na, there is no dispute about the reading of this verse. It is to be found in bk. 14, pt. 1, folio 12 verso, Riyakuge edition.

Ofu shinoto
Kono moto-yama no

Ma shiba ni mo
Noramu imo ga na
Kata ni idemu kamo

(My love’s name
which I tell not even to the grass
(or, not grudgingly even)
of this tree-mountain
where grow many trees
will appear in the shoulder-blade!)

(Ib. folio 12 verso.)

There is a play on the words shiba ni, which mean ‘to the grass’ and ‘frequently,’ or they may perhaps be read shiha ni, grudgingly. The allusion to divination by means of the shoulder-blade of a deer is here not very distinct, but kata cannot be satisfactorily explained in any other way.

Watatsumi no
Kashikoki michi wo
Yasukeku no
Naku nayami kite,
Imada ni mo
Mo naku yukanu to,
Yuki no ama no
Hotsuite no urahe wo
Kata yakite
Yukanu to suru ni,
Ime no goto
Michi no soraji ni
Wakare suru kimi.

(When I had toiling come
without enjoying ease
along the awful road
of the sea-possessor,
and yet again was
about to go
after burning the shoulder-blade
for the divining for a fair wind
by the fishermen of Iki,
in order to go untroubled,
thou didst depart from me,
in the sky of my road
like a dream.

(Ib. vol. 15, f. 34.)
This seems to be a lament by a traveller to Korea, who on arriving at the island of Iki lost his companion by death while they were waiting for a fair wind. *Hotsumete* is explained by *ho;* sail, and *te,* as used in *haya-te,* a gust; hence the compound may mean a wind that suits the sails, a fair wind. Here the reference to scorching a shoulder-blade is distinct, but the animal from which it was taken is not mentioned. It is clear, however, from the following passage from the *Kozhiki* that the shoulder-blade of a deer was used: "He summoned Ame-no-koya-ne no mikoto and Futo-dama no mikoto, and caused (431) them to pull out completely the shoulder of a stag of Ame-no-kagu yama, and taking *hakahaka* [the name of a tree] to Ame-no-kagu yama, to perform divination." Nothing is here said about scorching the bone, which part of the process is known from the verses previously quoted and from a passage in a Chinese account of Japan which dates from the latter part of the third century, A. D. This account is to be found in the appendix to the *Wei che* (魏志), in the *San kwo che,* or History of the Three States, but it is more conveniently referred to in a collection of passages from Chinese works bearing on Japan called 異冊日本傳 (*Wi shiyou Nihon den*), in the first volume of which book it is to be found, on the reverse side of folio 10. The Chinese author, in describing the custom of the Japanese, says: "They have the custom, when entering upon an undertaking or starting on a journey, or saying or doing anything of importance, of scorching a bone, and by divining, to discern good and evil. They first announce what is to be divined, and the language used is the same as in divination by the tortoise-shell. They discern the omens by observing the cracks produced by the fire." The last sentence but one is an allusion to the Chinese practice of muttering over the tortoise-shell the question which it is required to answer. It is interesting to notice that a similar method of divination was in vogue among the Kirghiz. In Pallas' *Reise durch Verschiedene Provinzen des Russischen Reichs,* vol. i, p. 393, he says: "There is a sort of diviners called Jauaruntschi, who from the shoulder-blade of a sheep predict the future, and can answer all sorts of questions. It is said that the shoulder must be simply scraped with a knife, and not touched with the teeth, because it would thus become unfit for the purposes of magic. When a question has been proposed to the diviner, or he has proposed something mentally to himself, he lays the shoulder-blade on the fire, and waits until the flat side gets all kinds of cracks and splits, and by means of these lines he divines." The Chinese history of the Mongol dynasty called *Yian* (元史) relates that Genghis Khan used to 'scorch the shoulder-blade of a sheep and compare the results thus obtained with those of the astrological diviners, whose advice he always sought before undertaking an expedition,' so that the Kirghiz method was also formerly practised by the Mongols. Another Chinese work (the *皇宋事實類苑,* which appears
to have been reprinted in Japan about two centuries ago) says: "The western barbarians use divination by the sheep. * * They scorch the shoulder-blade of a sheep on a fire of worm-wood, and observe the cracks." These western barbarians (西戎) are explained in Dr. Williams' Dictionary to be 'the wild tribes in Turfan and west of China generally.' Lubbock (Origin of Civilization, p. 163) mentions that the Lapps have this method of divination by a shoulder-blade, and quotes Klemm to the effect that it also exists among the Mongols and Tunguses of Siberia and the Bedouins. In the Okugi seu (奧儀抄), written about the middle of the 12th century, a tradition is quoted to the effect that 'the savages of Mutsu practised divination by scorching the shoulder-bone of a deer (vol. 6, § 8), and the Shiftau priests of Yahiko in Wechigo (near Nihigata) had a similar tradition concerning their own temple. The Ichi-no-miya Zhiyûnkei shi of Tachibana no Masayoshi (dated 1696) (432) contains the following account of a similar practice than observed at the temple called Hatsumu no Zhiêt-zhiya, the chief Shiftau temple of Kaudzuke, not far from the town of Takasaki. The shoulder-blade of a deer presented by the villagers of Akibata is taken out, carefully polished, and divided into slips about five inches in length. These are placed on a tray and touched with an awl heated in purified fire, and omens are discerned from the extent to which the point penetrates the bone, complete penetration being accounted a fortunate omen and vice versa. This practice seems to be a survival from the ancient method of divining by the cracks in the scorched bone. It is interesting to note the existence of this sort of divination amongst so many different races of central and eastern Asia. The substitution in Japan of the tortoise-shell for the deer's bone seems to have taken place as early as the 8th century at least, for it is alluded to in a poem which was composed about 730 (M. Y. S. 16, f. 19), and in the Riyau no Gige there is a note explaining that divination was performed by 'scorching a tortoise (shell) and discerning good and evil omens from the lines across and up and down the scorched shell.' It is said that the tortoise-shell has been used for this purpose by the islanders of Hachi-jiyau from the earliest times, and it is evident that a maritime people would find the tortoise-shell more convenient than the deer's shoulder-blade, especially as the neighbouring sea abounds in turtle, and the island is inhabited by no species of wild quadrupeds except rats.

*What gods were in the earliest ages regarded as 'heavenly' and what as 'country' gods is unknown, but the Riyau no Gige makes an attempt to give a definition of the two Chinese terms Tenzhin (天神) and Yigi (地祇), which were in old Japanese translated by ama tsu yashiro and kuni tsu yashiro or kamn (see Wa miyau Seu, bk. 2, f. 1). Among the former it ranks the Sun-goddess and the other goddess worshipped in Ise, the god of Kamo near Kiyauto in Yamashiro, those of Sumiyoshi or Suminoye between Ohosaka and Sakahi, and the god worshipped by
the *kuni no miyatsuko* of Iruzumo; and as representatives of the latter it names the gods of Oho-Miwa in Yamato, of Oho-yamato and of Katsuragi no Kamo in Yamato, and lastly Oho-namuchi no mikoto in Iruzumo. That this division is wrong seems clear from the fact that the god of Kamo in Yamashiro is identical with the god of Kamo in Yamato; Koto-shiro-nushi, who is worshipped at the latter place, being simply the 'intelligent spirit' (*nuigi mi tama*) of Aji-suki-taka-hiko-ne, to whom the former temple is dedicated. It is of course impossible that the same god can have belonged to both classes at once. Of the two goddesses of Ise, the Sun-goddess must evidently be ranked in the first class, but Ukemochi no kami, the personification of the earth as 'the supporter,' can only belong to the second. The gods of Sumiyoshi were chiefly sea-gods, and therefore more earthly than heavenly in their nature, while the god worshipped by the hereditary chieftains of Iruzumo was Susanowo, who was evidently a human being, though not a native of Japan. Among the deities classed by the *Gige* as 'earthly,' those of Oho-miwa, namely Oho-mono-nushi the 'intelligent spirit' of Oho-namuchi, and of Katsuragi no kamo are deified human beings, while the deity (433) of Oho-yamato, called Oho-kuni-mitama, is probably the earth looked upon as the abundant giver of food. It is impossible to discover what principle of classification was here acted upon by the compilers of the *Gige*, and it is most natural to suppose that the original meaning of the terms *Ama tsu yashiro* and *Kuni tsu yashiro* was no longer remembered in their time. In fact, they were simply trying, by the aid of such lights as they possessed, to explain the two Chinese terms *teushiu* and *jigi*, which they seem to have misunderstood. According to the orthodox Chinese view, these two expressions simply signify the two spirits of Heaven and Earth, and if *Ama tsu yashiro* and *Kuni tsu yashiro*, which the Wanmioau Sen gives as their equivalents in Japanese, really correspond to them, then the Japanese terms can only mean the Sun as the Celestial deity and the Earth as Terrestrial deity. A second interpretation is that *ama tsu yashiro* denotes all gods of supernatural origin, while *kuni tsu yashiro* should only be applied to deified human beings. A third view is that which looks on the latter class as the gods of the race which Zhihmu Teiwau found in possession of the land, and *Ama tsu kani* (or *yashiro*) as those whose worship was brought from beyond the sea by his ancestor, the ancient idea concerning foreigners having been that they descended from heaven. But on the whole, the safer conclusion is that the two expressions at first meant only Amaterasu-oho-mi-kami and Uke-mochi no kami, the Sun and the Earth, and that when their original signification was afterwards forgotten, various erroneous interpretations were put upon them.

*See Introductory remarks.*

*Mi ya*, House, has now various meanings, palace, temple, prince of
the imperial family by special patent. Anciently it was also applied to a tomb, which suggests how a chieftain who had once inhabited a palace, passed at death into a tomb which was at the same time a temple. In the Manyefu, *toko mi ya*, eternal house, is several times applied to tomb.

9The youth-god, that is Shinatsu-hiko no mikoto, the 'long-breathed youth,' which is the other name of the god of wind.

10The maiden-god, that is Shinatobe no mikoto, 'the long-breathed maiden.' These are the pair of wind-gods spoken of in the preceding part of the Ritual as Heaven's Pillar and Country's Pillar; see also introductory remarks.

11Wo-ke 麻縄, a thread-box. Wo is 'thread,' but as hemp-fibre in ancient times was the chief material used for that purpose (as it continues in modern times to be considerably employed) the character 麻, which properly means 'hemp,' was used to denote thread in general. Wo in *toma-no-wo*, bead-string, and perhaps *wo*, tail, are identical with it. Ke is usually a wooden vessel made by forming a thin board or a stout shaving into a circle and applying a flat bottom, to which the nearest European approach in form is a shallow band-box; *ke* is found in *woke*, pail (which is probably the same word), and in *kushi-ge*, casket (literally, comb-box). *Wogoke* is the modern term in use for the ancient *woke*, and the article known by this name is applied to the same purpose, namely, that of holding hempen threat used for coarse needlework.

(434) 12*Tatari*, supposed to have been formed of a flat stand 3'6 Japanese inches square, with an upright piece of wood in the centre, 1 ft. 1'6 inches high, Japanese measure.

13*Kasehi*. *Kase* is 'skein,' and *hi* is commonly translated 'shuttle,' but it probably had originally the wider meaning of something to wind a skein on. In the *Daishin guu shiki* (大神宮式) amongst the treasures of the goddess two *kasehi* are mentioned, one of gold, the other of copper, '9'6 inches long, the length of the handles 5'8 inches.' In the *Manyefu*, vol. 6, p. 56 verso. line 3, we have

\[
\begin{align*}
\text{Wotome ra ga,} & \quad \text{The mountain of the skein} \\
\text{Umi wo kaku tofu} & \quad \text{[holder] on which the} \\
\text{Kase no yama.} & \quad \text{maidens hang the twisted thread.}
\end{align*}
\]

There is a play here on the first half of *kasehi* and the name of a mountain. The *kasehi* kept at the sun-goddess' temple in Ise is simply a sort of reel in the shape of a letter *H*, the upright strokes being curved to hold the thread which was wound round it, and the horizontal stroke representing the *te* or handle.

14From this point the offerings are common to both deities.
(435) The Annual Meeting of the Society was held at the Shōhei-
kuwan, Tōkiyō, on the 30th June, Dr. Syle, President, in the chair.

The elections of the Rev. G. M. Meacham, Tōkiyō, as a resident
member, and M. Philippe Burty, Paris, as a non-resident member,
were announced.

The Annual Report of the Council was read and passed.

The Treasurer shewed that the revenue and expenditure of the
Society had increased by about one hundred dollars during the past
session, the increase in expenditure being partly due to the presentation
of accounts which should have been included in the balance sheet of the
previous year. The balance to the Society's credit was found to be
slightly over seven hundred dollars, within a few cents of what it was
at the last annual meeting in June, 1878. Of this sum a certain portion
will be required to pay for the printing of the 2nd, 3rd and 4th parts of
the Transactions for the past session.

The Librarian reported that the following books, the property of the
Society, are not to be found in the Library, and he requested that
member who have them in their possession would be so good as to
inform him.

"Outline History of Japanese Education."
"Enumeratio Plantarum in Japoniâ sponte Crescentium;" Franchet Savatier; 2 parts.
"From Moscow Overland to China;" Ides.
"Reminiscences of Captivity in China;" Loch.
"Oriental and Linguistic Studies;" Whitney.

A vote of thanks to the outgoing Council, moved by the Rew. W. B.
Wright and seconded by Mr. C. J. Tarring, was carried unanimously,
and acknowledged by the president.

The Rev. J. Soper and Dr. Leland having been appointed to scruti-
inize the voting papers for the Council for next session, the following
result was ascertained:

President, Rev. Dr. Syle.
Vice-Presidents, Dr. Edward Divers, Mr. J. J. Keswick.
Corresponding Secretary, Mr. E. Satow.
Recording Secretaries, Mr. J. A. Ewing, Mr. G. J. L. Hodges.

The Council have much pleasure in congratulating the Society on the amount of work accomplished by it during the past session. The number of General Meetings held has been fourteen, at which twenty papers were read. A list of these papers is given in Appendix A to this Report.

They have also to record with satisfaction that a proposal has recently reached them from a committee of gentlemen at Osaka on the subject of forming a branch of the Society at that place. Should this proposal be carried into effect, a considerable extension of the Society's usefulness may be expected.

Twenty-four new members have been elected.

In exchange for the Transactions of the Society, Journals, Transactions and Proceedings have been received from learned bodies in various parts of the world. A detailed list will be found in Appendix B.

A list of books and pamphlets added to the Library during the past year and of books omitted from the catalogue printed in Part 3 of Vol. VI. of the Society's Transactions appears in Appendix C. The number and value of the books added by purchase is less than it might otherwise have been, had not unavoidable circumstances rendered it necessary to devote a larger proportion than usual of the year's income to defraying the expenses of publishing the Transactions.

The Council beg to tender their thanks to the Vice-Minister of Education for the use of a large hall at the Shōhei-kawan for the meetings of the Society at Tōkyō and to the Proprietors of the Grand Hotel for the use of a room for the meetings held at Yokohama. Their thanks are also due to the authorities of the Kōbu Daigakkō for permission to make use of the large hall on the occasion of Mr. Anderson's Lecture and Exhibition of Pictures illustrative of Japanese art.

The following balance-sheet shows the present condition of the Society's Finances:—
### Dr.

<table>
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<th>Description</th>
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<tr>
<td>To Balance received from Mr. W. E. Ayrton</td>
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June 26, To Balance... 8707.03
Tokyo, June 26, 1879.

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Total 821.46

E. & O. E.

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**T. W. HELLYER,**

**In Account with**

**THE ASIATIC SOCIETY OF JAPAN.**

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**Note.**—46 subscriptions remain to be collected: viz., 8 from resident members and 18 from non-resident members; whilst the printing of Parts 2, 3 and 4 has yet to be paid for.

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**T. W. HELLYER,**

**Treasurer.**

**Audited by WILLIAM BALL WRIGHT,**

**JAMES L. AMERMAN.**
APPENDIX A.

LIST OF PAPERS READ DURING THE SESSION 1878-9.

Journey across Europe and Asia; by Mr. J. Milne, F. G. S.
Analysis of Takenoko; by Mr. D. W. Dwars.
Japanese Musical Intervals; by Rev. P. V. Veeder, D. D.
Visibility of Mountains from Tōkiyō; by the same.
Discovery of Human Remains; by Mr. T. R. H. McClatchie.
Ancient Japanese Rituals.—Part I; by Mr. E. Satow.
A Karen Inscription; by Rev. N. Brown. D. D.
The Church at Yamaguchi from 1550 to 1586; by Mr. E. Satow.
The Feudal Mansions of Yedo; by Mr. T. R. H. McClatchie.
Inscriptions in Shimabara and Amakusa; by Rev. H. Stout.
Foreign Travel of Modern Japanese Adventurers; by Mr. J. M. James.
On the Drinking Water of Yokohama; by Mr. A. J. C. Geerts.
Transliteration of the Japanese Syllabary; by Mr. E. Satow.
A Discourse on Infinite Vision as Attained to by Buddha; by Mr. J. M. James.
Wasōbyōe, the Japanese Gulliver; by Mr. B. H. Chamberlain.
Analyses of Surface Waters in Tokio; by Mr. R. W. Atkinson, B. Sc.
The Chemical Industries of Japan: No. 2—Ame; by Mr. R. W. Atkinson, B. Sc.
H. M. S. "Phaeton" at Nagasaki, in 1808; by Mr. W. G. Aston.
A History of Japanese Art; by Mr. W. Anderson.
Notes on Ōsaka; by the Rev. J. Summers.
Ancient Japanese Rituals.—Part II; by Mr. E. Satow.

APPENDIX B.

EXCHANGES.

Agricultural and Horticultural Society of India; Journal.
American Geographical Society; Bulletin.
American and Oriental Literary Record; Trübner.
American and Oriental Society; Proceedings.
American Philosophical Society; Proceedings.
Asiatic Society of Bengal; Journal.
Asiatic Society of Bengal; Proceedings.
Bataviaasch Genootschap; Verhandlingen.
Bollettino Italiano degli Studi Orientali.
Boston Society of Natural Philosophy; Proceedings.
China Review.
Chinese Recorder and Missionary Journal.
Cosmos; by Guido Cara.
Deutsche Gesellschaft für Natur-und Völkerkunde Ostasiens; Mittheilungen.
Geological Survey of India; Records.
Imperial Russian Geographical Society; Bulletin.
Indische Taal-Landen Volkenkunden; Tydschrift.
(439) Jahresbericht des Wissenschaftlichen Clubs.
Japan Weekly Mail.
Numismatic and Antiquarian Society, Philadelphia; Proceedings.
Oesterreichische Monatsschaft für den Orient.
Royal Asiatic Society of Great Britain and Ireland; Journal.
Royal Asiatic Society, Bombay Branch; Journal.
Royal Asiatic Society, Ceylon Branch; Journal.
Royal Asiatic Society, North China Branch; Journal.
Royal Asiatic Society, Straits Branch; Journal.
Royal Geographical Society; Proceedings.
Royal Society of Tasmania; Proceedings.
Sociedad Geografica de Madrid; Boletin.
Société d'Acclimatation; Bulletin.
Société des Études Japonaises; Annuaire.
Société de Géographie; Bulletin.

APPENDIX C,

BOOKS ADDED TO THE LIBRARY DURING THE PAST YEAR.
Chinese Repository; complete in 20 vols. bound; purchased.
Japan, Historical and Descriptive; Eden; presented.
The Times of India, Kalendar and Directory for 1866; presented.

PAMPHLETS, LEAFLETS, ETC.
Ägypten dargestellt in etwa 700 Bildern; von Geo. Ebers. (Specimen sheet.)
Magic Mirror of Japan; by Ayrton and Perry.
Map of India; pub. by Col. Thuillier.
Map of Japan; pub. by N. McLeod.
Ode to the Mikado of Japan; by Horne.
Periodical Changes of Terrestrial Magnetism; by Schulze.
Reis und Mais; by Dr. J. Rein.
Repertorio Sinico-Giapponese; Severini and Puini, Parts 1-3.
Das Schöne Mädchen von Pao; two copies.
The Music of Color and Visible Motion; by Perry and Ayrton.
Tweede Vervolg-Catalogus der Bibliotheck van het Bataviaasch Genootschap.

The following Books not mentioned in last year's Catalogue have been found in the Library.
Carpenter: Animal Physiology.
Galtier: Cours de la Langue Francaise.
Gellert: Fabeln.
Imperial College of Engineering, Report for 1876.
Martin: Statesman's Year Book, 1872.
Parker: First Lessons in Natural Philosophy.
Penna: Report of Board of Public Charities.
Tennyson: The Princess.
Williams, S. W.: Chinese Commercial Guide.
Ysbrandts: Travels in China.

The following numbers of the Society's Transactions are in the Library:

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<td>41</td>
</tr>
<tr>
<td>Vol. V, pt. 2</td>
<td>78</td>
</tr>
<tr>
<td>Vol. VI, pt. 1</td>
<td>95</td>
</tr>
<tr>
<td>Vol. VI, pt. 2</td>
<td>25</td>
</tr>
<tr>
<td>Vol. VI, pt. 3</td>
<td>31</td>
</tr>
<tr>
<td>Vol. VII, pt. 1</td>
<td>61</td>
</tr>
</tbody>
</table>

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