

42/2

GOVERNMENT OF INDIA
ARCHAEOLOGICAL SURVEY OF INDIA
ARCHAEOLOGICAL
LIBRARY

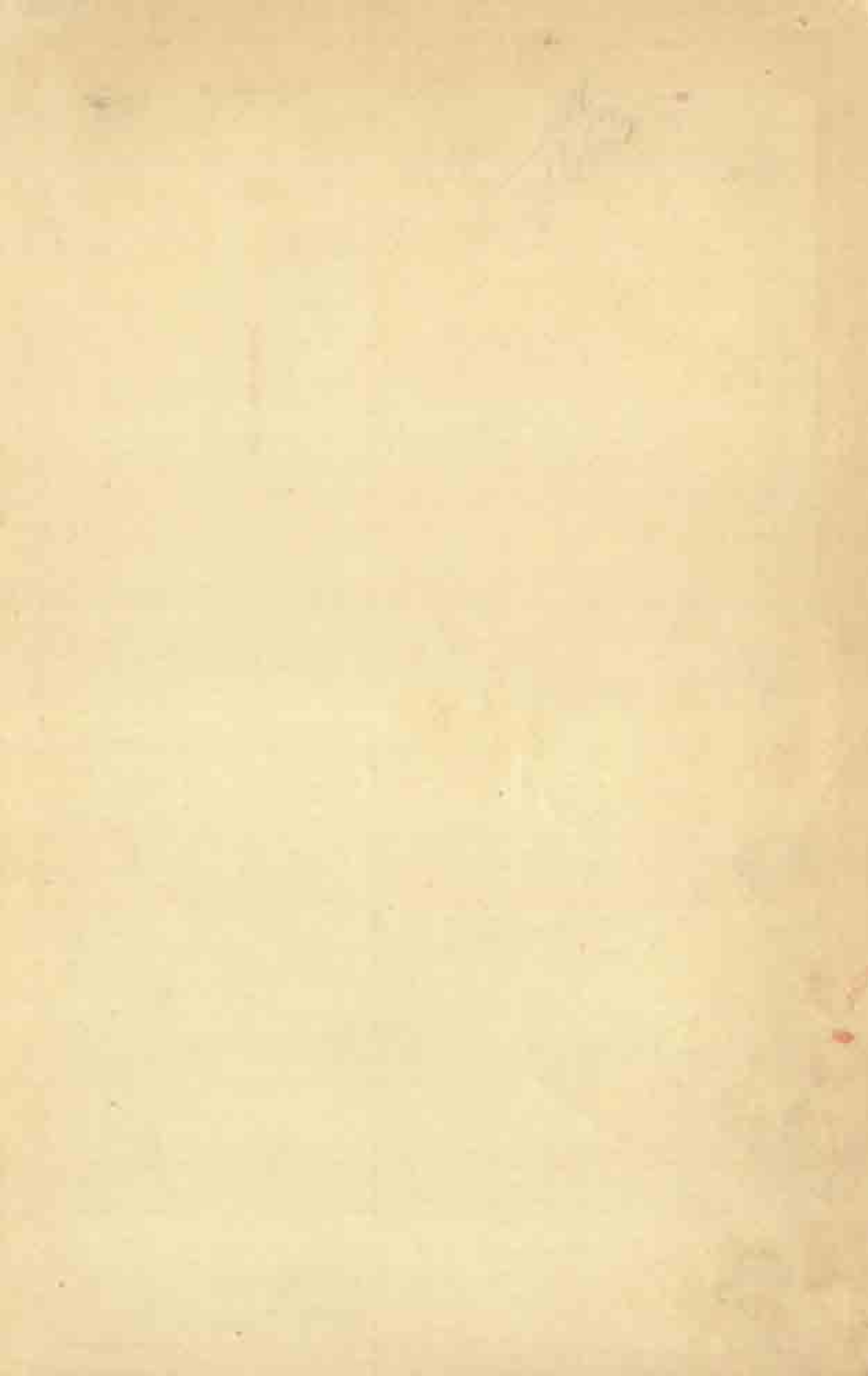
ACCESSION NO.

12250

CALL No. 398.04

Pen

D.G.A. 79



POISON-DAMSELS
AND
OTHER ESSAYS

POISON-DAMSELS

and other essays

IN

FOLKLORE AND ANTHROPOLOGY

12250

by

N. M. PENZER, M.A., Litt.D., F.S.A.

Editor of *The Ocean of Story* of Somadeva, the *Pentamerone* of Basile,
the *Trovels of Marco Polo*, etc. Author of the *Bibliography of*
Sir Richard Burton, the Harām, Nala and Damayanti, etc.



398.04
Pen



Ref 572.04
Pen

LONDON: PRIVATELY PRINTED FOR
CHAS. J. SAWYER, LTD., GRAFTON HOUSE, W.1

1952

*This book has been made and printed by
William Clowes and Sons, Limited, London and Beccles*

*Paper supplied by
Spalding and Hodge, Limited*

All rights reserved

Copyright in the U.S.A.

CENTRAL
LIBRARY
Acc. No. 488
Date 11.9.52
Call No. 572.01/520

CENTRAL
LIBRARY
Acc. No. 12250
Date 23-1-62
Call No. 398.24/ Penn.

FOREWORD

The present four Essays are based on Appendixes originally published in my edition of C. H. Tawney's *Kathā-Sarit-Sāgara*, which I called *The Ocean of Story*. Somewhat hidden in such a large work—it ran to ten volumes—and in view of the fact that much important new information has gradually accumulated since I first started research work on them thirty years ago, it was agreed between Mr Sawyer and myself that if revised and corrected in the light of present-day scholarship these studies might merit publication in their new form. The work of revision and addition has proved so great that, in some cases, there is little of the original left, while the new material occupies over a third of the entire volume. Although nearly three years have been spent on the task, the time would have been considerably longer had not the staff of the Cambridge University Library been so helpful in my endless inquiries and unceasing demands on their time and patience. In every part of the Library—the Anderson room, the Periodical room, the Map Room, the Upper Library, the Reading Room and especially in those mysterious private rooms hidden from the Reader's ken—I have received far more than my share of friendly help and unfailing kindness and interest.

N. M. PENZER

Cambridge, July, 1951.

CONTENTS

- Poison-Damsels, *page* 3
The Tale of the Two Thieves, *page* 75
Sacred Prostitution, *page* 131
The Romance of Betel-Chewing, *page* 187
Bibliography, *page* 299
Index, *page* 301

POISON-DAMSELS

POISON-DAMSELS

IN the *Kathā Sarit Sāgara* of Somadeva (*The Ocean of Story*, vol. ii, p. 91) we read of the methods employed by Yogakaraṇḍaka, the minister of King Brahmadata, against the King of Vatsa: "He tainted, by means of poison and other deleterious substances, the trees, flowering creepers, water and grass all along the line of march. And he sent poison-damsels as dancing-girls among the enemy's host, and he also dispatched nocturnal assassins into their midst."

The tactics of this minister are as curious as they are unscrupulous. We have read of wells being poisoned and even of diseased clothes being left for the enemy to find, but the poisoning of the vegetation and the dispatching of poisoned women are much more uncommon.

This subject is of great interest from many points of view, and as there appears to be very little published on the matter, especially poison-damsels, the whole question will be considered in some detail.

Although by far the greater part of this Essay will be on poison-damsels, a few notes on the practice of poisoning water, etc., in both classical and modern times, may serve as an introduction to the subject.

Poisoned Water, etc.

The references to such practices in Sanskrit literature are not numerous. They are, however, mentioned, and even advocated, in the *Code of Manu*, vii, 195, where, in the chapter on the duties of kings, we read¹: "When he has shut up his foe (in a town), let him sit encamped, harass his kingdom, and continually spoil his grass, food, fuel and water."

The glosses of the commentators on this text refer in general terms to bad or harmful substances which are mixed with the grass, etc., or to destroying them by fire, water and so on. The bad substances may be supposed to include poison. In only one of the glosses is the actual word "poison" used.

¹ J. G. Bühler's translation, *The Laws of Manu*, "Sacred Books of the East," vol. xxv, Oxford, 1886, p. 247.

In the well-known medical work dating from about the beginning of the Christian era, the *Suśruta Samhitā*,¹ we read in a chapter on the subject of the nature of animal poisons, etc., the following:

"A sheet of poisoned water becomes slimy, strong-smelling, frothy and marked with (black-coloured) lines on the surface. Frogs and fish living in the water die without any apparent cause. Birds and beasts that live (in the water and) on its shores roam about wildly in confusion (from the effects of poison), and a man, a horse or an elephant, by bathing in this (poisoned) water is afflicted with vomiting, fainting, fever, a burning sensation and swelling of the limbs. These disorders (in men and animals) should be immediately attended to and remedied, and no pains should be spared to purify such poisoned water. The cold ashes of *Dhava*, *Aśva-karna*, *Asana*, *Pāribhadra*, *Pātālā*, *Siddhaka*, *Mokshaka*, *Rāja-druma* and *Somavalka* burnt together, should be cast into the poisoned pool or tank, whereby its water would be purified; as an alternative, an Anjali-measure (half a seer) of the said ashes cast in a Ghata-measure (sixty-four seers) of the required water would lead to its purification.

"A poisoned ground or stone-slab, landing-stage or desert country gives rise to swellings in those part of the bodies of men, bullocks, horses, asses, camels and elephants that may chance to come in contact with them. In such cases a burning sensation is felt in the affected parts, and the hair and nails (of these parts) fall off. In these cases, the poisoned surface should be purified by sprinkling it over with a solution of *Ananta* and *Sarva-gandha* (the scented drugs) dissolved in wine (*Surā*), or with (an adequate quantity of) black clay dissolved in water, or with the decoction of *Vidanga*, *Pāthā* and *Katabhi*.

"Poisoned hay or fodder, or any other poisoned food-stuff, produces lassitude, fainting, vomiting, diarrhoea, or even death (of the animal partaking thereof). Such cases should be treated with proper anti-poisonous medicines according to the indications of each case. As an alternative, drums and other musical instruments smeared with plasters of anti-poisonous compounds (*Agadas*) should be beaten and sounded (round them). Equal parts of silver (*Tāra*), mercury (*Sutāra*), and *Indra-Gopa* insects with *Kuru-Vinda* equal in weight to that of the entire preceding compound, pasted with the bile of a *Kapila* (brown) cow, should be used as a paste over the musical instruments (in such cases). The sounds of such drums,

¹ English translation, edited by K. K. L. Bhishagratna, Calcutta, 1911, vol. ii, pp. 696-698.

etc. (pasted with such anti-poisonous drugs), are said to destroy the effects of even the most dreadful poison."¹

Turning to Europe, we find that from the earliest times writers on military law have continually distinguished between the law of nature and the law of nations, showing how the two sometimes coincide, but as often operate in opposite directions. They have, moreover, condemned the use of poison in warfare as being against all laws—human and divine.

Hugo Grotius in his great work, *De jure belli ac pacis*, writes as follows² (Book III, chap. iv, sec. 15, etc.):

"As the Laws of Nations permit many things . . . which are forbidden by Natural Law; so they forbid some things which are permitted by Natural Law. For him whom it is lawful to put to death, whether we put to death by the sword or by poison, it makes no difference, if we look to Natural Law. It is doubtless more generous to kill so that he who is killed has the power of defending himself; but this is not due to him who has deserved to die. But the Laws of Nations, if not of all, at least of the best, have long been, that it is not lawful to kill an enemy by poison. This consent had its rise in common utility, that the dangers of war, which are numerous enough, may not be made too extensive. And it is probable that this rule proceeded from kings, whose life may be defended from other causes, better than the lives of other persons; but is less safe than that of others from poison, except it be defended by the scruples of conscience and the fear of infamy.

"Livy (xlii, 18) speaking of Perseus, calls these clandestine atrocities: so Claudian (*De Bello Gild.*, v, 273) and Cicero (*De Offic.*, iii, 22) use like expressions. The Roman consuls say that it is required, as a public example, that nothing of the kind be admitted, in the epistle to Pyrrhus which Gellius (*Noct. Attic.*, iii, 8) gives. So Valerius (vi, 5, 1). And when the prince of the Catti offered to procure the death of Arminius by poison, Tiberius rejected the offer, thus gaining glory like that of the ancient generals (Tacitus, *Ann.*, ii, 88).

"Wherefore they who hold it lawful to kill the enemy by poison, as Baldus, following Vegetius (*Cons.*, ii, 188), regard mere Natural Law, and overlook the Instituted Law of Nations. . . . To poison fountains, which must be discovered before long, Florus says

¹ See also Kautilya's *Arthashastra*, new edition, J. Jolly and R. Schmidt, Lahore, 1923, ix, 6, 86; xii, 4, 6-8, 14.

² Trans. W. Whewell, Cambridge, 1853, vol. iii, ch. iv, pp. 86-88. Cf. also his *Elements of Morality*, 4th edition, Cambridge, 1864, p. 544, Art. 1062.

(Lib. II, 20), is not only against old rule, but also against the law of the gods; as the Laws of Nations are often ascribed to the gods; nor is it to be wondered, if to diminish dangers, there be some such tacit conventions of belligerents; as formerly in the permanent war of the Chalcidians and Eretrians (Strabo, x, p. 488) it was agreed not to use missiles.

"But the same is not true of making waters foul and undrinkable without poisoning them (*Æsch.*, *De male ob. leg.*, p. 262A), which Solon and the Amphictyons are said to have justified towards barbarians: and Oppian mentions as customary in his time. For that is the same thing as turning away a stream, or intercepting a spring of water, which is lawful both by Natural Law and by consent."

Nearly a hundred years later (1758) Emeric de Vattel, the Swiss jurist, published his *Droit des Gens*. It was founded on the works of Wolff and Leibnitz, with many quotations from Grotius. After practically repeating the above extract, he continues¹:

"Assassination and poisoning are, therefore, contrary to the laws of war, and are alike forbidden by the Natural Law and the consent of civilised Nations. The sovereign who makes use of such execrable means should be regarded as an enemy of the human race, and all Nations are called upon, in the interest of the common safety of mankind, to join forces and unite to punish him. In particular, an enemy who has been the object of his detestable practices is justified in giving him no quarter. Alexander the Great declared 'that he was determined to take the most extreme measures against Darius, and no longer treat him as an enemy in lawful war, but as a poisoner and an assassin' (Quint. Curt., iv, 9, 18). The interest and the safety of those in command, far from allowing them to authorise such practices, call for the greatest care on their part to prevent the introduction of them.

"Eumenes wisely said 'that he did not think any general would want to obtain a victory by the use of means which might in turn be directed against himself' (Justin, xiv, 1, 12). And it was on the same principle that Alexander condemned the act of Bessus, who had assassinated Darius (Quint. Curt., vi, 3, 14)."

The importance of Grotius's *De jure belli ac pacis* lies chiefly in the fact that it forms the foundation of the International Law of the present day. It was the first of such works to influence sovereigns and statesmen, for it showed in an exhaustive and masterly fashion what all men were beginning to feel.

¹ *Le Droit des Gens, ou Principes de la Loi Naturelle appliqués à la Conduite et aux Affaires des Nations et des Souverains*, E. de Vattel, translated by C. G. Fenwick, Washington, 1916, vol. iii, ch. viii, pp. 288-289.

The value of Vattel's work is due to the fact that it consists of all that is best in the works of his predecessors, Grotius, Pufendorf, Leibnitz, Bynkershoek and Wolff. Consequently it became the handbook of statesmen and jurists, and is still quoted as one of the great authorities.

As we have already seen, both these jurists condemned all unnecessary methods of killing an enemy—particularly by any form of poisoning. But, as history is largely a record of cruelty exercised by those in power, we must not be surprised to find that, especially in mediæval times, the number of deaths due to some form of poisoning was very large. At the same time superstition and general ignorance of medicine probably lay at the bottom of many so-called poison mysteries of ancient days, while in some cases, as with the Borgias, fact has to a large extent been obscured by fiction.¹

There are, however, endless methods by which the secret poisoner, whether in fact or fiction, has sought to achieve his ends. The favourite method is, of course, to introduce the poison in food or drink. Apart from hot dishes, examples are recorded of the use of honey, jam, cake, sweets, etc. Of drinks, coffee and red wine are the stock examples, although beer, milk, cocoa, chocolate, etc., have also been employed.

With regard to coffee an interesting and unusual method of poisoning has been noted by H. R. P. Dickson (*The Arab of the Desert*, 1949, p. 532) as having occurred under the ʿAl Rashid régime. Its efficaciousness depends on the accepted ritual observed among the Arabs in serving coffee. A handleless cup, *Finjāl* or *Finjān*, is used, being held between the thumb and forefinger. The poisoner spreads some arsenic powder, made into a paste, on his thumbnail. When he comes to serve his victim he lifts his thumb over the edge of the cup and pours, as if by accident, some coffee over the thumb and so mixes the poison with the liquid. The effects of arsenic poisoning closely resemble those of cholera, and the man's subsequent death is attributed to that cause.

A greater interest, however, attaches to objects less obvious than food and drink—where the ingenuity and skill of the poisoner or story-teller has been exercised to produce the unexpected and the unexplained. Objects employed for this purpose include weapons,

¹ See L. Collison-Morley, *The Story of the Borgias*, 1932, pp. 231-245, with the useful bibliography on pp. 310-322. For the official use of poisons by the Venetian Council of Ten see Horatio Brown, *Studies in the History of Venice*, vol. i, 1907, pp. 216-254; and C. J. S. Thompson, *Poisons and Poisoners*, 1931, pp. 142-147.

coins, rings, candles, perfume, torches, flowers, mirrors, snuff, incense, bed-linen, gloves, boots and various articles of clothing. Most of these, with their accompanying story, will be found in the writings of C. J. S. Thompson, late Hon-Curator of the Museum of the Royal College of Surgeons of England.¹ There is one unexpected object not included in the above list, and that is the poisoned book. It figures in one of the earliest and most dramatic tales in the *Thousand Nights and a Night* (Burton, i, 59) in which the Sage Duban revenges himself on King Yunan.² The unfortunate Sage is condemned to death on a false charge, and before the Sworder does his grim work he presents the King with a worn old volume. "And what is in the book?" the King asks. "Things beyond compt; and the least of secrets is that if, directly thou hast cut off my head, thou open three leaves and read three lines of the page to thy left hand, my head shall speak and answer every question thou deignest ask of it." On receiving this surprising reply the King hastens to prove the Sage's words! According to final instructions the severed head is placed on a tray covered with a powder which stops the flowing of the blood. "Now open the book, O King!" exclaims the head. On doing so he finds the leaves stuck together, but by moistening his finger he is able, with some difficulty, to unstuck them. After having unstuck six leaves in this manner and finding no writing thereon he cries, "O physician, there is no writing here!" Duban's head replies, "Turn over yet more," and accordingly he turns another three pages in the same manner. But the leaves of the book are treated with poison and before long the venom penetrates his system, and the King falls into strong convulsions, and crying aloud, "The poison hath done its work," rolls over—dead!

As the poisoned robe, or vest, figures in Indian historical tradition we may consider it briefly. The classical example is that of

¹ *Poison Romance and Poison Mysteries*, 1899; *Poison Mysteries in History, Romance and Crime*, 1923; and *Poisons and Poisoners*, 1931. See also: F. Funck-Brentano, *Le Drame des Poisons*, 1899 and other editions in 1900, 1908, etc.; *idem*, *Princes and Poisoners*, 1901; M. Robert, *Les Empoisonnements criminels au XVI^e siècle*, Lyon, 1903; A. Cabanès and Lucien Nass, *Poisons et Sortilèges. I. Les Célars. Envoûteurs et Sorciers. Les Borgia. II. Les Médecins. Les Bourbons. La Science au XX^e siècle*, Paris, 1903; A. Cabanès, *Les morts mystérieuses de l'histoire...* (1. Charlemagne to Louis XIII. 2. to Nap. III), Paris, N.D.; A. Masson, *La Sorcellerie et la science des poisons au XVII^e siècle*, Paris, 1904; A. W. and M. W. Blyth, *Poisons: their effects and detection*, 5th edition, 1920 (see "Old Poison-Lore," pp. 1-16, with bibliography); and Charles Leleux, *Le Poison à travers les âges*, Paris, 1923.

² See Chauvin, *Bib. des Ouv. Arab.*, V, pp. 275, 276, No. 156; and Stith Thompson, *Motif-Index of Folk-Literature*, vol. v, 1935, p. 228 (motif S 111-5), also issued as *FF Communications*, No. 116, Helsinki, 1935. See also motifs S 111-1 to S 111-6, where poison bread, lace, comb, apple and robe are listed.

Heracles and Nessus. According to Apollodorus,¹ when Heracles and his wife Deianira came to the river Evenus they met the centaur Nessus who ferried passengers across. Heracles went across by himself, entrusting his wife to Nessus. But the centaur attempted to violate her, whereupon Heracles shot him through the heart. As he lay dying Nessus told Deianira that if she wanted a love charm she should mix the seed he had dropped on the ground with the blood from his wound. She did so and kept it in case of need. When later on Heracles took Iole captive Deianira grew jealous and smeared his tunic with the supposed love charm. But no sooner had it warmed on his body than the poison began to corrode his skin. In agony he tried to tear off the garment, but only tore away his own flesh. On hearing what had happened, Deianira killed herself and Heracles burned himself on a pyre on Mount Ceta. According to another version,² he was tortured by the agony of the poisoned robe which burst into flames with the heat of the sun, and in his pain he flung himself into a stream and was drowned. The waters of the stream were called Thermopylæ and are hot to this day!

According to Colonel James Tod, in his well-known *Annals and Antiquities of Rajasthan*,³ the poisoned robe or shirt was firmly believed in by the Rājapūts and he gives several examples of its use. First, there was the case of the Queen of Ganor who gave a poisoned wedding robe to the Khan whom she had been forced to marry; then there was the Rāja Bakhta who died after donning a robe given him by his niece at the instigation of Isari Singh, Mahārāja of Jaipur (1742-1760); and, finally, there was the case of Aurangzēb, who, jealous of the possible power of Prithi Singh, presented him with a dress of honour, which proved to be so full of poison that the victim expired in great torture soon afterwards.

There is also another story about the Emperor Aurangzēb (1659-1707). It is to be found in the travels of Alexander Hamilton,⁴ and concerns the method by which he sought to be revenged on his son, the Prince Akbar. He had planned to capture the Rāja Sivājī as he was leaving his camp, but Akbar warned him of his father's treachery. Whereupon Aurangzēb's anger was turned against his own son. Feigning kindness, he sent him a richly caparisoned

¹ See Apollodorus, *the Library*, translated by J. G. Frazer, Loeb Classical Library, vol. i, 1921, pp. 261, 269. For the different versions see the note on p. 261.

² Nonnus, in Westermann's *Mythographi Græci, Appendix Narrationum*, xxviii, 8; Tzetzes, *Schol. on Lycophron*, 50-51.

³ See the edition edited by W. Crooke, Oxford, 1920, vol. ii, pp. 728, 867 and 985.

⁴ *A New Account of the East Indies*, edited by Sir William Foster, Argonaut Press, vol. i, 1930, pp. 138, 139.

horse and a very beautiful vest, which was poisoned by a perfumed powder. His son, however, "smelt a rat" and ordered it to be put on a slave who died a day or two after he had put it on.

In a note on these shirt poisonings, Crooke states (*op. cit.*, I, 728) that several of our leading authorities have investigated the question, with the result that they consider it doubtful if any known poison could be used in this way. Sir Lauder Brunton remarked that a paste of seeds of *Arbus precatorius* is used for killing animals. Dr N. Chevers (*Manual of Medical Jurisprudence for India*, p. 299) writes: "Any one who has noticed how freely a robust person in India perspires through a thin garment can understand that if a cloth were thoroughly impregnated with the cantharidine of that very powerful vesicant, the *Telini*, the result would be as dangerous as an extensive burn."

In conclusion, mention might be made of the story of Madame de Poulailhon, as related by Dr Lucien Nass.¹ Growing tired of her husband she attempted, with the help of one Marie Bosse, to poison him by a shirt soaked in arsenic. This was in 1679, the hearing of the case being at Vincennes. And here we can leave the subject, realising that the poisoned garment, whether used fatally in actual fact or not, was at any rate an excellent *motif* for the storyteller.

In India the most deadly poison is undoubtedly the variety of aconite found in the Himālayan districts. This is the so-called "Nepal aconite," known as *bīs*, *bish*, *bikkh*, etc. There are numerous forms of the series, the most deadly being *A. spicatum*. It is so poisonous in the Sikkim Terai that the sheep often have to be muzzled. The uses to which the aconites are put vary, for the rural drug-dealer has a great knowledge of the plant and finds many commercial uses for it, such as an adulterant in making *bhāng* from Indian hemp, for poisoning arrow-heads,² and many other uses.

The Indian aconites are confined to the mountain tracts of the north-eastern boundary, stretching from Afghanistan and

¹ *Les Empoisonnements sous Louis XIV d'après les documents inédits de l'affaire des poisons 1679-1682*, Paris, 1898, pp. 38-40. Dr Nass experimented with an arsenic paste on a guinea-pig and proved that arsenic could be introduced into the body by gentle friction leaving the skin unbroken and with no sign of ulceration.

² See L. Lewin, "Die Pfeilgifte. Historische und experimentelle Untersuchungen," in Rudolf Virchow's *Archiv für pathologische Anatomie und Physiologie und für klinische Medizin*, Bd. 136, Berlin, 1894, pt. i, pp. 83-126, pt. ii, pp. 403-443, and Bd. 138, *ditto*, pt. iii, pp. 283-346. For an interesting illustrated account of arrow poisons see the pamphlet "Pfeilgifte," *Ciba Zeitschrift*, Nummer 73, Basel, December 1939 (copies in British Museum and Victoria and Albert Museum).

Baluchistan, through Kashmir, Nepal, Sikkim, Bhutan and Assam to Burma.¹

The Gurkhas of Nepal regard the plant as a great protection against enemy attacks, and Hamilton² describes how they can destroy whole armies by poisoning the water, and in the Nepalese war the British found the wells poisoned with crushed aconite.

The poisoning of water is not confined to India. For instance, when the young Egyptian Sultan Faraj withdrew before the conquering hosts of Timūr (Tamerlane) in 1400 he took care to poison both the fields and water before leaving. It is related³ that in consequence Timūr lost so many men and animals that he desisted from the pursuit. Burton⁴ tells us that the Yuta Indians have diminished in numbers owing to the introduction of arsenic and corrosive sublimate in springs and provisions.

Similar havoc was wrought among the Australians,⁵ while in Tasmania⁶ poisoned rum was used to exterminate the aborigines. During the 1848 revolution in France we are told by Viscountess Enfield (*Leaves from the Diary of Henry Greville*, vol. i, p. 278) that women went about disguised as vivandières, giving poisoned brandy to the soldiers, causing many deaths.

In Brazil, when the import of African slaves rendered the capture of the natives less desirable than their extermination, the Portuguese left the clothes of people who had died of smallpox and scarlet fever for them to find in the woods.⁷ It is also said⁸ that the caravan traders from the Missouri to Santa Fé communicated smallpox to the Indian tribes of that district in 1831 by infectious clothing and presents of tobacco. The Historical Section of the War Office informs me that in General Botha's campaign in German South-West Africa the poisoning of wells was both authenticated and admitted. It is believed that the poison used to make the wells

¹ The different species of aconites are discussed in George Watt's *Commercial Products of India*, 1908, pp. 18-24; and more fully in his *Dictionary of the Economic Products of India*, vol. i, Calcutta, 1889, pp. 84-98.

² Francis Hamilton, *Account of the Kingdom of Nepal*, Edinburgh, 1819, p. 99.

³ Hans Schiltberger's *Reisebuch*, edited by V. Langmantel, Bib. des Litt. Ver. in Stuttgart, Bd. 172, Tübingen, 1885, 25, 38. An English translation was published by the Hakluyt Society in 1879 under the title *The Bondage and Travels of Johann Schiltberger, a Native of Bavaria, in Europe, Asia and Africa, 1396-1427*. Translated by J. B. Telfer; with notes by Professor P. Bruun. The reference to poison grass and water is on p. 23.

⁴ *City of the Saints*, 1861, p. 576.

⁵ E. J. Eyre, *Journals of Expeditions of Discovery into Central Australia*, 1845, vol. ii, pp. 175-179 (see the notes and letters below the text).

⁶ James Bonwick, *Last of the Tasmanians*, 1870, p. 58.

⁷ J. J. von Tschudi, *Reisen durch Südamerika*, vol. ii, p. 262.

⁸ J. Froebel, *Seven Years' Travel in Central America*, 1859, p. 272; and A. R. Wallace, *Narrative of Travels on the Amazon and Rio Negro*, 1853, p. 326.

unserviceable was chloride of mercury, which was available as it was employed in the gold-mining industry. The official records of the campaign are in the hands of the Government of the Union of South Africa.

Colonel B. De Sales La Terrière, in *Days that are gone*, 1924, p. 207, records that at the evacuation of Gakdool in the Sudan Campaign Sir Evelyn Wood told him to poison the wells in order to stop the pursuit of the enemy. In spite of the strongest protests he insisted, and scores of decaying camels and refuse, as well as the veterinary and spare hospital stores, went into the wells. In the Peninsular War the French threw their dead down the wells.

But vile as all these acts are, they were easily eclipsed by the inhuman methods of warfare introduced by the Germans in World War I beginning with the gas attack at Langemarck on 22nd April, 1915. This is not the place to describe the different varieties of poison-gases which were successively used. Readers interested in the subject are referred to the list of works given below.¹ Several of the books, such as Liepmann's *Death from the Skies*, contain chapters on microbial warfare, while the elaborate plans made by the Japanese in World War II for the release of millions of plague-carrying fleas are fully described in the Supplement to the *New Times*, No. 1, 1st January, 1950. With the coming of the atomic and hydrogen bombs the acme of horror in warfare has surely been reached. How wonderful is the progress of civilisation!

We now pass on to the study of the poison-damsel.

The Poison-Damsel in India

Although the poison-damsel is found in the *Kathā Sarit Sāgara*, her appearance in Sanskrit literature is rare.

There are, however, two or three works in which she is mentioned. Of these the most important is undoubtedly Viśākhadatta's political drama, the *Mudrā-Rākshasa*, or *Signet-ring of Rākshasa*. This

¹ For general reference see *Books and Pamphlets published since 1919 on chemical warfare and defence*, Science Museum, Science Library Biblio., Series Nos. 292, 342 and 500, London 1937-1939; C. H. Wentz, *A Check List, civilian defence collection, Sec. D, subject 5. Chemical Warfare, decontamination*, Library of Congress, Washington, 1943-1944. Among others may be mentioned: A. A. Roberts, *The Poison War*, 1915; E. S. Farrow, *Gas Warfare*, New York, 1920; A. A. Fries and C. J. West, *Chemical Warfare*, New York, 1921; R. Hanalian, *De chemische Krieg*, 1927; C. J. S. Thompson, *Poisons and Poisoners*, 1931, pp. 229-234; L. Dautrehande, *Les Gaz Toxiques*, Paris, 1933; Le Pr. C. Héderer and M. Istin, *L'arme Chimique et ses blessures*, Paris, 1935; Heinz Liepmann, *Death from the Skies. A study of gas and microbial warfare*, London, 1937—with a good bibliography on pp. 275-286; and H. Glaser, *History, constitution, uses and abuses of poisonous substances*, 1937.

play, written about the seventh century A.D., deals with events which happened, or were supposed to have happened, at the formation of the great Maurya Empire in 313 B.C. From the commencement of this dynasty dates the unbroken chain of Indian history, and Chandragupta, its founder, must be regarded as the first paramount sovereign or emperor of India. He obtained the throne of Pāṭaliputra under circumstances which have a distinct bearing on the subject under discussion. At the end of 327 B.C. or in the early spring of the following year¹ Alexander the Great began his invasion of Northern India. He had gradually pushed farther and farther eastwards until, at the river Ὑπόσις (the modern Beās, a tributary of the Sutlej), his victorious advance received a sudden, but none the less definite, check by his army refusing to proceed with the expedition.

Thus he was prevented from attempting the defeat of the Gandaridæ, i.e. the Eastern branch of the Gandaridæ of Gandhāra on the Indus, referred to by Arrian (v. 25, i) simply as an Aratta people. Arrian tells us, moreover, that one of the reasons for the mutiny was a report that this people had a very large number of war elephants. This would not be welcome news to the troops after their experience with the elephants of Porus. Moreover, they were war-weary after the fighting on the Jhelum and at Sangala. As Dr Tarn shows (*op. cit.*, ii, 284), the Beās had very probably been the one-time Persian boundary. Persia was now fully conquered, and the troops wanted to go home. Neither they, nor even Alexander himself, knew what lay to the east. As far as his information went there was merely one more river to cross, presumably the Sutlej, and then came the end, i.e. the Ocean! All this is fact. There is no reason to suppose that Alexander had even heard of the Ganges. But here legend steps in and introduces a mythical ruler, one Phegeus, who tells Alexander all about the Ganges and, in particular, that beyond it lives the Gandaridæ and Prasii. Legend always links these two together, whereas in actual fact half the breadth of India lay between them. The Prasii, or "Easterners," were the people of the great Kingdom of Magadha, whose capital Pāṭaliputra, the modern Patna (see *The Ocean of Story*, vol. ii, p. 39n¹), lay on the Ganges, and whose new king, Chandragupta, was destined to create the Mauryan empire. It seemed a pity that Alexander never reached the sacred river, and so

¹ See V. A. Smith, *Early History of India*, 1924, pp. 119, 120; W. W. Tarn, *Cambridge Ancient History*, vol. vi, 1927, p. 403; *idem*, *Alexander the Great*, Cambridge, 1948, vol. i, p. 87 *et seq.*; and C. A. Robinson, *The Ephemerides of Alexander's Expedition*, Brown Univ. Providence, 1932, p. 81. For the latest Bibliography on Alexander see the *Oxford Classical Dict.*, s.v.

by a few alterations and additions legend supplied the necessary narrative.¹

It has been stated that when quite young, Chandragupta had actually met Alexander and made a close study of his methods of warfare. He was said to be an illegitimate relation² of Nanda, king of Magadha, and to have held the position of Commander-in-Chief in his army. He chanced to incur Nanda's displeasure and fled to the Panjāb, where the meeting with Alexander is reported to have occurred.

However this may be, the mention of Alexander in connection with Chandragupta is of the greatest interest in this inquiry. For, as we shall see later, the European versions of the poison-damsel find their origin in a certain Pseudo-Aristotelian work purporting to have been written for Alexander and sent to him on his campaigns, when age prevented his learned tutor from continuing his duties personally. This work was known as the *Secretum Secretorum*, and will be fully discussed in the course of this Essay.

It will suffice here merely to draw attention to the fact that it was Aristotle who was credited with the wise teachings and prudent counsels which helped Alexander so much in his Eastern campaigns, and it was he who, in the *Secretum Secretorum*, prevented him from losing his life at the hands of the poison-damsel.

In just the same way, Chandragupta benefited by the advice of a wise minister. For at the very time that he fled to the Panjāb there was a certain Brāhman named Chāṇakya (Kaṭilya or Vishnugupta³) who, incensed against King Nanda, owing to an effrontery to which he had been subjected, became not only a fellow-conspirator with Chandragupta in the overthrow of Nanda, but was the directing force guiding every movement of the plot. Although details of the defeat of Nanda are hidden under a veil of mingled fact and fiction, it seems almost certain that Chandragupta had the assistance of strong allies, the chief of whom was Porus, who ruled on the far side of the Hydaspes (Jhelum).

On his ascending the throne of Pāṭaliputra Chandragupta, not forgetful of the part played by Chāṇakya in his success, made him his chief minister, and it is at this point that the *Mudrā-Rākshasa* commences. We find Chāṇakya involved in a maze of political

¹ For full details see Dr Tarn's Appendix 14 in his *Alexander the Great*, vol. ii, pp. 275-285.

² The son of one Murā, a concubine of the King. Hence his surname Maurya.

³ Chāṇakya appeared in *The Ocean of Story*, vol. i, p. 55 *et seq.*, as a Brāhman who brought about Nanda's death by a magical rite. In the same volume (p. 233) his name is mentioned as an alternative of Kaṭilya, the supposed author of the *Arthashastra*. See p. 233n¹.

intrigue, employing every form of cunning and strategy imaginable. His chief object is to win over the late king's ex-minister Rākshasa and so sever the one remaining link with the old line of Nanda kings. In this he is ultimately successful, but only after he has answered every stroke of his opponents by a more effective counterstroke, at the same time shielding Chandragupta from the numerous attempts on his life. These attempts were of different kinds, including a poisoned draught and nocturnal assassins who were instructed to get into Chandragupta's sleeping chamber by a subterranean passage and kill him in his sleep. The plot was, however, discovered by Chāṇakya. In relating the circumstances to Rākshasa, one of his secret agents, Virādhagupta, speaks¹ as follows:

"———Before the king retired to rest,
The watchful minister was wont to enter
The chamber, and with diligent scrutiny
Inspect it—thus, he saw a line of ants
Come through a crevice in the wall, and noticed
They bore the fragments of a recent meal;
Thence he inferred the presence of the feeders
In some adjoining passage, and commanded
That the pavilion should be set on fire
That moment—soon his orders were obeyed,
And our brave friends, in flame and smoke enveloped,
Unable to escape, were all destroyed."

Rākshasa replies:

"'Tis ever thus—Fortune in all befriends
The cruel Chandragupta—when I send
A messenger of certain death to slay him,
She wields the instrument against his rival,
Who should have spoiled him of one half his kingdom.
And arms, and drugs, and stratagems are turned
In his behalf, against my friends and servants,
So that whate'er I plot, against his power,
Serves but to yield him unexpected profit."

¹ The translation given is that by H. H. Wilson, *Select Specimens of the Theatre of the Hindus*, vol. iii, 1827, p. 71. Reference should be made to his Introduction, which contains the different versions of the tale of Nanda, Chandragupta and Chāṇakya. For more recent translations of the *Mudrā-Rākshasa* see those by S. C. Chakravarti, Calcutta, 1908; B. Goswami, Calcutta [1909]; M. R. Kale, 2nd edition, Bombay, 1911; A. Hillebrandt, Breslau [Bombay printed], 1912; V. A. Shastri and K. V. Abhyankar, Ahmedabad, 1916; and K. H. Dhruva, 2nd edition, Poona, 1923 (Oriental Book-Supplying Agency). The "Notes" were issued in a separate paper cover, see pp. 103, 104—the pagination is continued from the text.

The "messenger of certain death" was the poison-damsel which Rākshasa had prepared for Chandragupta's undoing. The plot was discovered by the ever-watchful Chāṇakya, who, instead of killing or returning the girl, passed her on to Parvataka, who, although a former ally of Chandragupta, was thought best out of the way.

It appears that the girl could poison only once, and, like the cobra, would be of little danger after the accumulated poison had been spent in her first embrace.

Rākshasa, thinking of the well-known incident in the *Mahābhārata*, says (Chakravarti's translation):

"Friend, see how strange! As Karṇa in order to kill Arjuna reserved a strong lance capable of destroying only one person once and for all, I too kept a vigorous poisonous maid to kill Chandragupta. But as the lance, to the great advantage of Kṛishṇa, killed the son of Hidimbā, so she killed the Lord of the Mountains [Parvataka] to be destroyed by the wicked Chāṇakya, to his very great advantage."

There is no need to pursue this reference further. Sufficient has now been said to show the analogy between Chandragupta and Chāṇakya on the one hand, and Alexander and Aristotle on the other. Both kings were saved from the deadly results of a poison-damsel by their equally clever ministers, both were in the Panjāb during the reign of the last of the Nanda kings, and both would naturally be the cause of endless plots.

Although the possible connection of what may be two versions of a single incident (whether fact or fiction) is nothing more than a suggestion, the idea is none the less fascinating, and one on which much research might be carried out.

Before dealing with the *Secretum Secretorum* I should mention other occurrences of the poison-damsel in Sanskrit literature.

In the *Parīkṣitaparvan* we find a slightly different version of the story. Here it is Nanda himself who has prepared the poison-damsel, and his minister Rākshasa has nothing to do with it. The passage is as follows¹:

"Then Chandragupta and Parvata [*sic*] entered Nanda's palace and began to divide his great store of treasures. Now in the castle there lived a maiden who was cared for as if all treasures were combined in her. King Nanda had had her fed on poison from the

¹ *Ausgewählte Erzählungen aus Hēmatandras Parīkṣitaparvan*, Johannes Hertel, Leipzig, 1908, pp. 200-201, viii, line 327 et seq. M. Bloomfield refers to this in his *Life and Stories of the Jaina Savior Pārśvanātha*, Baltimore, 1919, p. 198. On p. 62 of this work the word "poison-damsel" is used as a simile of a stolen jewel-casket which was destined to bring bad luck to whoever touched it.

time of her birth. Parvata was seized with such a passion for her that he locked her in his heart like his guardian deity. Chandragupta's teacher [Chāṇakya] gave her to him, and he immediately began to celebrate the ceremony of taking hands. During this, however, poison was transferred to him through her, because their perspiration caused by the heat of the sacrificial fire, was mixed together. The strength of this poison caused Parvata great agony; all his limbs relaxed, and he said to Chandragupta: 'I feel as if I had drunk poison; even speaking is well-nigh impossible. Help me, friend. I am surely going to die.'

Chāṇakya, however, advises Chandragupta to let him die, as then he will have the entire treasure to himself. Thus that king of the Himālayan mountain died, and Chandragupta became ruler of two mighty kingdoms.

That the poison-damsel was well known and regarded with the greatest fear is clear from the seventy-first tale of the *Suvābahuttarīkathā*, where, on the demand of Dharmdat for King Kāmsundar's daughter, the wily minister Siddhreh gets out of the difficulty by saying that the girl is a poison-damsel, and by a clever trick persuades Dharmdat to depart.¹

Both Hertz² and Bloomfield³ state that there is a treatise in Sanskrit for finding out whether a woman is a poison-damsel. It is described by Weber,⁴ but appears on inspection to be nothing more than a treatise on horoscopes which sometimes show if a child is going to be a poison-damsel when grown up, but there is no method given for discovering if a woman one might chance to meet is a poison-damsel or not.

Secretum Secretorum

After thus briefly enumerating the chief Sanskrit references to poison-damsels, we must now take a big jump to Europe in search of further evidence. This does not mean that there is no trace of our *motif* in Persia,⁵ Mesopotamia, Arabia, Syria and Asia Minor, but

¹ Johannes Hertel, "Über die *Suvābahuttarīkathā*," *Festschrift für Ernst Windisch*, Leipzig, 1914, pp. 146, 147.

² "Die Sage vom Giftnädchen," *Abh. der Philos.-Philol. Classe der k. bayer. Akad. d. Wiss.* Zwanzigster Band, München, 1897, p. [89-166]. See p. 143.

³ *Op. cit.*, p. 199.

⁴ *Verzeichniss der Sanskrit-Handschriften der Königlichen Bibliothek*, Berlin, 1853, vol. i, p. 263 (No. 879), note 2.

⁵ See J. J. Modi, "The Vish-Kanyā or Poison-Damsels of Ancient India, illustrated by the story of Susan Rāmashgar in the Persian *Burzo-nāme*," *Folk Lore*, 1927, vol. xxxviii, pp. 324-337; and *idem*, "The Story of Alexander the Great and the Poison-Damsel of India. A trace of it in Firdousi's *Shāh-Nāme*," *Journ. Bombay Branch, Roy. As. Soc.*, 1928, vol. iii, pp. 212-230.

merely, that as Eastern Europe in the Middle Ages was the centre of great literary activity and the *entrepôt* between East and West, it is here that we are most likely to find data to help us in our inquiry. Having surveyed the evidence, we must look eastwards for links with India, and westwards to mark the extent of its ultimate expansion.

In the first place, then, it is necessary to become more acquainted with the character of the *Secretum*, to ascertain, if possible, why it was written, the cause of its immense popularity, and what is known of the history of the work itself.¹ We shall then be in a better position to estimate the value of the inclusion of such a *motif* as that of the poison-damsels.

About the very time that Somadeva wrote, a work appeared in European literature in the Latin language, translated from the Arabic. It was entitled *Secretum Secretorum, De Secretis Secretorum, or De Regimine Principum*.² It purported to be nothing less than a collection of the most important and secret communications sent by Aristotle to Alexander the Great when he was too aged to attend his pupil in person. Such letters had been circulated from the earliest times, but here was a treatise containing not only the essence of political wisdom and state-craft, but regulations for the correct conduct of body and mind, and an insight into the mysteries of occult lore.

Since his death in 322 B.C. the reputation of Aristotle had gradually increased, and in the Middle Ages any work bearing his name was sure to be received with the greatest enthusiasm. Furthermore, the name of Alexander was surrounded by an ever-growing wealth of romance and mystery. No wonder, then, that the discovery, or supposed discovery, of the actual correspondence between these two great men created something of a sensation.

The *Secretum*, however, is not reckoned among Aristotle's genuine works, but as one of a number of unauthenticated treatises which, reflecting as it does theories and opinions contained in his famous philosophical writings, was readily accepted as a work of the Master himself. Its popularity was so great that it became the most widely read work of the Middle Ages, and contributed more to Aristotle's reputation than any of his fully authenticated writings. It was translated into nearly every European language, and consequently played a very considerable part in European literature.

¹ Although space will not permit any detailed discussion of this tangled mass of evidence, I shall endeavour to supply ample reference to the existing literature on the subject.

² For other titles see P. R. Förster, *De Aristotelis quæ feruntur Secretis Secretorum Commentatio*, Kilise, 1888, 1.

As already mentioned, the Latin version of the *Secretum* first made its appearance in the twelfth century. There were two distinct recensions, a longer and a shorter one, both derived from Arabic MSS., which in their turn were said to rest upon Greek originals. Owing to the complicated and uncertain history of the *Secretum* it was considered necessary in the later MSS. to account in some way for the appearance of this hitherto unheard of correspondence between Aristotle and Alexander. A kind of prologue was accordingly added, both to the longer and shorter rescensions, written by the alleged discoverer of the work, Yahya ibn Batrîq¹—i.e. John the son of Patricius, who was a Syrian freedman under the Khalifa al-Ma'mûn (circa 800). He first gives what he describes as the preliminary correspondence between Aristotle and Alexander, and states that in accordance with the commands of the Khalifa, who had somehow heard of the existence of the *Secretum*, he started on a prolonged search for the MS. and "left no temple among the temples where the philosophers deposited their hidden wisdom unsought," until finally he came across the object of his search in the Temple of the Sun dedicated to Æsculapius (Asklepios). It was written in letters of gold, and he immediately translated it first into Rumi (Syriac), and then from Rumi into Arabic. Whether Yahya was really the double translator is unknown. He certainly would know Syriac and Arabic, but if he was ignorant of Greek we must assume that the translation from the Greek into Syriac had been made earlier. It has been suggested that it was on the occasion of the second translation that the other treatises previously existing independently were incorporated, thus accounting for the longer and shorter recensions found both in the Arabic and Latin versions. The number of existing Latin MSS. is very large, and every library of any note possesses a number of copies.²

As was only to be expected with a popular book like the *Secretum*, it suffered greatly at the hands of copyists, who removed or added chapters as they thought fit. The work was, moreover, so wide in its scope that in some cases a chapter was enlarged to such a degree that it appeared as a fresh work of its own and was circulated separately. This is what happened with the chapters on *Regimen Sanitatis*—rules for preserving the health—and that on Precious

¹ See M. Steinschneider in Virchow's *Archiv für pathologische Anatomie und Physiologie*, lii, Berlin, 1871, p. 364 *et seq.*; and Förster, *op. cit.*, p. 23 *et seq.*

² There is no complete bibliography of the MSS., prints, etc., of the *Secretum* in all the different languages in the libraries of Europe, but Richard Förster made a list of no less than 207 Latin MSS. See the *Centralblatt für Bibliothekswesen*, VI, Jahrgang 1, Heft, Leipzig, 1889, pp. 1-22.

Stones, while that on Physiognomy was incorporated into the works of Albertus Magnus and Duns Scotus.¹

A comparison of the various texts and translations shows that in all probability these very chapters, or sections, which are also found as separate works, did not form part of the original composition, but were added at a later date. The chief reasons for arriving at this conclusion will be given a little later. Thus a kind of "enlarged edition" was formed, which would naturally enjoy a greater circulation. Without going over the ground that has already been sufficiently covered,² I would merely mention the two men who are reputed to have made the Latin translations. The first was a Spanish Jew, who, on his conversion to Christianity, took the name of Johannes Hispaniensis, or Hispalensis.³ He flourished in the middle of the twelfth century, and translated only the section dealing with the health-rules and the four seasons. It had, however, the prologue prefixed to it, and bore the Latinised form of the Arabic title, "Sir Alasrar," i.e. Sirr Al'asrār, "Secret of Secrets." The other translator was a French priest, Philip Clericus of Tripoli,⁴ who at the request of his Archbishop, Guido of Valencia, translated the whole work from an Arabic original he had found in Antioch. His date is fixed at the beginning of the thirteenth century. As time went on these two versions got blended, and any knowledge of the separate works was lost. The most interesting and important of the Arabic originals have been compared and discussed by

¹ See Lynn Thorndike, *A History of Magic and Experimental Science*, vol. ii, pp. 266, 267.

² F. Wüstenfeld, "Die Übersetzungen Arabischer Werke in das Lateinische seit dem XI. Jahrhundert," *Abhandl. d. Königl. Gesell. d. Wiss. zu Göttingen* (Histor.-philolog. Classe), Bd. xxii, 1877, Abt. I, pp. 1-53, Abt. II, pp. 55-133—for the section "Johannes Hispanus," see pp. 25-38; R. P. Förster, *op. cit.*, pp. 1-41. For a more recent account of the origin, versions and popularity of the *Secretum*, see O. A. Beckerlegge, *Le Secrét des Secrets by Pierre D'Abernun of Fitcham*, Anglo-Norman Texts—V. Oxford, 1944, pp. xviii-xxvi. The poison-damsel section occupies lines 1242-1263.

³ Also known as John of Seville, usually identified with John, son of David (John Avendeath). His translation was made for a Queen of Spain named Theophina or Tharasia—possibly Theresa of Portugal, daughter of Alfonso VI of Castile and Leon. See O. A. Beckerlegge, *op. cit.*, pp. xix, xx.

⁴ G. Favre, *Mélanges d'Histoire Littéraire* . . . , Genève, 1856, vol. ii, p. 41n¹; Hermann Knust in *Jahrbuch für Romanische und Englische Literatur*, Bd. x, Leipzig, 1869, pp. 153-172 and also pp. 272-303; G. Cecioni "Il Secretum Secretorum attribuito ad Aristotile e le sue Redazioni Volgari," *Il Propugnatore*, vol. ii, pt. ii, Bologna, 1889, pp. 72-102, esp. p. 84 et seq.; P. G. Brunet, *Le Violier des Histoires Romaines. Ancienne traduction française des Gesta Romanorum*, Bib. Elzevirienne, Paris, 1858—see ch. xi, pp. 28-30 "Du venin du péché duquel cothidiennement sommes nourris," with the notes on pp. 429, 430. For Philip of Tripoli see C. H. Haskins, *Studies in the History of Medieval Science*, Cambridge—Harvard Univ. Press, 1924, pp. 137-140.

Steinschneider,¹ who found a similar confusion of the chapters as in the Latin texts.

There is also a Hebrew version, which is quite as old as any of the complete texts. It is now almost universally recognised as the work of Judah Al-Harizi,² who flourished in the early thirteenth century. It formed in all probability, one of the cycle of Alexandrian legends upon which Harizi was working. This Hebrew version, translated by Gaster,³ is important in tracing the history of the *Secretum* as it follows the Arabic faithfully, and represents the work before it was encumbered with the enlarged chapters on Astronomy, Physiognomy, etc. One of the most convincing proofs of the subsequent addition of these chapters is the fact that none of them is included in the index of either the longer Arabic or Hebrew texts, and the Latin versions derived from them. But apart from this Förster has traced the chapter on Physiognomy to the Greek treatise of Polemon, while Steele has ascribed part of the Rule of Health section to Diocles Carystius (320 B.C.). The medical knowledge displayed in the enlarged chapters places the author in the eighth or ninth century, but when restored to their original proportions we can reduce the date by at least a century. Scholars are agreed that there is no Greek text in existence, and no proof that it ever did exist. Now if we look more closely into the longer Arabic and Hebrew texts, we find that the background of the book is wholly Eastern—Persian and Indian—while, on the other hand, there is hardly a mention of Greece. If any analogy or simile is needed, it is the sayings and doings of Persians or Indians that are quoted. The allusion to chess, the occurrence of Eastern place-names, and animals, all tend to point to the influence under which the *Secretum* really originated. Among similar Eastern works whose history is now fairly completely known may be mentioned *Syntipas*, *Kalilah* and *Barlaam and Josaphat*. All these slowly migrated westwards, changing their character with their environment, and readily adapting themselves to any new purpose for which they might be wanted. Among the later insertions added by the Greek author of *Barlaam*

¹ *Die Hebräischen Uebersetzungen des Mittelalters und die Juden als Dolmetscher*, Berlin, 1893, p. 995—cf. also p. 245 et seq. where a full bibliography is given.

² M. Steinschneider, *Hebräische Bibliographie*, vols. ix, p. 44 et seq., and xi, p. 74 (this was a periodical published in Berlin in 21 vols. from 1858 to 1882, with the exception of 1866-1868, with J. Benzián as co-editor from vol. ix onwards); Steinschneider, "Spanische Bearbeitungen arabischer Werke," in *Jahrbuch für Romanische und Englische Literatur*, Bd. xii, Leipzig, 1871, pp. 366-376; F. Wüstenfeld, *op. cit.*, p. 83; and Israël Lévi, "Les traductions hébraïques de la légende d'Alexandre," *Revue des Études Juives*, vol. iii, Paris, 1881, p. 241.

³ "The Hebrew Version of the *Secretum Secretorum*," *Journ. Roy. As. Soc.*, October 1907, pp. 879-912, and January and October 1908, pp. 111-162, 1065-1084.

is a "Mirror of Kings," which closely resembles portions of the *Secretum*. The composition of this work is now placed at about the first half of the seventh century, and the vicissitudes through which the two works have gone are in all probability very similar.¹

Having thus briefly glanced at the history of the *Secretum*, we are now in a better position to examine the actual reference to poison-damsels. In the first place we should note that it is omitted in both those sections which were not included in the index (see *supra*), but occurs in the oldest portion—that of the rules for "the ordinance of the king, of his purveyance, continence and discretion."

According to the text, Aristotle is warning Alexander against entrusting the care of his body to women, and to beware of deadly poisons which had killed many kings in the past. He further advises him not to take medicines from a single doctor, but to employ a number, and act on their unanimous advice. Then, as if to prove the necessity of his warnings, he recalls a great danger which he himself was able to frustrate. "Remember," he says, "what happened when the King of India sent thee rich gifts, and among them that beautiful maiden whom they had fed on poison until she was of the nature of a snake, and had I not perceived it because of my fear, for I feared the clever men of those countries and their craft, and had I not found by proof that she would be killing thee by her embrace and by her perspiration, she would surely have killed thee."

This is from the Hebrew text (Gaster's translation), and, as has already been mentioned, represents the early recension. It will be noted that the person who sent the poison-damsel was a king of India. In some of the Arabic texts it is the king's mother, and in most of the later versions the queen of India, who sends the poisoned woman. Then again the contamination differs—sometimes it is caused by the kiss or bite, in other versions by the perspiration, intercourse, or even only the look.

The translation² of one of the Arabic texts (MS. Gotha, 1869) is as follows:

"Remember the mother of the Indian king who sent to thee some presents, one of which was a girl who had been brought up on poison until her nature had become that of poisonous serpents. And if I had not found it out through my knowledge of the Indian

¹ For further notes on this see Gaster, *op. cit.*, October 1908, p. 1080.

² See the appendix of Robert Steele's *Opera hactenus inedita Rogeri Baconi Fasc. V.*, by A. S. Fulton, Oxonii, 1920, Introduction p. xl, and p. 191 for the English translation of the Arabic text.

kings and physicians, and had not suspected her to be capable of inflicting a fatal bite, surely she would have killed thee."

Another MS. (Laud. Or., 210) ends with: "she surely would have killed thee by her touch and by her perspiration, and thou shouldst have perished."

The Spread of the Legend in Europe

As already mentioned, the work has been translated in full, or partly edited, in numerous European languages. These include Spanish, Italian, Provençal, Dutch, French and English. Full bibliographical details will be found in the excellent article "Die Sage vom Giftmädchen," by W. Hertz,¹ to which I am indebted for many useful references and translations. There are, however, only one or two of these which, owing to their importance in literature or curiosity of their version, interest us here.

The incidents of the story must have been well known in Spain by the thirteenth century, as Guillem de Cervera (Guillaume de Cervera, Guylem de Cerveyra) when referring to the tricks of women in his *Proverbes*, v, 1000, observes: "The Indian wanted to murder Alexander through a woman"; and later, when advising care with regard to presents, he continues: "Alexander took gifts from India, and the maiden who thought to rouse his passion was beautiful. If Aristotle had not been versed in astronomy, Alexander would have lost all he possessed through presents."²

Heinrich von Meissen, a German poet of the thirteenth century, generally known as Frauenlob, and famous for the display of learning in his poems, tells us that³ a certain queen of India was so clever that she brought up a proud damsel on poison from infancy. She gave, according to the text, "poisoned words"—that is to say, the breath from her mouth when speaking was poisonous—and her

¹ See above p. 17, note 2.

² <i>Alexandri pres do</i>	<i>Aristotils no fos</i>
<i>D'Indis et le puciela</i>	<i>Après d'astronomia,</i>
<i>Quel cuydet passio</i>	<i>Alexandri per dos</i>
<i>Dar, car era tam biela.</i>	<i>Perdera quant avia.</i>

Antoine Thomas in *Romania*, 15^e Année, Paris, 1886, p. 107, verses 1149-1150.

³ Frauenlob's poetry was edited by L. Ettmüller in 1843—*Heinrich von Meissen des Frauenlobes Leiche, Sprüche, Streitgedichte und Lieder*. Bib. d. gesammten deut. Nat.-Lit., Bd. 16; a selection will be found in K. Bartsch, *Deutsche Liederdichter des zwölften bis vierzehnten Jahrhunderts* (3rd edition, Stuttgart 1893). See also A. Boerckel, *Frauenlob* (2nd edition, Mainz, 1881), and F. H. Von der Hagen, *Minnesinger*, Leipzig, 1838, iii, 111a, verse 3. For more recent studies on the poet and his sources see I. Kern, *Das höfische Gut in den Dichtungen Heinrich Frauenlobs*, Germ. Stud. Heft. 147, Berlin, 1934; and H. Thomas, *Untersuchungen zur Überlieferung der Spruchdichtung Frauenlobs*, Paestra 217, Leipzig, 1939.

look also brought sudden death. This maiden was sent to King Alexander in order to cause his death and thus bring freedom to her land. A master saw through this and gave the king a herb to put in his mouth, which freed him from all danger.

Frauenlob cites the above as a warning to princes to beware of accepting gifts from conquered foes. The idea of the miraculous herb is entirely new and seems to have been an invention of the poet.

A peculiar rendering is found in a French prose version of the early fourteenth century. It has been described by Ernest Renan in the *Histoire Littéraire de la France*.¹ The work is in three different texts. According to the most recent (sixteenth century), *Le Cuer de Philosophie*, by Antoine Vêrard, the tale of the "Pucelle Venimeuse" is roughly as follows:

A certain king was once informed by a soothsayer that a child, named Alexander, had just been born who was destined to be his downfall. On hearing this disconcerting news, the king thought of an ingenious way in which to get rid of the menace, and gave secret orders for several infant girls of good family to be nourished on deadly poison. They all died except one, who grew to be a beautiful maiden and learnt to play the harp, but she was so poisonous that she polluted the air with her breath, and all animals which came near her died.

Once the king was besieged by a powerful army, and he sent this maiden by night into the enemy's camp to play the harp before their king. She was accompanied by two others, who were, however, not poisonous. The king, struck by her beauty, invited her to his tent. As soon as he kissed her he fell dead to the ground, and the same fate overtook many of his followers who gathered round her on the same evening. At this juncture the besieged army made a sortie and easily overcame the enemy, who were demoralised by the death of their leader.

Delighted with the success of his experiment, the king ordered the damsel to be even better cared for, and nourished with even purer poison than hitherto.

Meanwhile Alexander, grown to manhood, had started his campaigns, besieged and conquered Darius, and made his name feared throughout the world.

Then the king, anxious to put his long-conceived plan into execution, had five maidens beautifully attired, the fifth being the poisoned damsel, more lovely and more richly clad than the rest; these he sent to Alexander, ostensibly as a mark of his love and

¹ "Le Livre des Secrets aux Philosophes, ou Dialogue de Placide et Timéo," *Hist. Litt. de la France*, Tome XXX, Paris, 1888, pp. 367-393.

obedience, accompanied by five attendants with fine horses and rare jewels. When Alexander saw the lovely harpist he could scarcely contain himself, and immediately rushed to embrace her. But Aristotle, a wise and learned man of the court, and Socrates, the king's tutor, recognised the poisonous nature of the maiden and would not let Alexander touch her. To prove this Socrates ordered two slaves to kiss the damsel, and they immediately fell dead. Horses and dogs which she touched died instantly. Then Alexander had her beheaded and her body burnt.

In some of the Latin versions¹ the name of the poison is mentioned.

The most curious version, however, is that occurring in the Italian edition of Brunetto Latini's *Li livres dou Tresor*,² and which runs as follows:

"There ruled a wise queen in the land of Sizire, and she discovered by her magical art that a son of Olympus, Alexander by name, would one day deprive her of her kingdom. As soon as she was informed of the birth of this hero, she considered how she might destroy him and thus evade her fate. She first procured Alexander's portrait, and seeing that his features betrayed a sensual nature, made her plans accordingly.

"In that country there exist snakes so large that they can swallow a whole stag, and their eggs are as big as bushel baskets. The queen put a baby girl, just born, into one of these eggs, and the snake-mother hatched it out with her other eggs. The little one came out with the young snakes and was fed by the snake-mother with the same food that she gave her own young ones. When the young snakes grew up, the queen had the girl brought to her palace and shut up in a cage. She could not speak, and only hissed like a snake, and anyone coming near her too often either died or fell into disease. After seven weeks the queen had her fed with bread, and gradually taught her to speak.

"After seven years the girl began to be ashamed of her nakedness, wore clothes and became accustomed to human food. She grew into one of the most beautiful creatures in the world, with a face like an angel.

¹ Antoine Mizauld, *Memorabilium, sive arcanorum omnium genesis, per aphorismos digestorum*, Centuria IX, Coloniae, 1572, p. 9, verso et seq. (i.e. Centuria I, No. 37, etc.). The 1574 edition has the same enumeration. There were several French and many German editions: Michael Bapst von Rochlitz, *Artzney Kunst- und Wunder-Buch*, Eisleben, 1604, I, 19.

² Alessandro D'Ancona, "Il Tesoro di Brunetto Latini versificato," *Atti della R. Accademia dei Lincei*. Serie Quarta, Classe di Scienze Morali, Storiche e Filologiche, vol. iv, pt. i, memorie, pp. 111-274, Roma, 1888.

"Once upon a time Alexander chanced to come to that country, and the queen, thinking that her opportunity had arrived, offered him the girl, with whom he at once fell in love, saying to Aristotle, 'I will lie with her.' But Aristotle, without whose permission he would not even eat, saw the beauty of the maiden, her glittering face and her look, and said to Alexander: 'I see and recognise in this creature the bearing of snakes. Her first nourishment was poison, and whoever comes in contact with her will be poisoned.' Seeing that Alexander was loth to believe him, Aristotle continued: 'Procure me a snake and I will show you.' He ordered the girl to be kept carefully overnight, and the next morning a dreadful snake was brought to him which he shut up under a big jar. Then he ordered a basket of fresh dittany to be ground in a mortar, and with the juice thus obtained he drew a circle round the jar about an ell away from it. Then a servant lifted the jar and the snake crawled out and crept along the circle of juice trying to find a way out. But it could find no outlet and crawled continuously round and round until it died.¹

"See," said Aristotle, "that will also happen to that maiden." Then Alexander had three girls brought, and drew a circle of the juice all round them, and called them to him. Two of the maidens ran to him, but the third, the poisoned damsel, remained within the circle, looking in vain for an outlet. She then began to choke, her hair stood on end, and she died suddenly like the snake."

It is impossible to say if this tale is really old, or merely emanated from the poet's own imagination. Although the kingdom of Sizire appears to be unknown, it is interesting to note the mention of the huge swallowing powers of the snakes, which naturally point to India as the home of the story.

As I have pointed out elsewhere,² the magic circle could be used as a vantage-ground from which to summon spirits and also as a barrier from which there was no escape. It appears that even in the early Babylonian texts the prototype of the magic circle possessed these same properties, and in his *Semitic Magic* R. Campbell Thompson describes it as a kind of *haram* through which no spirit could break. The circle was sometimes made of *kusurra* (flour), flour of lime, which may, perhaps, have been a mixture of meal and lime, while in other cases flour and water were used for tracing

¹ For numerous references on the use of dittany in the works of classical writers, particularly Plutarch and Pliny, see Lynn Thorndike, *A History of Magic and Experimental Science*, vol. i, pp. 218, 495. See also Funk and Wagnall's *Dict. of Folklore, Mythology and Legend*, New York, 1949 s.v.

² *The Ocean of Story*, vol. ii, pp. 98-100; see also vol. iii, pp. 201-203.

the circle. The mixture was described as the "net of the corn-god," thus fully explaining the office it was supposed to perform.

Hertz (*op. cit.*, p. 105) refers to a mediæval legend told by Hieronymus Rauscher. Once upon a time a terrible dragon overcame a land and no human power could destroy him; then the bishop ordered the people to fast for ten days, whereupon he said: "In order that you may discover what power lies in fasting, you must all spit into this mug." After this he took that saliva and traced a circle round the dragon, which was unable to get out of it (*Das ander Hundert der . . . Papistischen Lügen*, Laugingen, 1564, c. 32). Aristotle (*Hist. Anim.*, viii, 28, 2) and Pliny (*Nat. Hist.*, vii, 2, 5) believed that human saliva, and especially that of a fasting person, was dangerous to poisonous animals. The same effect is attributed to the juice of garlic. Johannes Hebenstreit¹ tells us that a white worm was found in the heart of a prince who had died after a long illness. When they put this worm on a table surrounded by a circle of garlic, he crawled round until he died (*cf.* G. P. Harsdörffer, *Der grosse Schaulplatz Lust-u. Lehrreicher Geschichte*, Frankfurt, 1660, ii, 113, N. 9). Wolfgang Hildebrand (*Magia Naturalis*, Leipzig, 1610, 200) states that a circle drawn round a snake with a young hazel branch will cause its death.

The spread of the tale of the poison-damsel in Europe was greatly increased by its inclusion in the famous collection of stories, "invented by the monks as a fire-side recreation; and commonly applied in their discourses from the pulpit," known as the *Gesta Romanorum*. These tales date from the thirteenth and fourteenth centuries. In Swan's English translation, edited by Thomas Wright, the tale forms No. 11 of the collection.² We are informed that it was the Queen of the North (Regina Aquilonis) who, having heard of Alexander's proficiency, nourished her daughter upon poison and sent her to him. The story as told here is very brief indeed, chief importance being laid upon the "application," in which any good Christian is represented by Alexander, the Queen of the North is a superfluity of the good things in life, the envenomed beauty is luxury and gluttony, which are poison to the soul. Aristotle exemplifies conscience, and the moral is: Let us then

¹ *Regiment pestilenzischer giftiger Fieber*, Erford [Erfurt], 1562, Folio H., p. 16. A copy of this rare work will be found in the library of the Wellcome Historical Medical Museum, 183, Euston Road, N.W.1.

² See J. A. Herbert, *Catalogue of Romances in the Dept. of MSS. in the British Museum*, vol. iii, 1910, p. 211, No. 92 (Harl. 5259). *Cf.* also vol. i, p. 167, No. 6 (Harl. 7322); and *Lydgate and Burgh's Secretes of Old Philisoffres*, edited by R. Steele, Early Eng. Text Soc., Extra Series 66, 1894, p. xi and note 2.

study to live honestly and uprightly, in order that we may attain to everlasting life.

The popularity of the *Gesta Romanorum* must have done much to cause the spread of the poison-damsel *motif*, and as time went on, the idea found its way, sometimes little changed and at other times hardly recognisable, into the literature of most European countries.

When discussing the different methods of poison transference we shall meet with numerous interesting versions. The most recent adaption of the story is probably that of the American poet Nathaniel Hawthorne.¹ It appeared under the title of "Rappacini's Daughter," and tells of a certain doctor of Padua who was always making curious experiments. Soon after the birth of his daughter the heartless father decides to use her for his latest experiment. He has a garden full of the most poisonous plants, and trains her up to inhale their odours unceasingly. As years pass she not only becomes immune from poison, but so poisonous herself that, like Siebel in *Faust*, any flowers she touches wither. The girl herself was beautiful, and a young man falls in love with her, but marriage seems out of the question. A colleague of her father's, however, prepares a potion for the lover which would neutralise the poison. The plan succeeds, but because poison has now become part of her very life the sudden application of the antidote kills her.

This idea might be well taken from similar results that the sudden complete stoppage of drugs in a habitual drug-fiend would produce. We shall consider the possible connection of opium with our *motif* a little later.

I now propose to look rather more fully into the different methods by which the poison-damsel was said to transfer her poison.

Some versions speak merely of the kiss. Thus in the Persian version of the *Pañchatantra*, the *Anvār-i-Suhaili*, we read of a queen who wished to kill her husband, so knowing he had a special weakness for kissing the neck of his favourite concubine, she has it rubbed with poison. The plot is, however, discovered by a slave.²

The same idea is found in the *Vissāsabhojana-jātaka*, where a herd of cows yield but little milk through fright of a lion in the

¹ *Mosses from an Old Manse*, Paterson's Shilling Library, New England Novels, Edinburgh, 1883, p. 93.

² See the translation by E. B. Eastwick, 1854, p. 582. See also T. Benfey, *Pantschatantra*, vol. i, Leipzig, 1859, p. 598. For other references see Chauvin, *Bib. des Ouv. Arabes*, ii, p. 87; and *The Ocean of Story*, vol. v, p. 220, with the genealogical table by Professor Franklin Edgerton facing p. 242.

neighbourhood. Finding out that the lion is very attached to a certain doe, the herdsmen catch it and rub it all over with poison and sugar. They keep it for a day or two until it has properly dried, and then let it go. The lion meanwhile has missed its friend and on seeing it again licks it all over with pleasure, and so meets its death. Then as a kind of moral¹ we read:

"Trust not the trusted, nor th'untrusted trust;
Trust kills; through trust the lion bit the dust."

Other methods are through the look, the breath, the perspiration, the bite and, finally, sexual intercourse.

We will consider the fatal look first.

The Fatal Look

As has already been mentioned in some versions of the story, it is merely a look from the poison-damsel which is fatal.² When we consider the practically universal fear of the evil eye, it is not to be wondered at that such an idea should have crept into these versions. A large number of examples from all parts of the world will be found in Hertz, *op. cit.*, pp. 107-112; reference should also be made to F. T. Elworthy, *The Evil Eye*, 1895, and his article, "Evil Eye," in Hastings' *Ency. Rel. Eth.*, vol. v, pp. 608-615.³

There is a wide-spread Oriental belief that the look of a snake is poisonous, hence the Sanskrit name *drig-viṣa* or *drīṣṭi-viṣa*, "poison in a glance." The Indians also believed that there were some snakes (*Dibya*, or heavenly) which poison the atmosphere with their breath and eyes (T. A. Wise, *Commentary on the Hindu System of Medicine*, London, 1860, p. 399).

Similar snakes are reported by the Arabs as living in the desert (see Barbier de Meynard, *Les Colliers d'Or, allocutions morales de Zamakhschari*, Paris, 1876, p. 94). Likewise Qazwīnī in his *Cosmography, or Wonders of Creation* tells of snakes existing in the Snake Mountains of Turkestan which also killed by their glance. It is interesting to note that these deadly snakes have entered into stories connected with Alexander the Great. Thus in the *Secretum Secretorum*⁴ we read: "I furthermore command thee and warn thee that thy counsellor be not red-haired, and if he has blue eyes, in

¹ See the Cambridge edition, edited by E. B. Cowell, No. 93, vol. i, p. 228.

² See Funk and Wagnalls *Standard Dictionary of Folklore*, vol. i, New York, 1949, under "Fatal Look," p. 371.

³ For the women of Scythia with the evil eye mentioned by Pliny (vii, 2, 17, 18). See later (p. 38) after the Mandeville passage.

⁴ Gaster's Hebrew version, section 48, *op. cit.*, January 1908, pp. 137, 138.

Arabic called *asrk*, and if he be one of thy relations, do not trust them, do not confide in them any of thy affairs, and beware of them in the same manner as thou bewarest of the Indian snakes which kill with their look from a distance."

According to another myth,¹ during one of his campaigns Alexander came across a valley on the Indo-Persian frontier guarded by deadly serpents whose mere glance was fatal. Learning that this valley was full of precious stones, he erected mirrors in which the serpents might stare themselves to death, and so secured the gems by employing the carcasses of sheep in a manner with which we have already become accustomed in the story of "Sindbad the Sailor." See also the descriptions of Epiphanius.² According to Albertus Magnus the scheme was suggested by Aristotle.³ He also tells a somewhat similar tale of Socrates in his commentary on the Pseudo-Aristotelian work on the properties of the elements and planets.⁴ In the reign of Philip of Macedon, who is himself described as a philosopher and astronomer, the road between two mountains in Armenia became so poisoned that no one could pass. Philip vainly inquired the cause from his sages until Socrates came to the rescue and, by erecting a tower as high as the mountains with a steel mirror on top of it, saw two dragons polluting the air. The mere glance of these dragons was apparently not deadly, for men in air-tight armour went in and killed them.

Thus it seems that it was the breath of the dragon that caused death.⁵ This will be discussed shortly. The fatal glance of snakes reminds us at once of Medusa, whose hair was composed of serpents, one glance at which was sufficient to turn the unwary into stone.

It is in myths like that of Perseus and the Gorgon that the fatal glance is more understandable. For in the case of the Alexander

¹ Valentin Rose "Aristoteles de Lapidibus und Arnoldus Saxo," *Zeitschrift für deutsches Altert.*, vol. xviii, Berlin, 1875, 364, 28 et seq. Cf. W. Schwartz, *Indogermanischer Volksglaube*, Berlin, 1885, p. 236 (re Michlal Jofi of Samuel ibn Zarza). For him see the *Jewish Ency.*, 1906, s.v.; M. Steinschneider, *Cat. Lib. Heb. in Bib. Bod.*, cols. 2496-2498; and A. Neubauer, *Cat. Heb. MSS. in Bod. Lib.*, 1886, col. 457, No. 1296. In Brunetto Latini these basilisks are destroyed by warriors who are protected from them by large glass bottles (*Li Livres dou Tresor*, P. Chabaille, Paris, 1863, Bk. i, pt. 5, ch. cxli, pp. 192, 193.) Cf. L. Laistner, *Rätsel der Sphinx*, Berlin, 1889, vol. ii, p. 263 et seq.

² Lynn Thorndike, *History of Magic and Experimental Science*, vol. i, p. 496.

³ *De mirabilibus mundi* (*De secretis mulierum*, Amstelodami, 1669, p. 176 et seq.).

⁴ *De causis et proprietatibus elementorum*, II, ii, 1. See also the complete edition of his works by Augustus Borgnet, vol. ix, p. 643. The extract quoted above and those immediately following are taken from Lynn Thorndike, *op. cit.*, vol. ii, pp. 262-263.

⁵ Compare the poisonous breath of the snakes in the *Jātakas*—e.g. *Daddara-Jātaka* (No. 304), Cambridge edition, vol. iii, p. 11.

story, if a single look produced death, the warning of Aristotle would come too late. Some of the translators seem to have realised this, and in cases where the text read "by the glance" it has been altered to "continual (or prolonged) look." It is clear, I think, that the reading is not correct and is found only in some of the later texts.

The Poisonous Breath

The idea of poisonous breath, such as we find in some of the versions of the poison-damsel story, is quite a common one in fiction. As we saw in Frauenlob's version, the girl's breath was poisonous. The same statement is made by Peter of Abano,¹ the Jesuit Del Rio,² Michael Bapst, Wolfgang Hildebrand and Gaspar de los Reyes.³ For further details see Hertz, *op. cit.*, pp. 112, 113.

The notion of the poisonous breath may perhaps be traced in some cases to stories of people living on poison in order to protect themselves against any attempt on their lives by the same means. The story of Mithradates (Pliny, *Nat. Hist.*, xxv, 3) is a well-known case in point. Discovering that the Pontic duck lived on poison, he utilised its blood as a means of inoculation, and finally was able to eat poison regularly.

Of more interest to us, however, as showing the Indian belief in the use of poison as nourishment, is the tale of Mahmūd Shāh, King of Gujarāt. It was current about 1500, and versions are found in the travels of Varthema,⁴ Duarte Barbosa⁵ and Tomé Pires.⁶

The story goes that Mahmūd's father reared his son on poison to frustrate any attempts on the part of enemies to poison him. In Varthema's account we read: "Every day he eats poison. Do not, however, imagine that he fills his stomach with it; but he eats a certain quantity, so that when he wishes to destroy any great personage he makes him come before him stripped and naked, and then eats certain fruits which are called *chofole*, which resemble a muscatel nut. He also eats certain leaves of herbs, which are like the leaves of the sugar orange, called by some *tamboli*; and then he

¹ *Libellus de venenis*, c. 3 (*Conciliator*, Venetiis, 1548, fol. 278, col. 2).

² I.e. Martin Antoine Deltio (1551-1608), *Disquisitionum Magicarum libri sex* . . . Moguntiae, 1606, I, 55. For details of the various editions see Carlos Sommervogel, *Bib. de la Compagnie de Jésus*, Nouv. Édit., Tome 11, Bruxelles et Paris, 1891, cols. 1898, 1899.

³ *Elysium iucundarum questionum Campus*, Bruxellae, 1661, 483.

⁴ *Travels of Ludovico di Varthema*, G. P. Badger, Hakluyt Society, 1863, pp. 109-110; also Sir Richard Temple, Argonaut Press reprint (1928), pp. li and 46.

⁵ *The Book of Duarte Barbosa*, M. Longworth Dames, Hakluyt Society, 1918, vol. I, pp. 121-123.

⁶ *The Suma Oriental*, Armando Cortesão, Hakluyt Society, vol. I, 1944, p. 40 and note 2.

eats some lime of oyster shells, together with the above-mentioned things. When he has masticated them well, and has his mouth full, he spurts it out upon that person whom he wishes to kill, so that in the space of half an hour he falls to the ground dead. This sultan has also three or four thousand women, and every night that he sleeps with one she is found dead in the morning. Every time that he takes off his shirt, that shirt is never again touched by anyone; and so of his other garments; and every day he chooses new garments. My companions asked how it was that this sultan eats poison in this manner. Certain merchants, who were older than the sultan, answered that his father had fed him upon poison from his childhood."

In Barbosa's version we have a very interesting and accurate account of gradual inoculation by poison compared with the taking of opium:

"He began to eat it in such small doses that it could do him no evil, and in this manner he continued so filled with poison that when a fly touched him, as soon as it reached his flesh it forthwith died and swelled up, and as many women as slept with him perished.

"And for this he kept a ring of such virtue that the poison could have no effect on her who put it in her mouth before she lay down with him. And he could never give up eating this poison, for if he did so he would die forthwith, as we see by experience of the opium which the most of the Moors and Indians eat; if they left off eating it they would die; and if those ate it who had never before eaten it, they too would die; so they begin to eat it in such small quantities that it can work them no ill, as they are reared on it, and as they grow up they are accustomed to it. This opium is cold in the fourth degree; it is the cold part of it that kills. The Moors eat it as a means of provoking lust, and the Indian women take it to kill themselves when they have fallen into any folly, or for any loss of honour, or for despair. They drink it dissolved in a little oil, and die in their sleep without perception of death."

Dames (*op. cit.*, p. 122) notes that it was Ramusio's versions of the travels of Varthema and Barbosa which spread the story through Europe, until it found its way into Purchas (ii, 1495). Butler's allusion in *Hudibras*, where he turns the poison into "asps, basilisks and toads," is as follows:

"The Prince of Cambay's daily food
Is asp, and basilisk, and toad;
Which makes him have so strong a breath,
Each night he stinks a queen to death."

Part II, canto i, line 753 *et seq.*

Dames refers to a curious tale he heard about Nādir Shāh among the Baloches (see *Folk-Lore*, 1897, vol. viii, pp. 78, 79), in which the king's breath was so poisonous that of the two girls who helped him to clean his teeth, one died outright, and the other only just managed to recover.

It is interesting to note that in Varthema's account of Mahmūd Shāh he distinctly speaks of the practice of betel-chewing so widely distributed throughout the East. The fruit called *chofole*, *coffolo*, or in Arabic *fūfel*, *faufel*, is the areca nut, the fruit or seed of the areca-palm—*Areca catechu*. The *tamboli* are the leaves of the betel vine or pan—*Chavica Betel*. The third ingredient, "some lime of oyster shell," is the small pellet of shell lime or *chunām* which is added to the piece of dried nut, both being wrapped in the leaf. Although betel-chewing is not poisonous, as was proved as early as the fifteenth century by the botanist Clusius (Charles de l'Escluse or Lécluse, 1526-1609),¹ it has been known to have curious effects on people strongly addicted to the habit, and it is quite natural that such effects would be exaggerated in the hands of story-tellers, or merely in the gradual spread of a local story first told, perhaps, with a large percentage of truth, which in time would become smaller and smaller.

The spitting of betel juice in a person's face was an Indian way of offering a gross insult. In speaking of the city of Kail, or Cail (a port, now forgotten, on the coast of the Tinnevely district of the Madras Presidency), Marco Polo² says: "If anyone desires to offer a gross insult to another, when he meets him he spits this leaf or its juice in his face. The other immediately runs before the king, relates the insult that has been offered him, and demands leave to fight the offender. The king supplies the arms, which are sword and target, and all the people flock to see, and there the two fight till one of them is killed. They must not use the point of the sword, for this the king forbids."

In an interesting letter to me on the subject, Dr J. D. Gimlette,³ the Residency Surgeon of Kelantan, tells me that in the old days Malays were in the habit of conveying poison to anyone they wanted "out of the way" in a "chew" of betel. The modern Malay criminal may also attempt to poison his victim during the process of betel-chewing. The poison, consisting of the bile of the green

¹ See the note to his Latin *résumé* of Garcia da Orta, L. I, c. 25 (*Aromatum . . . Historia*, Antwerp, 1567, p. 122 et seq.). The English translation of da Orta's *Coloquios dos simples* . . . appeared as *Colloquies on the Simples and Drugs of India*, and is by Clements Markham, London, 1913.

² *The Book of Ser Marco Polo*, Yule, vol. ii, p. 371.

³ See the 2nd edition (1923) of his *Malay Poisons and Charm Cures*.

tree-snake (*ular puchok*) mixed with that of the green water-frog and that of the jungle-crow, is smeared on the gambier used in betel-chewing. White arsenic, a common Eastern poison, could easily be mixed with the lime, and might well go undetected if the betel leaf was not carefully wiped to remove any grittiness. The Malays must always have been suspicious of such tricks, as even to-day they always wipe the leaves thoroughly before commencing chewing.

Sufficient has now been said to show how, in the East especially, exaggerated stories of poison breaths might arise. I shall have much more to say on betel-chewing in a later Essay.

Opium

Significant, too, is the mention of opium by Barbosa. He speaks of "opium which the most of the Moors and Indians eat." Although the contrary view has been expressed, the weight of evidence appears to indicate that the eating and drinking of opium is much more deleterious than smoking it.

Both Maḥmūd Shāh and his son have been described as great opium-eaters, and at this time the practice was on the increase. The early history of the drug is very uncertain, but the discovery of opium began to attract attention about the third century B.C., when references to it are found in the works of Greek writers. The home of the *Papaver somniferum* appears to have been the Levant, whence it soon spread to Asia Minor. It was, however, the Arabs who were chiefly responsible for disseminating the knowledge of the plant and its varied uses, and to the Mohammedans can be attributed its introduction into both India and China. Thus all the vernacular names for the drug are traceable to the Semitic corruption of *opos* or *opion* into *afyūn*.¹

It was not long before opium found favour with the Hindus. There were many reasons for this. It was looked upon as a cure for several diseases, and enabled those who took it to exist on very little food during famines; it was a great restorative, a means of imparting strength in any laborious work, and was, moreover,

¹ The full history of opium has yet to be written, but I would refer readers to George Watt's *Commercial Products of India*, 1908, pp. 845-861, or to the fuller account in his *Dictionary of the Economic Products of India*, vol. vi, pt. i, London and Calcutta, 1892, pp. 16-105. See also: H. A. Giles, *Some Truths about Opium*, Cambridge, 1923; E. N. La Motte, *Ethics of Opium*, New York, 1924; J. P. Gavit, *Opium*, 1925; W. W. Willoughby, *Opium as an International Problem*, the Geneva Conference, Baltimore, 1925; A. B. Lubbock, *The Opium Clippers*, Glasgow, 1933; J. P. L. S. Abbaticchi, *Les Prisonniers de l'Opium*, Paris, 1934; and M. Goldsmith, *The Trail of Opium*, 1939, with good bibliography on pp. 284-286.

considered a strong aphrodisiac. Apart from all this, opium was welcomed by ascetics, and, besides *gānja*, or Indian hemp (from which *bhāṅg* is made), became a means of producing the physical inertia and abnormal mental exaltation required for the complete conquest of all sensation and movement. It was also found to aid the observance of a protracted fast.

Then, again, it was venerated on account of the pleasant and soothing visions it produced, which were regarded as the excursions of the spirit into paradise.

No wonder, then, that such a powerful drug took a strong hold of the people, and appears in some form or other in literature. True it was unknown in India in the time of Somadeva, but there was no lack of other poisons, as is clear from the most cursory glance at the earliest Hindu medical works.

Russell¹ says that opium is administered to children almost from the time of their birth, partly because its effects are supposed to be beneficial, and also to prevent them from crying and keep them quiet while their parents are at work. One of the favourite methods of killing female children was to place a fatal dose of opium on the nipple of the mother's breast. The practice of giving children opium is said to be abandoned at the age of eight or nine, but as that is about the marriage age of girls it seems as if the harm would be already done, and the habit a very difficult one to break. I can find no evidence as to whether children were given poisonous herbs to suck before opium was introduced; the possibility, however, seems quite a likely one. The prohibition of alcoholic liquor by the Brāhman priesthood only led to the use of noxious drugs, and opium contributed much to the degeneration of the Rājput, the representatives of the old Kshatriya or warrior class.²

Poison by Intercourse

The fatal look and poisonous breath which help to characterise the poison-damsel's snake nature cannot be taken alone. They appear to be mere variants of the original idea stated, or perhaps only hinted at, in the story as told in India. There are several considerations that help to show what was originally meant. In all versions we are told that the girl was very beautiful and at once

¹ *Tribes and Castes of the Central Provinces*, vol. iii, p. 319.

² See Colonel James Tod's *Annals and Antiquities of Rajast'han*, vol. i, 1829, pp. 644, 645, and W. Crooke's edition, Oxford, 1929, vol. ii, pp. 749, 750; the latter's articles on the Rājput clans in his *Tribes and Castes of the North-Western Provinces and Oudh*; and Russell, *op. cit.*, vol. iv, p. 423 *et seq.* For evidence against the Rājputs being the offspring of the Kshatriyas see Forbes, *Rās Mālā*, edited by H. G. Rawlinson, 1924, vol. i, p. 217².

captured the admiration of her intended victim. The evil effects of her bite are mentioned. Remembering the Eastern origin of the tale, we must regard this as an amorous bite on the lip,¹ probably drawing blood, and so allowing the poisonous saliva of the girl to enter the whole system of the man. Then, again, the perspiration is mentioned.² All these facts point to intercourse as the most obvious and successful way of passing on the poison.

Aristotle told Alexander that if he had had intercourse with the poisoned woman he would have died. I take this to include all the numerous methods which in later versions were taken separately. The idea would be appreciated by the Hindu, who would imagine the woman bringing into play the whole *ars amoris indica*, as detailed by Vātsyāyana.³ It is almost surprising that no versions suggest nail-scratchings as a means of conveying the poison.

So much for the actual idea of poisonous intercourse, but the question which is of far greater interest is, What gave rise to such an idea?

Perhaps it depends on the interpretation of the word "poisonous." It is well known that in many countries the first intercourse after marriage is looked upon with such dread, and as an act of so inauspicious a nature, that the husband either appoints a proxy for the first night, or else takes care that if the girl is a virgin the hymen be broken by artificial means.⁴ It is hard to say exactly why the first sexual connection was so greatly feared, but the chief idea seems to have been that at any critical time evil spirits are especially active. Just as special care had to be taken at birth, so also at marriages it was equally important to guard against any malign influences which may be at work trying to do harm on the first night of the marriage. Such attempts, however, would not

¹ With the discovery of the Vagina Dentata motif among the aboriginal tribes of the Central Provinces (see later pp. 41, 44), it seems quite possible that the fear of castration during intercourse may originally have given rise to the "fatal bite."

² In one version, that in the *Paritistapartan*, the perspiration was caused by the heat of the sacrificial fire (see *supra* p. 17).

³ See *The Ocean of Story*, vol. v, pp. 193-195; and Funk and Wagnall's *Standard Dictionary of Folklore*, vol. i, New York, 1949, under "Amorous Bite" and "Body Marks."

⁴ See Ploss and Bartel's *Woman*, edited by E. J. Dingwall, vol. ii, London, 1935, pp. 138-141. For the use of the proxy see Antonio de Morga, "Sucesos de las Islas Filipinas," in *The Philippine Islands* . . . , edited by H. E. J. Stanley, Hakluyt Society, 1868, p. 304; L. Moncelon, *Bulletin de la Société d'Anthrop. de Paris*, 3 série IX, 1886, p. 368, par. 13. Further references will be found in Westermarck, *History of Human Marriage*, vol. i, p. 170 et seq; and *idem*, *Three Essays on Sex and Marriage*, 1934, pp. 45-49 (*Jus primæ noctis*); also R. Briffault, *The Mothers*, vol. iii, 1927, pp. 223-226, and p. 319 for mechanical defloration of girls. Numerous references are given in R. Goodland's *Bibl. of Sex Rites and Customs* (see Index s.v. "Defloration").

be renewed, and if only the husband could shift the primary danger on to someone else's shoulders all would be well.

There is no evidence that any form of poisoning was feared, but the idea occurs in a curious passage from Mandeville. In describing the islands in the lordship of Prester John, he says:¹

"Another Yle is there toward the Northe, in the See Occean, where that ben fulle cruele and ful evele Wommen of Nature; and thei han precious Stones in hire Eyen: and thei ben of that kynde, that zif thei beholden ony man with wratthe, thei slen him anon with the beholdynge, as doth the Basilisk.

"Another Yle is there, fulle fair and gode and gret, and fulle of peple, where the custom is suche, that the firste nyght that thei ben maryed, thei maken another man to lye be hire Wifes, for to have hire Maydenhode: and therfore thei taken gret Huyre and gret Thank. And ther ben certeyn men in every Town, that serven of non other thing; and thei clepen hem Cadeberiz, that is to seyne, the Foles of Wanhope. For thei of the Contree holden it so gret a thing and so perilous, for to have the Maydenhode of a Woman, that hem semethe that thei that haven first the Maydenhode, puttethe him in aventure of his Lif. And zif the Husbonde fynde his Wif Mayden, that other next nyghte, afre that sche scholde have ben leyn by of the man, that is assigned therefore, perauntes for Dronkenesse or for some other cause, the Husbonde schalle pleyne upon him, that he hathe not done his Deveer, in suche cruelle wise, as thoughe he wolde have him slayn therfore. But after the firste nyght, that thei ben leyn by, thei kepen hem so streytely, that thei ben not so hardy to speke with no man. And I asked hem the cause, whi that their helden suche custom: and thei seyden me, that of old tyme, men hadden ben dede for deflourynge of Maydenes, that hadden Serpentes in hire Bodyes, that stongen men upon hire Zerdes [stung men upon their yards], that thei dyeden anon: and therefore thei helden that custom, to make other men, ordeyn'd therfore, to lye be hire Wyfes, for drede of Dethe, and to assaye the passage be another, rather that for to putte hem in that aventure."

There are many interesting things in this passage. In the first part we have the women with precious stones in their eyes. This is

¹ *The Voyage and Travaile of Sir John Maundevile, Kt.*, with an Introduction, Additional Notes and Glossary, J. O. Halliwell, 1839, p. 285 *et seq.* (In the 1866 reprint the page is 284 *et seq.*) The 1895 edition, illustrated by Layard, omits all the above except the first paragraph (p. 355). For an excellent and searching study on Mandeville, see Malcolm Letts, *Sir John Mandeville, the man and his book*, London, 1949. The bibliographical section, especially of the MSS, and early editions, is of particular value.

taken from Solinus' *Collectanea rerum memorabilium* who, when borrowing from Pliny's *Natural History*, misread "geminam" (twin), as "gemma" (gem). But in Pliny (Bk. VII, ch. 2, 17, 18) we find the passage as follows (Rackham's translation in Loeb edition):

"Apollonides also reports women of this kind [who possess the evil eye] in Scythia . . . whose distinguishing marks he records as being a double [geminam] pupil in one eye and the likeness of a horse in the other, . . . Also among ourselves Cicero states that the glance of all women who have double pupils is injurious everywhere. In fact when nature implanted in man the wild beasts' habit of devouring human flesh, she also thought fit to implant poisons in the whole of the body, and with some persons in the eyes as well, so that there should be no evil anywhere that was not present in man."

In Bostock and Riley's notes to their translation of Pliny (Bohn edition, 1855, vol. ii, p. 127) it is suggested that an error has also been made about "the likeness of a horse" in the other eye, the point being that the Greek ἵππος means "a winking or twitching eye," apart from "horse." It is in this sense that Galen quotes it from Hippocrates. Thus, it would seem that errors of translation have really been responsible for Mandeville's "cruelle and ful evele wommen." Mention might also be made of Pliny's reference (viii, xxxii) to an animal called the catoblepas (i.e. "the downward-looker," perhaps the gnu or a species of antelope) whose gaze is fatal, but as its heavy head causes it to look at the ground the human race has been spared!

In the unique English version in the British Museum (Egerton MS. 1982), magnificently published by the Roxburghe Club in 1889, the editor, Sir George F. Warner, gives some interesting references to the *jus primæ noctis* passage.¹ In the text (p. 140) the men are called "Gadlibiriens, pat es to say, 'Foles despaired,'" and the answer to Mandeville's inquiry about them is ". . . in alde tyme sum men ware deed in pat cuntree thurgh pe defloracioun of maydens, for pai had within nedders, pat taanged pe husbands on pe zerdez in pe Wymmen bodys . . ." In his note on this passage (p. 217) Warner says that the nearest analogue he can find in sources ordinarily used by Mandeville is in Vincent de Beauvais *Spec. Hist.*, I, 88, "Augylæ vero solos colunt infernos, sœminas suæ primis noctibus nuptiarum adulteriis cogunt patere, mox ad perpetuam pudicitiam legibus stringunt severissimis." This comes from

¹ Apart from the references given on p. 36, note 4, the most comprehensive work on the subject, geographically considered, is still that by Karl Schmidt, *Jus Primæ Noctis*, Freiburg im Breisgau, 1881, pp. 397, with a thirty-one page bibliography.

Solinus (31, § 4), who by an obvious error ascribes to the Augylæ what Herodotus (iv, 172) says of the Nasamones of North Africa: "The Nasamones . . . go up to the region of Augila in order to gather the fruit of the palm-trees. . . . When a Nasamonian first marries, it is the custom for the bride on the first night to lie with all the guests in turn, and each, when he has intercourse with her, gives her some present which he has brought from home."

In a note on the passage from the British Museum Cotton Titus C.XVI, P. Hamelius (vol. ii, p. 138, Early Eng. Text Society No. 154) says that in a mediæval fabliau "Van den cnape van Dordrecht," edited by E. Verwijs in *Dit Sign X goede boerden* ('sGravenhage, 1860), a boy takes money to act as a substitute for the husband. The true meaning of "Cadeberiz" has never been satisfactorily explained.

The usually accepted prototype of tales in which successive bridegrooms die in the marriage chamber is that found in the apocryphal *Book of Tobit*. It is a tale of considerable interest from many points of view—quite apart for Tobias' famous dog which, so the Moslems tell us, is in Paradise with Baalam's ass and other important animals! The *Book of Tobit*, according to such scholars as D. C. Simpson¹ and J. H. Moulton,² was written by a Jew, exiled in Egypt, about 250 B.C. (at any rate between *circa* 350 and 170 B.C.). Its purpose was to dissuade his co-religionists from apostacy, to convert pagans to his faith wherever possible, to give warning against non-Jewish marriages, to stress the necessity for decent burial and to praise the virtue of almsgiving. The tale, which served as the thread from which all these admonitions and exhortations hung like jewels, was deliberately chosen to illustrate Jahveh's sole sovereignty over supernatural as well as human beings, and His ability to protect and assist in dangers, sickness and exile all who fulfilled his moral and ceremonial requirements. The *motifs* in the tale were selected as a reply and challenge to very similar ones current at the time in an Egyptian story, probably of Ptolemaic times, dealing with a princess possessed by a demon, who is finally delivered by a *double* of the god Khonsu. The monument on which this story is preserved is a stele found in a temple of Khonsu

¹ The "Book of Tobit," in *The Apocrypha and Pseudepigraphia of the Old Testament*, edited by R. H. Charles, Oxford, 1913, pp. 174-241. See especially § 7. "Place of Composition and Purpose." and § 8 "Sources" in the Introduction. The Bibliography of editions and critical studies in on pp. 200, 201.

² *Early Zoroastrianism*. Hibbert Lectures, Second Series, London, 1913, pp. 246-253, and also the Appendix "The Magian Material of Tobit," pp. 332-340, in which the author tentatively reconstructs a Median folk-story, full of Magian ideas and practically devoid of all Zoroastrian features, to show in what way the writer may have adapted his material.

at Thebes, and now in the Louvre.¹ It was used to enhance the somewhat fading glory of the god, and to ensure material advantages to the temple. In his form of Khonsu Nefer-hetep, this god possessed absolute power over evil spirits, especially those which were hostile to man and attacked his body with sickness and disease. Thus when all else fails the *double* of Khonsu, fortified by the *sa*, or magical essence, travels to the possessed woman and by virtue of the *sa* rids her of the demon.²

In adopting the *motif* the author of *Tobit* substituted for the *sa* the fumes of the heart and liver of a fish—the prophylactic properties of which were well known in popular legend, and are referred to in Qazwīnī's '*Ajā' ibn'l-makhlūqāt, Wonders of Creation*, line 132. The *Book of Tobit* commences in the first person, Tobit telling us how he was blinded by the dung of sparrows falling in his eyes. The tale then continues:

"Ch. 3, v. 7. The same day it happened unto Sarah the daughter of Raguel in Ecbatana of Media, that she also was reproached by her father's maidservants;

"8. Because that she had been given to seven husbands, and Asmodæus the evil spirit slew them, before they had lain with her. And they said unto her, Dost thou not know that thou stranglest thy husbands? Thou has had already seven husbands, and thou hast had no profit of any one of them."

Meanwhile Tobit has decided to send Tobias, his son, to get certain money left with a friend in Rages of Media. The angel Raphael, disguised as Azarias, son of Ananias, acts as his companion and guide. On the journey Tobias is attacked by a huge fish, but the angel bids him hold on to it, cut it open and preserve the heart, liver and gall. As they approach Rages, Tobias speaks with fear of the terrible story of Sarah and how all the bridegrooms have perished in the bride-chamber. The angel consoles him, assures him that all will be well, and tells him what to do with the heart and liver of the fish at the critical time. Accordingly he goes boldly into the fatal room:

"Ch. 8, v. 2. But as he went, he remembered the words of Raphael, and took the ashes of the incense, and put the heart

¹ It is to be seen in the Galerie d'Alger (Salle X) No. C.284. See Jacques Vandier, *Guide Sommaire, Dépt. des Ant. Égy.*, 1948, p. 17.

² For English translations see G. Maspero, *Popular Stories of Ancient Egypt*, 1915, pp. xxvii, xxviii and pp. 172-179 "The daughter of the Prince of Bakhtan and the possessing spirit"; E. A. Wallis Budge, *The Gods of the Egyptians*, vol. ii, 1904, pp. 33-41, and *idem*, *Egyptian Tales and Romances*, 1931, Tale XI "How the God Khonsu expelled a devil from the Princess of Bekhten," pp. 142-148—a reproduction of the stele is given on p. 143.

and the liver of the fish thereupon, and made a smoke therewith.

"3. But when the devil smelled the smell, he fled into the uppermost parts of Egypt, and the angel bound him."

It has repeatedly been shown that the *Book of Tobit* contains the germ of the Grateful Dead *motif*¹ which shows how a grateful spirit, ghost or divine being saves the hero from the fatal effects of the "poisonous" maiden or wife. In his work *The Grateful Dead*, published by the Folk-Lore Society in 1908, G. H. Gerould gives no less than twenty-four examples of the *motif*—Bulgarian, Serbian, Gypsy, Russian, Siberian, Armenian, etc. Naturally the details vary, but in most cases a snake, or several small snakes, or a dragon, issues from the woman's mouth or other part of the body. The kindly spirit kills them just in time. In several examples the woman is then cut into two halves and "the evil things that emerge from her body" are burnt, or else her poisonous entrails are removed.

It is not easy to determine what primitive idea lies behind all these strange tales. Many suggestions have been made—the fear of defloration, the presence of evil influences at such a vital time, or the dread of impotence in the man. Flügel² suggests that in the case of defloration, involving as it does, the destruction of an organ, the act may be regarded as a symbolic castration and this in turn may give rise to a desire for revenge on the part of the woman—a circumstance which makes the first act of coitus a dangerous adventure for the man.

A still more curious type of story, based, in many cases on dreams, is that containing the Vagina Dentata *motif*³ which, in view of the fact that it has only recently been found in India, we must consider briefly.

The Vagina Dentata Motif

The existence of this *motif* has been traced in regions of the world as far apart as California and Central India. As the term denotes, the tales deal with women whose danger, or "poisonous" nature, lies in the fact that they have teeth or fangs hidden in the vagina, and in consequence castrate the husband or lover. In some cases

¹ See *Motifs* No. E.341-E.352 in Stith Thompson's *Motif-Index of Folk-Literature*, vol. ii, p. 364 *et seq.*; and *Standard Dict. of Folklore*, vol. i, 1949, s.v.

² "Polyphallic Symbolism and the Castration Complex," *International Journal of Psycho-Analysis*, vol. v, 1924, p. 175.

³ In Stith Thompson's *Motif-Index of Folk-Literature*, vol. iii, p. 135, it forms *motif* F.547.1, and he cross-indexes it with F.582, the Poison-damsel *motif*, thus showing that he considers the two to be closely related.

timely precautions save the intended victim, while in others the results are fatal. Most of the tales exhibit very primitive, and often disgusting, ideas about sexual relations and the amazing things that can happen during such a dangerous relationship. We are, then, not surprised to find them existing only among aboriginal tribes, or in places where early beliefs still linger in local superstitions and folk-tales. For instance, examples are found in Siberia and Japan—localities once covered by the great pre-historic race of the Ainus.¹ Once across the Bering Strait we find the *motif* current among a very large number of American aboriginal tribes stretching throughout Canada and the United States. For a study of this "Folklore bridge" linking Asia to America reference should be made to Waldemar Bogoras,² "The Folklore of Northeastern Asia as compared with that of Northwestern America." He gives a curious Vagina Dentata tale as told by the Yukaghirs on the Kolyma river in N.E. Siberia, and shows in another, and most amusing, tale from Northern Russia how an unwanted husband is got rid of by the girl pretending to have the fatal attachment, which in actual fact is but a dried pike's head.

In his *Tales of the North American Indians*,³ Stith Thompson gives a long list of variants from all parts of North America. There is a good tribal map at the end of the book, which enables one to trace at once the exact locality of any particular tribe mentioned.

Until Dr Verrier Elwin published his numerous works on the tribes of the Central Provinces⁴ it was quite unknown that the Vagina Dentata dreams and legends existed in Central India at all. Whether it will be found in other parts of India remains for the patience and persuasion of the anthropologist to determine.

In an article published in the *British Journal of Medical Psychology* (vol. xix, 1943, pp. 439-453), Dr Elwin has selected twenty-four stories and five examples of dreams which cover all aspects, not only of the Vagina Dentata legend, but also of its opposite, the

¹ B. H. Chamberlain, *Aino Folk-Tales*, Folk-Lore Society, 1888, No. XXXIII—The Island of Women, pp. 37-39; B. Pilsudski, *Materials for the Study of the Ainu Language and Folklore*, Cracow, 1912, No. 6, pp. 85-90, with variants, etc., on p. 91. For a good general study see J. Batchelor "Ainus" in *Hastings' Ency. Rel. Eth.*, vol. i, pp. 239-252. Ophiolatry is discussed on p. 251.

² *American Anthropologist*, New Series, vol. iv, 1902, pp. 577-683. See pp. 667, 668 for the tales mentioned.

³ Published by Harvard University Press, Cambridge Mass, 1929. For the bibliography see p. 309.

⁴ *The Baiga*, London, 1939, pp. 424, 425 and 483; *The Agaria*, Oxford (India printed), 1942, pp. 164, 269; *The Muria and their Ghotul*, Oxford (Indian branch), 1947, pp. 423-426; and *Myths of Middle India*, Oxford (Indian branch), 1949, ch. xviii, pp. 354-409, containing forty-six tales and a full account of the *motif*, as well as a complete bibliography.

Penis Aculeatus.¹ As, without exception, all these stories are quite unsuitable for printing in a book intended for general reading, I must ask the serious student to refer to the references given. Most of the tales are a witness to that element of cruelty in sex which has so often attracted the notice of psychiatrists. Sadism, noted so repeatedly among animals during mating, has its roots in normal primitive sexuality, and in a country where clitoridectomy is not unknown and where the cutting off of the nose of the adulterous wife is universal, it is not surprising to find these tales still current among the remoter aboriginal tribes. To the primitive mind sexual intercourse is always considered dangerous for a number of reasons—blood becomes magically toxic at this period, men are especially liable to attacks by witches, and finally there is the manifest or latent fear of castration and impotence said to be subconsciously present in every human being.

References for further research on this subject are given in Elwin's article. In concluding his researches on the *motif* he writes as follows:

"In conclusion, therefore, it may be said that the discovery of the Vagina Dentata dream and legend in the remoter States and districts of Middle India is of great interest as establishing parallel psychological development among people as diverse as the Baiga of India, the Chilcotin of north-western America and the Ainu of Siberia. Stories of a poisonous snake hiding in the vagina or belly link up again with the classical Indian tradition of the Poison Maid. Tales of the Penis Aculeatus witness to the woman's view of the element of cruelty in sexual relations. All the stories testify to a very widespread belief that sexual intercourse is often defiling and often dangerous. It does not appear that here this danger is due to the infection of hymeneal blood, but is the result of a complex psychological situation, in which a recognition of the toxic character of menstrual blood, the possibility of venereal contagion, the exposure of both male and female to hostile magic and witchcraft at the moment of sexual congress, the universal latent dread of castration and the fear of impotence with all its social and domestic embarrassments are contributory factors."

It has long been realised that there has always been a curious

¹ As the author was unable to revise the proofs of this article, it has been reprinted, with additions and corrections, in his *Myths of Middle India* (as mentioned in the last note). Here there are twenty-seven tales of the Vagina Dentata, four of the Vaginal Snakes, six of the Penis Aculeatus and nine of the Umbilicus Elongatus. At the end of the volume is a most useful "Glossary of Tribes and Castes" and a *Motif-Index* based on Sirith Thompson's system and enumeration, similar to the one that he himself did for my edition of Basile's *Il Pentamerone*.

connection between snakes and intercourse. In India the snake is often represented as encircling the *linga*. In a paper read before the Asiatic Society of Bengal, J. H. Rivett-Carnac¹ refers to certain pictures sold in Nāgpūr during the Nāgpanchanmī (Snake Festival), and says that "the positions of the women with the snakes were of the most indecent description and left no doubt that, so far as the idea represented in these sketches was concerned, the cobra was regarded as the phallus."²

Venereal Disease

There remains to be discussed the possibility of the "poison" of the poison-damsel being venereal disease unrecognised as such. Here we at once open up an enormous field of research much too controversial and technical to pursue here in any detail. The literature on the subject is vast as can be appreciated by a glance at the various bibliographies already published.³ The question to which we seek an answer is whether syphilis was always endemic in Europe and chanced to burst out epidemically at the end of the fifteenth century, or whether, on the other hand, it was quite unknown in Europe until brought back by Columbus and his crews on the return from the first voyage in 1493. Both these divergent views have their strong adherents, the name of Karl Sudhoff (with Vorberg, Singer, Butler and Holcomb) being associated with the former and that of Iwan Bloch (with Barduzzi, Jeanselme and

¹ "The Snake Symbol in India, especially in connection with the worship of Siva," *Journ. As. Soc. Bengal*, vol. xlviii, Calcutta, 1829, pp. 17-30.

² See further C. F. Oldham, "The Nāgas," *Journ. Roy. As. Soc.*, July 1901, pp. 461-473; J. A. Macculloch, "Serpent Worship (Primitive and Introductory)," *Hastings' Ency. Rel. Eth.*, vol. xi, p. 409, and W. Crooke, "Serpent Worship (Indian)," *ibid.*, p. 415 et seq.; E. S. Hartland, "Phallism," *ibid.*, vol. ix, p. 815 et seq., and the references given in these articles; R. Eisler, *Weltenmantel und Himmelszelt*, p. 123, München, 1910; R. Briffault, *The Mothers*, vol. ii, pp. 664-669; and Roger Goodland, *Bib. Sex Rites and Customs*, see index under "Serpent, Connection with lingam or phallus."

³ For syphilis see H. A. Hacker, *Literatur der syphilitischen Krankheiten vom Jahre 1794 bis mit 1829* . . . , Leipzig, 1830, and his *Neueste Literatur der syph. Krank.* (vom 1830-1838) *nebst Nachträgen zu früheren Jahren*, Leipzig, 1839; *Index bibliographicus syphilidologie*, bearbeitet von Dr K. Szadek, 5 pts., Hamburg, 1886-1893. For venereal diseases, including syphilis, see C. Girtanner, *Abhandlung über die venerische Krankheit*, 3 Bde, Göttingen, 1788-1789 (bib. in vols. ii and iii); C. H. Fuchs, *Die ältesten Schriftsteller über die Lustseuche in Deutschland von 1495 bis 1510* . . . , Göttingen, 1843; and especially J. K. Proksch, *Die Litteratur über die venerischen Krankheiten*, 4 Bde, Bonn, 1889-1891, with *Supplementband 1*, Bonn, 1900, taking the entries up to 1899. For more recent literature reference should be made to the great *Index-Catalogue* of the U.S. Surgeon General's office, now in its 4th series (57 vols. in all); and to the *Quarterly cumulative index medicus*, from 1927 onwards, which covers over 1,200 periodicals. Special bibliographies or lists of sources given in works subsequently mentioned in the text or notes of the present section of this Essay will be duly noted.

Pusey) with the latter.¹ Writing to me on the subject, Dr Charles Singer, Professor Emeritus of the History of Medicine of the University of London, says that the difficulty which all historians find in the current accounts—both those which ascribe a European origin to the disease and those which ascribe an American origin to it—is that the historical facts do not fit its known epidemiology. We know it to be a disease of long incubation period and low infectivity. We know it to be an insidious disease in which the lesions, even the most serious, are singularly devoid of pain. We know that there was a severe pandemic of what was supposed to be syphilis about 1500. We know that that pandemic was associated especially with joint pains, with conspicuous lesions of the skin and with high infectivity. We know that it frequently caused death rapidly. These pieces of knowledge do not seem to be consistent with each other. Professor J. van Loghem of Amsterdam, so Dr Singer informs me, suggests that syphilis existed in Europe in the Middle Ages and that the disease imported by Columbus was not syphilis but yaws. This, he claims, has the required epidemiology. He believes that yaws gradually retreated, during the sixteenth century, to its natural tropical habitat, leaving syphilis in Europe. There are, however, many difficult questions to be answered before such a theory could be proved. In his work on yaws, H. D. Chambers² points out that it is, in the main, a children's disease, the age group specially liable to infection being from five to nine years of age. Moreover, it is non-venereal and differs very considerably from syphilis. Chambers, in comparing the two diseases (pp. 112-116), gives no less than twenty-two distinct differences. He considers that syphilis may be a biological development of yaws consequent on infection in a completely non-immune race living under different environmental conditions. This would mean that frambæsia must have existed in America prior to its discovery by Columbus. There is no evidence of this.³ On the other hand,

¹ For a complete list of Sudhoff's writing on syphilis up to 1923, see *Essays on the history of medicine presented to K. S. on . . . his seventieth birthday*, 1924, pp. 413, 414. For Iwan Bloch, see *Der Ursprung der Syphilis*, 2 pts., Jena, 1901, 1911; *idem*, *Internationaler Amerikanisten Kongress* (14th Session, Stuttgart, 1904), Stuttgart, 1906, pp. 57-79 and *Das Erste Auftreten der Syphilis in der europäischen Kulturwelt*, Jena, 1904. A full bibliography of his writings is given by Erich Ebstein in *Medical Life*, vol. xxx 1923, pp. 57-70.

² *Yaws (Frambæsia Tropica)*, London, 1938, with a most useful Bibliography on pp. 158-164.

³ See the correspondence on the two diseases between C. S. Butler, H. S. Stannus and E. T. Burke in the *Lancet* for 1931, pp. 937, 995, 1105, 1160, 1268 and 1269. Cf. also Butler's earlier paper "Primitive Syphilis," *U.S. Naval Med. Bull.*, vol. xxvi, July 1928, Washington, pp. 553-557. His theories were shattered by the other *Lancet* correspondents.

there is evidence of the existence of yaws in Africa before that time, and also of its being brought over from the West Coast of Africa to Central America by slaves. Thus the *pouba* of West Africa became the *buba* of Central America. But, as Bloch pointed out long ago, both Haiti and Central America, as well as the aborigines of South America, already had definite names for syphilis, as Spanish and French missionaries soon discovered. Thus the confusion of names for the two diseases began. In a most important paper,¹ written as early as 1881, D. B. Montejó y Robledo deals with the whole question of nomenclature and equivalent translations, apart from giving extracts from early Spanish historians and scientists, to which we shall refer later.

Now the first African slaves were not brought to the West Indian Islands until 1502. It was this same year that the Spaniards first employed negroes in the mines of Hispaniola. It was not, however, until 1517 that Charles V of Spain actually granted a patent by which four thousand negroes a year could be imported into Hispaniola, Porto Rico, Cuba and Jamaica. Thus it would seem an impossibility for Columbus to have introduced yaws into Europe. In his works on Yucatan and Guatemala² G. C. Shattuck reports that he could find nothing even suggestive of yaws. These works contain important findings on the early history of syphilis which may be summed up by the statement (No. 2 of the Summary of ch. xiii of the Yucatan volume, p. 282) that "It seems probable that syphilis was carried to the Old World from the New World after its discovery by Columbus."

Professor Arturo Castiglioni³ wisely prefers to take a middle course in the dispute, and his theory is well worth our consideration. He is of the opinion that one should accept the suggestion that syphilis was probably noted in Europe before the return of Colum-

¹ "Cuáles son las principales enfermedades contagiosas que recíprocamente han cambiado entre sí los pueblos del Antiguo y del Nuevo Mundo?" Congreso Internacional de Americanistas. *Actas de la Cuarta Reunión* (4th Session), Madrid, 1881, Tomo Primo, Madrid, 1882, pp. 334-416. For selected translations see H. V. Williams, J. P. Price and J. R. Lacayo "The American origin of Syphilis," *Archives of Dermatology and Syphilology*, vol. xvi, 1927, pp. 683-696; and Victor Robinson, "Did Columbus discover Syphilis?" *Brit. Journ. Derm. and Syph.*, vol. i, November 1938, pp. 593-605. Cf. also H. M. Brown, "Must the history of Syphilis be rewritten?" *Bull. Soc. Med. Hist.*, Chicago, vol. ii, No. 1, January 1917 pp. 1-14.

² *The Peninsula of Yucatan. Medical, Biological, Meteorological and Sociological*, by G. C. S. and collaborators. Carnegie Institution of Washington, Pub. No. 431, Washington, 1933. See ch. xiii, pp. 249-288, with list of references on p. 289; *A Medical Survey of the Republic of Guatemala*, as above, Pub. No. 499, Washington, 1938. See ch. x, pp. 141-172, with references on pp. 172, 173.

³ *A History of Medicine*, 2nd edition, New York, 1947, pp. 453, 454, and see the whole section extending to p. 470, together with the corresponding bibliography on p. 1162.

bus and that the doubtful allusions of early writers really apply to syphilis; but that it was only after 1493, because of the great movements of troops throughout Europe, and especially the invasion of Italy by the French army, that the disease was so widely distributed. Castiglioni continues: "Perhaps also it was brought back from the New World in more virulent form. If there is little doubt that syphilis or something very close to it existed in the New World before the arrival of Columbus, it seems best to assume, for the moment at least, that syphilis had existed in both continents for undetermined periods, even though the reason for its sudden increase in Europe has not been satisfactorily explained."

I may say at once that the question remains quite unsettled, and owing to the difficulty of obtaining definite results as to the date and pathology of bones of undoubted pre-Columbian age—quite apart from other considerations—it looks as if we are dealing with one of those questions on which the learned will continue to agree to differ.

In spite, however, of assertions to the contrary, it would appear to be a generally accepted fact that a strange and quite unknown disease was brought back from Central America by Columbus in 1493, that in the following autumn Charles VIII of France invaded Italy with infected Spaniards in his army, that in February 1495 on his unopposed entry into Naples the disease spread rapidly, and that with the disbandment of the army the troops disseminated it all over Europe. From 1495 it has been traced¹ step by step—first in France, Germany and Switzerland (1495), then in Holland and Greece (1496), in England and Scotland (1497), and in Hungary and Russia (1499). According to Grunpeck, one of the earliest writers on the subject,² English soldiers had acquired the disease in Italy. With the Portuguese under Vasco da Gama it reached India in 1498, China in 1505 and finally Japan in 1569.

If syphilis was unknown in India until 1498 it could hardly have figured—under whatever name or disguise—in tales told in Kashmir in the twelfth century! But we shall return to this point later.

In considering the subject as a whole it would seem that there are three main lines of inquiry:

- (1) Contemporary and sixteenth-century literary evidence.
- (2) The purely medical approach, especially with regard to osseous remains.

¹ W. A. Pusey *History and Epidemiology of Syphilis*, Springfield, Illinois and Baltimore, Md., 1933, pp. 5-9.

² Josephus Grunpeck or Gruenpeck, *Tractatus de pestilentiali scorra siue mala de Francos* . . . [Augsburg 1497]—with several reprints including one "Ienæ, 1787."

- (3) A study of the early inhabitants of Central America, particularly the Aztec and Maya.

(1) In dealing with contemporary accounts of an unknown and little-understood disease it seems obvious that the utmost care should be taken in quotations, and still more in translations. The rarity of many of these fifteenth- and sixteenth-century books or tracts often makes it impossible to check such translations, except in cases where reprints have appeared. Karl Sudhoff¹ has dealt with manuscripts and incunabula, but scholars are not agreed as to the correct interpretation of many of the medical words employed. In some cases, however, certain statements appear clear enough to quote. We may commence our inquiry with the important evidence of Peter Martyr.² Born, probably in 1457, in Arona on the South-Western shores of Lago Maggoire, he was baptised Pietro Martire in honour of the Dominican Inquisitor, Fra Pietro of Verona, murdered near Milan in 1252 and canonised in 1253. His parents came from the little town of Angera or Anghiera, a mile from Arona on the opposite side of the lake. They had adopted the name of the town for their surname as they proudly traced their family back to the Counts of Anghiera. Thus the works of Peter Martyr are often catalogued under "Anghiera" or else under the Latinised form "Anglerius," as in the British Museum. Although Peter Martyr is chiefly famous as the first historian of America, the friend of Columbus, and author of the *Decades*, it is rather as a prolific letter-writer that we have to consider him in the present inquiry. He had left Milan for Rome in 1477 where he met Íñigo López de Mendoza, the Conde de Tendilla, Spanish Ambassador to the Pope from Ferdinand and Isabella. At his suggestion Peter Martyr accompanied him to their court in 1487, where he became tutor to the Queen's children, and

¹ *Aus der Frühgeschichte der Syphilis Handschriften- und Inkunabelstudien...* (Studien zur Geschichte der Medizin, Heft. 9), Leipzig, 1912. See also, by the same author, *The Earliest Printed Literature on Syphilis, being 10 tractates, 1495-98*, Monumenta Medica, vol. iii, Florence, 1925. The authors concerned are Schellig, Grunpeck, Leonicensi, Torrella, Widmann, Gilino, Steber, Montesauero and Scanaroli. Most of them will be found in Brunet. See also E. C. Streeter, "The date of Lacurnarcino's *De Morbo Gallico*," *XVIIth International Congress of Medicine*, 1913, Sect. XXIII, 1914, pp. 373-376.

² A full life yet remains to be written, as does also an English translation of his letters. No complete modern English edition of the *Decades* exists, and, *mirabile dictu*, even the *Ency. Brit.* ignores him! The nineteenth century "Lives" (French and Italian) are made full use of by Francis A. MacNutt, *De Orbe Novo. The Eight Decades of Peter Martyr D'Anghiera*, 2 vols, New York, 1912 (Intro. vol. i, pp. 1-48). See also John Boyd Thacher, *Christopher Columbus*, New York, vol. i, 1903, pp. 1-110; and, especially, Henry R. Wagner, "Peter Martyr and his works," *Proc. Amer. Antiq. Soc.* vol. lvi, pt. ii, Worcester, Mass., 1947, pp. 239-288.

head of the Palace school. Diplomatic missions followed—first to Bohemia in 1497, and later to Egypt in 1501, 1502. The letters had commenced on 1st January, 1488 (at least this is the date of the first of the 813 which have been published¹) and contain information and news from Spain, the Indies and the Near East, usually communicated to friends in Italy. Soon after his arrival in Spain, Martyr had been offered, and refused, a chair in the University of Salamanca. But he went there from time to time to lecture to the students. It was during these visits that he met the Portuguese humanist, Arias Barbosa, the first professor of Greek in the peninsula.² Correspondence followed between the two, and in one of his letters to Martyr, Barbosa gave a detailed account of a strange disease he appears to have contracted. At least we have every reason to conclude that this was the case on reading Peter Martyr's reply dated "Giennio in nonis Aprilis 1488," i.e. Jaén, 5th April, 1488 (probably 1489).

According to the 1530 edition it forms Letter LXVII³ and starts as follows (Fo.XV.r.):

"In peculiarem te nostre tempestatis morbum qui appellatione Hispana Bubarus dicitur ab Italis, morbus Gallicus, medicorum Elephantium alii, alii aliter appellant, incidisse precipitem, libero ad me scribis pede."

We may translate this as:

"You have written me in detail about the strange disease of our times which the Spaniards call Bubarus, the Italians morbus Gallicus, some doctors call it leprosy, while others give it other names."

It is clear from this passage that neither Arias Barbosa nor Peter Martyr knew what this "strange disease" was. The Spanish *buba* simply means a pimple, pustule or tumour and would be used to describe any scrofulous swelling or form of dermatitis. The fact that the Italians are said to have used the adjective *Gallicus* in relation to a new and unwelcome disease, whatever that disease might

¹ *Opus Epistolarum . . . nunc primum et natum et mediocri cura excusum . . . in Aedibus Michaelis de Eguia: Cöpluti [Alcala], 1530.* See also Paul Gaffarel and Abbé Louve, "Lettres de Pierre Anghiera," (43 letters only), *Revue de Géographie*, Paris 1884-1885. The 1530 edition was reprinted, together with some letters of F. de Pulgar, by the Elzevir in Amsterdam, 1670. In order to obtain a picture of the Spanish court life of the time and the friends and correspondents of Peter Martyr, see the excellent work by Caro Lynn, *A College Professor of the Renaissance: Lucio Marineo Siculo among the Spanish Humanists*, Chicago, 1937.

² See W. H. Prescott *Ferdinand and Isabella*, George Bell's edit. London, 1902, vol. ii, pp. 197, 198 with note 26 on p. 198; and *Grande Enciclopédia Portuguesa e Brasileira* "Barbosa (Aires)," vol. iv, p. 188.

³ In the 1670 reprint it is Epist. LXVIII.

be, need not surprise us for it was customary in such cases for each European country to shift the blame on to their neighbours. But in the present case we must look to Africa rather than America for a possible explanation.

Prince Henry of Portugal, the Navigator, had started his activities in the exploration of the coast of West Africa in 1415, and in 1441 Antam Gonçalves had brought back to Portugal the first slaves and gold-dust from the Guinea coast. In 1448 a fort was erected in the Bay of Arguim and slave-raids began in real earnest.

By this time nearly 1,000 captives, of both sexes and of all ages, had been carried back to Portugal. In the pages of Gomes Eannes de Azurara, the Chronicler,¹ we can read the whole story—and a pathetic story it is. The influx of natives continued and with them they must have brought skin and other diseases endemic to West Africa—especially yaws.

It would be rash, therefore, to assume that the disease mentioned in Martyr's letter was syphilis. It might quite possibly have been yaws, a disease that we know was common among West African natives. Little enough is known about yaws to-day, and when Prescott published his *Ferdinand and Isabella* in 1838 nothing definite whatever was known on the subject. We naturally, therefore, find no mention of it in his long and interesting note on the theory of the American origin of syphilis given in the chapter on Spanish Colonial Policy.²

The great events of the next few years—the expulsion of the Moors from Spain, the discovery of the New World, the European wars and subsequent pandemic of a strange and new disease, the rounding of the Cape and discovery of a passage to India—were more than sufficient to occupy both the mind and the pen of Peter Martyr who was in the very centre of all this activity. The letters were now supplemented by the *Decades* on which the author was busy for many years. The unknown disease called for drastic treatment and when the use of mercury in ignorant or unqualified hands proved to be of no avail the news of a wonderful cure from the newly discovered Hispaniola was welcomed with open arms. This was the guaiacum or *Lignum vitæ*, of which we shall have more to say later. Remembering the letter of Arias Barbosa, we can well

¹ *The Chronicle of the Discovery and Conquest of Guinea written by Gomes Eannes de Azurara*. Trans. C. R. Beazley and Edgar Prestage, Hakluyt Soc. 2 Vols, 1896, 1899. See especially chs. xxv and xxvi, and the Introduction to vol. ii. Beazley also includes Gonçalves's account in ch. xii of his *Prince Henry the Navigator*, 1895.

² See the edit. by J. F. Kirk, Geo. Bell & Sons. Vol. ii, 1902, pp. 501-504; and Heinrich Heidenheimer, *Petrus Martyr Anglerius und sein Opus Epistolarum*, Berlin 1881, pp. 140, 141 and notes.

imagine Peter Martyr's interest in the "cure" while Ulrich von Huttens work on the subject published in 1519 (see later p. 52 n²) would not have escaped his active and enquiring mind. Thus we are not surprised to find it mentioned in his *Decades* (Dec. 7. Cap. 8) where we read:

"De arbore, ab cuius truncis sectis & in puluerem redactis, decocta conficitur ad puparum infelicē morbum ex ossibus & medullis eruendum, aqua potabilis, & satis ego, & iam per vniuersam Europam vagantia eius ligni frustra iudicium faciunt."

which we can translate literally as:

"Concerning the tree from whose cut up body, reduced to powder, a water potion is made to draw out the unhappy disease of the bubas from the bones and marrow, I have already sufficiently spoken. And now pieces of that wood wandering throughout all Europe are standing their trial."

Martyr shows himself uncommittal on the subject, but, as a further extract from the *Decades* (to be quoted later) proves, was sufficiently shrewd to differentiate between the effects of the treatment and the cure.

We can now consider Gonzalo Fernández Oviedo y Valdés (1478-1557) who in his *Historia general y natural de las Indias*, 1535, Book ii, ch. iii, p. 50, tells us that the disease was contracted from Indian women by the Spaniards who were with Columbus. "Great was the wonder," he adds, "produced in all that saw it, not only because the disease was contagious and horrible, but because many died of this disease. And as the disease was something new the physicians did not understand it and did not know how to cure it, nor were there others with experience to advise about such a disease." He then tells how the disease travelled to Naples and with what dire results, and continues: "But the truth is that this disease was transmitted from this island of Haiti or Española to Europe as stated; and it is very common among the Indians here and they know how to cure themselves and they have very excellent herbs and trees and plants appropriate to this and other diseases. . . ."

The evidence of Oviedo is important for several reasons. In the first place it is obvious that we are dealing with a man who was not content with second-hand information, but was determined to find out the truth for himself. This is clear when we remember that he himself had contracted syphilis, probably during the years he was in Italy. Being unable to effect a cure in Europe, he decided to go to the Indies to see how the natives treated themselves and to discover all he could about the disease in general. Accordingly, he set sail in April 1514 and returned in December 1515, bringing back

with him the "cure"—the wood known as "huaiacum" or "guaia-cum". Oviedo appears, then, to have been the first man to bring to Europe the wood which was destined to have such a strange and disastrous history in the "cure" of syphilis. We shall return to the subject later.

In the second place we must note that Oviedo was also the first man to proclaim the American origin of syphilis. It has been often pointed out that this claim was not made until 1526, *i.e.* eleven years after his return from the Indies, but we must remember that the incentive that prompted him to go on a none too easy journey in 1514 must have originated in strong rumours that the disease had come from the Indies. Little did he imagine that he was to return with a piece of wood as a cure! Oviedo was convinced that he had found the disease and the remedy side by side, and in his works of 1526 and 1535 proclaims his faith aloud. "Such is the divine mercy," he writes, "that wherever it permits us to be afflicted for our sins, it places a remedy equal to our afflictions."¹

But the fame of his "cure" had long preceded his published works and soon after his return from the Indies the demand for this new "Lignum vitæ" began. The great German House of Fugger—the most famous merchants and bankers of the time—soon saw its commercial possibilities, and Augsburg became a "cure" centre. The "Wood-houses" or "Pox-houses" of the Fuggers were filled with eager and hopeful patients. Among them was one Ulrich von Hutten who had taken the treatment in 1518. He considered himself cured (thought the unfortunate man died of the disease at the age of thirty-five) and in 1519 published a tract² on the virtues of guaiacum which had enormous popularity and influence. Other tracts and pamphlets also appeared.³ With all this excitement going on we can well imagine that Oviedo as the first claimant of the "American origin" as well as the first importer of the cure of the disease was justified in propounding his axiom of *unde morbus inde remedium*.⁴

¹ *Relacion sumaria de la natural hystoria de las Indias . . . la ciudad de Toledo, 1526*, ch. lxxv; *Historia general y natural de las Indias*, Pt. i, Sevilla, 1535, Book x, ch. ii.

² *De guaiaci medicina et morbo gallico*, Mainz, 1519. For a translation see W. Mendell, "The Remarkable Medicine Guaiacum and the cure of the Gallic Disease," *Archives of Dermatology and Syphilology*, vol. xxiii, 1931, pp. 409-428, 681-704 and 1045-1063.

³ For these see Max H. Fisch, *Nicolaus Pol Doctor 1494* (with a critical text of his Guaiac Tract . . . by D. M. Schullian) Cleveland Medical Library Ass. New York, 1947, pp. 37-44.

⁴ For the history of the whole subject see Robert S. Munger "Guaiacum, the Holy Wood from the New World," *Journ. Hist. Med.* vol. iv, No. 2, New York, 1949, pp. 196-229.

Bartolomé de Las Casas (1474-1566) censured Oviedo's work strongly, but they both agree that the natives of Haiti gave syphilis to the white race. After referring to the spread of the disease to Naples, Las Casas speaks of his life in Haiti and writes¹ (*Historia de las Indias*, vol. v, 1875-1876, p. 233) "I myself sometimes endeavoured to inquire of the Indians of this island if this malady was very ancient on it, and they answered yes, before the Christians came to it, without having memory of its origin. . . . The Indians, men and women, that had it were little affected by it, almost as little as if they only had smallpox; but for the Spaniard the pains from it were intense and continuous torment, particularly up to the time that the bubas appeared."

We now pass on to a consideration of the very rare work of Ruiz Diaz de Isla,² *Tractado el mal serpentino que vulgarmente en España es llamado bubas* . . . , Seville, 1539. Several writers³ have pointed out that the printed volume omitted an important passage found in the original MS. at the Bib. Nac. of Madrid in which the author states that he treated one of the Pinzón brothers for syphilis at Barcelona in 1493 immediately after his return from America. The whole question, however, has been studied in detail by R. C. Holcomb,⁴ who seeks to prove that the entire thing is a pure interpolation. However this may be, the following extract (according to the translation of Williams, Rice and Lacayo) is of considerable interest:

¹ As translated by Williams, Rice and Lacayo, *Arch. Derm. Syph.*, vol. xvi, December 1927, pp. 687-696. For Las Casas see Arthur Helps, *The Life of Las Casas*, 1868; J. B. Thacher, *Christopher Columbus*, vol. i, 1903, pp. 111-156; and F. A. MacNutt, *Bartholomeo De las Casas, his life, his apostolate, and his writings*, New York, 1909. Another Spanish author who wrote on the subject in 1526 was the priest Francisco Delicado. His work, *Il modo de adoperar el legno de India occidentale* . . . was published at Venice in 1529 on his final recovery at Rome from the disease which he had contracted many years before. The chief interest lies in the fact that he speaks of a disease present in Europe in 1488 which he regarded as syphilis.

² Only two copies are known to exist, one in Madrid and another in the Huntington Library. See A. Palau y Dulcet, *Manual del Librero Hispano-Americano*, Tomo III, Barcelona, 1925, p. 50. J. T. Medina catalogues an edition of 1542 in his *Biblioteca Hispano-Americana*, Santiago de Chile, vol. i, 1898, pp. 174-176, No. 115.

³ Apart from Williams, Robinson, etc., we may quote J. J. Abraham in his Introduction to H. Wynne-Finch's *Fracastor. Syphilis or the French Disease*, 1935, pp. 6, 7; and also in his "Early History of Syphilis," *Brit. Journ. Surgery*, vol. xxxii, October 1944, p. 228—see the useful bibliography on pp. 236, 237.

⁴ Ruiz Diaz de Isla and the Haitian Myth of European Syphilis, *Medical Life*, vol. xlii, 1936, pp. 271-316, 319-364, 414-470 and 487-514. See also C. S. Butler and J. A. Biello, "The Influence of Ruiz Diaz de Isla upon the question of the American origin of syphilis," *Southern Medical Journal*, Manchester, Alabama, vol. xxx, May 1933, pp. 438-443, and Holcomb's earlier article: "Christopher Columbus, and the American Origin of Syphilis," *U.S. Naval Medical Bulletin*, vol. xxxii, October 1934, Washington, pp. 401-430.

"It has pleased divine justice to give and send down upon us unknown afflictions, never seen nor recognised nor found in medical books, such as this serpentine disease. And this appeared and was seen in Spain in the year of our Lord one thousand four hundred and ninety three in the city of Barcelona: which city was infected and consequently all Europe and the universe in all known and communicable parts: which disease had its origin and birth once and for all on the island that to-day is named Española: as has been found by very long and well proved experience. And this island was discovered and found by the admiral don Xrisptoual Colon, at present holding intercourse and communication with its people." It is at this point that the omission in the printed text occurs. According to the translation of Williams, Rice and Lacayo it reads:

"As it is of its very nature contagious, they got it easily: and presently it was seen in the armada itself in a pilot of Palos who was called Pinçon, and others whom the aforesaid malady kept attacking."

He proceeds to explain how the disease reached Barcelona, how it spread with Charles's army to Naples, and what a large number of different names were given to it.¹ A further passage, occurring in ch. xiii, fol. 63, recto, is as follows:

"In the first chapter it is told how this malady came from the island of Española, and many doubt it and hold that it appeared for the first time in the army of King Charles of France in the year 1494 and on this I have said enough in the same chapter, but I wish to give a reason so that among the discerning it may be seen clearly, and so I say that in the year 1504 there were given me in writing all the remedies that the Indians used for this disease as I have them written, as well with the guaiac as with the mapuan and with the tuna: now if that rude people was right about the treatment by which the disease is properly remedied and healed it follows that the disease was prevalent among them for a long time so that they had regulated both the drinking of water and the diet and the time when they should keep from women, as well as protection from dampness and the air, while in truth since this sickness has prevailed among ourselves no one of these things have I seen controlled down to to-day, neither mercury nor wine nor our habits; never to date have I seen any authoritative writing wherein may clearly be found the cure for this disease whether among Christians or among Moors and Gentiles of all the communicable parts: and as these

¹ Apart from the article by Montejó y Robledo already quoted, see J. R. Whitwell, *Syphilis in Earlier Days*, 1940, pp. 8-12; and J. D. Rolleston, "The Folk-lore of Venereal Disease," *Brit. Journ. Ven. Dis.*, vol. xviii, 1942, pp. 3, 4.

people although they were the most stupid ever seen, were completely familiar with its cure and regulation, it is evident that because the disease always prevailed among them, for that reason, they knew the cure, being persons who had minute knowledge of the disease. For if this were not so, many other peoples much wiser than they would have found the cure for this disease for which reason all erroneous argument that may be made concerning the aforesaid may be given up. For I have had long experience and have cured persons who had it in the aforesaid armada and cured persons that were afflicted in Barcelona and I could quote many testimonials that are omitted: because the above seems to me to suffice abundantly for the case and those who wish may read more in the chapter on the cure by the *palo* and there may find more particulars."

The *palo* was, of course, the "wood," the *guaiacum officinale*¹ which we have already briefly considered in quoting from Oviedo, who is said to have been the first man to import it from Hispaniola. Diaz de Isla, however, claims (*Tractado*, 1539, Fol. liii) to have received a written account of it as early as 1504, and Delicado (*op. cit.*) asserts that the guaiac treatment was brought from the West Indies to Spain in 1508 and to Italy in 1517, but as Max Fisch (*op. cit.*, p. 43) rightly comments, until we have actual documents of 1504 or 1508 to confirm these statements they will carry little weight.²

The important fact remains that it was only after Oviedo's return that the craze for the *Lignum vitæ* cure started. As we have already seen, the Fuggers had established a Wood-house (*Holzhaus*) at Augsburg. It consisted of part of the so-called *Fuggerei*, or model housing centre for the labouring classes.³ It would appear that Cardinal Matthew Lang, bishop coadjutor of Salzburg, who had sent a mission to Spain to enquire into the subject, was closely connected with the activities of the Fuggers.⁴ It is clear that the sale of this precious wood became a highly profitable undertaking—in the hands of financiers, churchmen, merchants, physicians, barber-surgeons and charlatans alike. The stir which had been

¹ For the different species (with bib. refs.) see O. Stapf, *Index Londinensis to illustrations of flowering plants* . . . vol. iii, Oxford 1930, p. 324; and S. J. Record *Lignum-Vitæ. A study of the Woods of the Zygophyllaceæ* . . . Yale Univ. School of Forestry, Bull. No. 6, New Haven 1921.

² The earliest recipe known for the guaiac cure came from Spain on 22nd June, 1516 and is given, with an English translation, by Max H. Fisch, *Nicolaus Pol Doctor 1494*, New York 1947, pp. 84-87. The first published recipe was one issued anonymously on 1st December, 1518. See Fisch *op. cit.* p. 43.

³ See Josef Weidenbacher, *Die Fuggerei in Augsburg* . . . [Augsburg] 1926, pp. 60-67.

⁴ Max H. Fisch, *op. cit.* pp. 46, 47.

created by the publication of Hutten's tract in 1518 was maintained by others singing the praises of the new cure, to the detriment of mercury. This is clearly demonstrated by the history of the publication of Girolamo Fracastoro's famous poem *Syphilis sive morbus gallicus*, Verona, 1530. He had finished the work in 1525. It consisted of two Books. These he sent, through Francesco della Torre, to Cardinal Bembo¹ for his criticism. The result of this was that the Cardinal suggested to Fracastoro that he should delete the entire story of Ilceus and his visit to the underworld in search of a cure for his disease, because it was affected by bathing three times in the healing spring of mercury. In its place, added Bembo, Fracastoro could pen the sovran merits of the now popular "Sacred Wood." But as the Ilceus episode occupied nearly one-third of Book II (lines 283-423) Fracastoro was loath to sacrifice it. However, he compromised by spending the next five years in adding another Book in which he extolled the virtues of guaiacum, "which alone has set bounds to our pain and brought our distresses to an end" (Book iii, lines 6, 7), and introduced the shepherd Syphilus² as the first man to be cured. He then tells us that some of the Spaniards who first discovered this blessed land of the sacred wood returned to Europe and there to their amazement found that "the same pestilence waxed beneath the skies of the Old World, attacking terrified cities that lacked all means of healing" (Book iii, lines 385, 6). On their way back to Hispaniola the disease broke out in their own ships, but on their arrival they were cured by the guaiacum and were able to take the wood back to disease-stricken Europe.

Such, then, is the muddled account presented in Book iii, in marked variance with that already given in the preceding Books. In his *De Contagione*,³ published in 1546, Fracastoro develops his views on the origin of the disease, and strongly opposes the suggestion that the contagion was conveyed from America. His chief reasons for the statement are that contagion was slow and Europe too large to be infected with such speed as was asserted, and, moreover, astronomers had predicted a great malady about this time! The outbreak in Europe was regarded as a mere coincidence. Why he should make the returned sailors take the disease back to Hispaniola

¹ See H. Wynne-Finch, *Fracastor*, pp. 179, 180.

² According to G. L. Hendrickson, "The Syphilis of Girolamo Fracastoro" (*Bull. Inst. Hist. Med.* Baltimore, 1934, vol. ii, pp. 515-546) the name syphilis was not an invention of Fracastoro, but was already current at the time. Cf. H. Wynne-Finch, *op. cit.*, p. 211.

³ See . . . Hieronymi Fracastorii *De contagione et contagiosis morbis et eorum curatione*, libri III, translation and notes by Wilmer Cave Wright, New York 1930, with a useful bib. on pp. 345-351.

when it was already there is not clear. The only point he wants to stress is that the New World sent the wood to save the Old World. And so his patron, Bembo, was satisfied and the work was an enormous success. It was translated into many languages and edition followed edition.¹

We now pass on to a brief consideration of the evidence of Francisco López de Gómara, whose work² became the first real history of the conquest of the Indies down to about 1550. He tells us that the natives of Española were all pocked (*todos bubosos*), and that the Spaniards caught the disease and took it back to Europe. He then repeats the account of its spread in Europe, and goes on to say that the Indians were paid back by the introduction of smallpox. Following Oviedo, he says that just as the evil had come from the Indies, so had the remedy, which was the wood and tree called guaiacum. He then continues: "Tambien curan la mesma dolencia con palo de la china, que deueser el mesmo guaican, o palo santo que todo es uno." But here Gómara has wrongly identified China root, *smilax china*, Linn. with guaiacum. It is interesting, however, to note that China root has been used in the East as a cure for syphilis since the sixteenth century, *i.e.* as soon as it had reached China, and Garcia da Orta states that he knew of a cure made by its use in 1535. In Europe it superseded guaiacum for a time, and is still used for venereal diseases by the Malays.³

Few were the voices raised against the precious wood, yet there was one which from the very first boomed out the uselessness of the "cure." But it had often boomed before and little attention was paid to it. I refer to the great Paracelsus (Theophrastus Bombast von Hohenheim, *c.* 1490-1541) who boldly declared that "neither surgical procedures and expulsive methods, nor the guaiac wood about which so much noise is made, is of any use." Referring to Cardinal Lang he wrote: "The red hat and the Fuggers' wagons have brought the wood but not its virtue."⁴

¹ In their *Bibliography of the Poem Syphilis sive Morbus Gallicus*, . . . L. Baumgartner and J. F. Fulton (New Haven, 1935) record no less than 100 editions, including translations into six languages, fifteen independent versions in Italian and seven in English.

² *La Historia general de las Indias, y todo lo acaescido en ellas desde que se ganaron hasta agora* . . . En Anvers (Martin Nucio) 1554, vol. i, f. 43 recto. For a reprint see *Bib. de Autores Españoles*, vol. xxii, Madrid, 1852, p. 174 "Que las bubas vinieron de las Indias." For further bibliographical details see J. T. Medina, *Bib. Hispano-Americana (1493-1810)* vol. i, Santiago de Chile 1898, Sect. 159. See also Henry R. Wagner "Francisco López de Gómara and his Works," *Proc. Amer. Antiq. Soc.* vol. lviii, Pt. ii, Worcester, Mass. 1940, pp. 263-282.

³ See I. H. Burkill, *Dict. Econ. Prod. Malay Peninsula*, vol. ii, 1935, pp. 2037-2038. For quotations from authors (1563-1690) see Yule, *Hobson-Jobson*, i.v.

⁴ *Sämtliche Werke*, Edit. Sudhoff, München and Berlin, 14 vols. 1922-1933. See

Peter Martyr was equally sceptical and in ch. vii of his seventh *Decade*,¹ rightly guesses that it was the rest and starving in the cure that really caused the disease to abate—"the *Phisitions* bringe them to such a dulness through that fastinge that I should thinke a thousand kindes of diseases might bee removed without drinkinge the decoction of *guacum* which for the whole space of that time [thirty days] they only vse."

A few years later (1533 and 1536) Pietro Andrea Mattioli (Matthiolus)² suggested that the wood was not of as much use as formerly and that other drugs such as China root, sarsaparilla and sassafras were just as good.

Michael Blondus (Biondo)³ unreservedly condemned its use and declared that it provoked relapses into a worse condition than before it was used. He considered that its very failure was a proof that the disease itself never came from the New World. What it really did show was that the cure and the disease did not come from the same place, as Oviedo had first propounded. During the period of the wood's decline in favour there were still stout defenders who continued to sing its praises, and at Venice in 1566 Aloysius Lusinus published his *De Morbo Gallico* which contained the "pro-guaiacum" views of several authors from 1497 to 1566. Nicolo Monardes declared⁴ in 1545 (reprints in 1565 and 1569) that the wood was the "best remedy that is in the worlde, for to heal the disease of the Poxe. . . ." and that any relapse was most improbable "except the sicke man doe return to tumble in the same bosome, where he tooke the first." In his autobiography (1558-1562) Benvenuto Cellini wrote (Book i. lix) "I resolved on taking the

vol. vi, pp. 312, 327 *et seq.*, 420 and vol. vii, p. 418. Cf. also the new edition edit., J. Ströbel, St. Gallen 1944 onwards. Several of the works of Paracelsus, including *An excellent treatise teaching howe to cure the French Poxes*, 1590 were translated by John Hester, but they are of great rarity. See Robert Watt *Bib. Britannica*, vol. i, Edinburgh 1842 (Authors *q.v.*), and P. H. Kocher "Paracelsian Medicine in England" *Journ. Hist. Med.*, vol. ii, No. 4, New York 1947, pp. 450-480, see p. 467.

¹ Although the *Decades* had been partially published at various dates from 1504 onwards, it was not until 1530, four years after the author's death, that the complete eight *Decades* appeared: *De Orbe Novo decades* . . . Apud Michaelē d'Eguia: Compluti [Alcala], 1530. See fol. xcvi recto, and fol. xcvi verso *et seq.* The second complete edition was that published by Hakluyt in Paris, 1587 (pp. 502, 503). An English trans. by R. Eden and M. Lok came out in 1612 (see p. 266 verso). It was reprinted in vol. v of Hakluyt's *Principal Navigations* of 1809-1812, and again by F. A. MacNutt, 2 vols. New York, 1912, but the passage is omitted (vol. i, p. 295). See further vol. i, p. 299.

² *Morbi Gallici curandi ratio exquisitissima*, . . . Basileæ, 1536, pp. 62-69.

³ *De origine morbi gallici de que ligni indicii ancipiti proprietate*, Venice, 1542.

⁴ His two works of 1569 and 1571 were published together at Seville in 1574, and this was translated into English by John Frampton in 1577 as *Joyfull Newes out of the Newe Founde Worlde* . . ., see folios CII verso-III verso, or pp. 28-33 of the 1925 Tudor Translations reprint.

wood, against the advice of the first physicians in Rome," and after a temporary set-back he found himself "wholly free from those infirmities as though I had been born again."¹ Mention might also be made of a rare work by Sir William Cornwallis, *Essayes of Certaine Paradoxes*, 1616. In the section "The Prayse of the French Pockes" Columbus' "Treasure" (the pox) is discussed, and its "Holy" cure, the *Lignum Sanctum*.

It is unnecessary to quote further. Robert S. Munger, in his excellent article in the *Journ. Hist. Med.* mentioned above (p. 52 n⁴), has dealt with the subject fully. Gradually the superiority of mercury over the wood was realised. Yet even so this was not the last we were to hear of guaiacum, for in the first half of the eighteenth century such highly respected physicians as Boerhaave,² Turner³ and Astruc⁴ still advocated its use. Luckily, however, the revival was only temporary. From all this strange history the question that remains unanswered is whether or not the aborigines of pre-Columbian America really did use guaiacum as a remedy for venereal disease. After very considerable research on the subject Munger tells us that not a single indisputable genuine reference to guaiacum as a remedy has come down to use from either professional or lay sources. He points out that America's earliest known medical book, *Libellus de medicinalibus Indorum herbis*,⁵ makes no mention of it whatever.

The importance of this lies in the fact that the work goes back to pre-Conquest times and is without contamination of European medical practices such as are found in the later Mayan medical texts.⁶ Francisco Hernández, court physician of Philip II, who spent seven years in Mexico as "Protomedico of the Indies," devotes a chapter, "Del Arbol Gvayacan, que es el palo santo q̄ llaman en España," to the wood in his work on medicinal plants of New Spain published in 1615.⁷ In the illustrated Latin edition of

¹ From the translations of John Addington Symonds. For a handy and excellently illustrated edition see that issued in 1949 by the Phaidon Press Ltd.

² *A Treatise on the Venereal Disease and its Cure in all its Stages and Circumstances*, Englished by J.B., London 1729, p. 76.

³ *A Practical Dissertation on the Venereal Disease*, 2nd edition, 1724, p. 140.

⁴ *De Morbis Venereis libri sex*, Paris, 1736, pp. 108-115 (2nd edition, 1740, 2 vols.). See the English trans. by W. Barrowby, *A Treatise of the Venereal Disease*, in *Six Books*, vol. i, pp. 176-183, London 1737, Robert Watt, *Bib. Brit.* gives several other English trans. in his long list of works by "Astruc, John."

⁵ *The Badianus Manuscript (Codex Barberini, Latin 241) Vatican Library. An Aztec Herbal of 1552*. Introduction, Trans. and Annot. by E. W. Emhart, with a Foreword by H. E. Sigerist. Baltimore, The Johns Hopkins Press, 1940. There is a useful bibliography on pp. 339-341.

⁶ For these see Munger, *op. cit.*, p. 223.

⁷ *Quatro Libros. De La Naturaleza, y virtudes de las plantas . . . en el uso de*

1651¹ it appears as "De Hoaxcan, seu Ligno Sancto," and is given the alternative name of Matlalquauhilt. But we have now reached dates when European medical knowledge is very evident so that further quotations are unnecessary.

To-day the medicinal uses of the wood are chiefly confined to the *mistura guaiaci*, a lozenge for sore throats, and is considered by some to be beneficial in the treatment of chronic gout. Its real value, however, lies in its hardness and density, due to the crossing structure of its fibres. Thus it is used for pulleys, rulers, mallets and for the gentle pastime of a game of bowls! What other wood can boast of such a strange and chequered history?

In concluding this section I would draw attention to a recent notice in the *British Medical Journal* (16th September, 1950, p. 668), which discusses an ambitious scheme sponsored by the World Health Organisation and the United Nations International Children's Emergency Fund to eradicate both yaws and venereal diseases from Haiti, or Hispaniola. It is estimated that yaws has an incidence of eighty-five to seventy-five per cent among children under fifteen years of age—while venereal diseases affect perhaps twenty-five per cent, of the population of 3½ millions. The undertaking is an immense one and the difficulties enormous, but it is hoped that, with the use of penicillin, all the diseases will be eliminated within the two years allotted to the scheme. It is probably the largest anti-venereal-disease campaign ever launched, and not the least of its results may be that at last the true relationship of *Treponema pertenue* and *Treponema pallidum*—the causative organisms of yaws and syphilis respectively—will be examined, and understood.

(2) Although hundreds of claims of the existence of pre-Columbian syphilitic bones have been made, in nearly every case either the date or the pathology, or both, has proved in doubt. The fact that yaws itself produces bony lesions has only added to the confusion.

In 1924 I wrote to Professor G. Elliot Smith who had examined over 25,000 Ancient Egyptian skulls. He referred me to his article in the *Lancet*,² and said that he had discovered no trace of the disease whatsoever even to suggest that it had ever existed in Egypt before mediæval times.

Medicina en la Nueva España . . . En Mexico, 1615. See folio 22 verso—23 recto, i.e. Lib. prim. Cap. xxix.

¹ *Rerum Medicarum Novæ Hispaniæ Thesaurus . . .* Romæ, 1651, pp. 62-65. For further details of Hernández see Miss Emmart's Preface to *The Badianus Manuscript*, pp. xiv, xv.

² "The Alleged Discovery of Syphilis in Prehistoric Egyptians," *The Lancet*, 22nd August, 1908, pp. 521-524.

He added that had it existed it would most certainly have left its mark. Considering the intercourse of dwellers on the Nile with Nubians, Assyrians, Syrians and nomadic races, we can assert, with some degree of assurance, that syphilis was unknown to the ancient world of the Middle East.

The findings of Elliot Smith have been supported by those of W. R. Dawson, Bruno Oettking, M. A. Ruffer and others. It is interesting to note that Ruffer and Rietti¹ examined bones from the tombs of the Macedonian soldiers of Alexander the Great and Ptolemy I from the necropolis at Chatby in N.E. Alexandria. The results were negative as far as syphilis was concerned. The names on some of the tombs indicated that the crypts contained skeletons of the prostitutes who had accompanied the Greek army. Evidence of syphilis was expected here if venereal disease existed at the time at all. Unfortunately all the skeletons were in such a bad condition that no satisfactory examination was possible.

A complete survey of all known bones and skulls claimed to be syphilitic was undertaken by Dr Herbert U. Williams, who published his findings in 1932.² So far as the Eastern Hemisphere was concerned the evidence, including Japan and France, was negative.

In both North and South America, however, the amount of material was very considerable. Of the numerous finds of pre-Columbian date showing syphilitic lesions the most important, considered free from any suspicion, came from New Mexico, Ohio, Tennessee, Peru and Argentina. Messrs Butler and Biello (*op cit.*) consider that as so many types of "expert" are necessary to determine the age and diagnosis of syphilitic osseous material, the evidence of bones is practically useless. They suggest, however, that the determination of aneurysm of the aorta in Egyptian mummies might help to answer the question.

(3) As so many medical and historical writers have testified, the antiquity of syphilis in Central America seems well established. In course of time the natives became largely immune, but when it spread to the Spaniards the disease assumed a virulent form. This Indian resistance was commented on long ago, and has been noted in modern times in the two works of Shattuck already mentioned. In an important article,³ Dr Eduard Seler declares his belief in the

¹ "On Osseous Lesions in Ancient Egyptians," *Journ. of Pathology and Bacteriology*, vol. xvi, Cambridge, 1911-1912, pp. 439-465.

² "The Origin and Antiquity of Syphilis: the Evidence from Diseased Bones," *Archives of Pathology*, Amer. Med. Ass., Chicago, vol. xiii, 1932, pp. 779-814 and 931-983, including a good bibliography on pp. 980-983.

³ *Gesammelte Abhandlungen zur Amerikanischen Sprach- und Alterthumskunde*,

American origin of syphilis and quotes the article of Montejo y Robledo to which we have referred above (p. 46 and note). We must now consider briefly the evidence that can be derived from the early myths and folklore of the natives of Central America.

Both in the work already noted and also in his edition of the *Codex Borgia*,¹ Seler refers many times to an Aztec god named Nanahuatzin (or Nanahuatl—the suffix "tzin" apparently meaning "young" or "small"). The word seems to mean "el buboso," i.e. "the pustulous one," and owing to his name, legendary history and appearance he has been described as the God of Syphilis.

In a long letter to me on the subject, Dr J. Eric Thompson, of the Carnegie Institute of Washington, tells me that the Aztec believed the world to have been created four or five different times, and at each creation a different God had to assume the function of the Sun. When the turn of Nanahuatzin arrived he was embarrassed because of his poverty. When the other gods made offerings of costly objects, such as jade and quetzal² feathers, he offered his own blood and the scabs from his sores. After some hesitation he threw himself into the fire and was transformed into the Sun. It was, however, only a temporary possession of that role, and subsequently he was neither regarded as the Sun nor considered as having any close association with that God.

The mythology of ancient Mexico is terribly confused, and Nanahuatzin, as a god definitely not of the first rank, is not too well understood. At times he merges into, or entirely replaces, Xolotl, the dog god. In this respect it is of importance to note that both among the Aztec and Maya the dog symbolises fornication and lasciviousness, a not unnatural association if Nanahuatzin is the God of Syphilis. Moreover, Xolotl and often dogs in general, are frequently shown with the tips of their ears torn and eaten away. The edge of the cropped ear is usually painted yellow, suggesting a running sore. In one place a deity generally identified with Nanahuatzin replaces the regular Xolotl as God of the Day,

"Ueber den Ursprung der Syphilis," Bd. ii, Berlin, 1904, pp. 94-99. See also Abb. 25 in Bd. iii, p. 407. See further Brasseur de Bourbourg, *Popol Vuh*, Paris, 1861, p. cxlii, and for a contemporary reference F. B. de las Casas, *Historiadores de Indias*, Tomo I, *Apologética Historia de las Indias*, Nueva Bib. de Autores Españoles, vol. xiii, Madrid, 1909, ch. xix, pp. 44, 45.

¹ *Codex Borgia, Eine altmexikanische Bilderschrift der Bibliothek der Congregatio de Propaganda Fide*, Bde. iii, Berlin, 1904-1909. See Bd. ii, pp. 94, 95 with abb. 67 on p. 96 and the numerous references to "Nanauatzin" in Bd. iii, the index volume.

² This is the *Pharomacrus mocinno* belonging to the Trogon family, one of the most beautiful birds in the world. The tail coverts are over three feet long and of a resplendent golden-green. For a history, description and illustrations see the 11th edition, *Ency. Brit.*, i.v.

Ollin. Here he is shown with an eye closed and what probably represents a drop of blood hanging from it. As can be clearly seen in the Codex Borgia (II. 96) his hands and feet curve round in a manner which clearly indicates that he is jointless in those extremities. In some of the pictures of the disjointed Nanahuatzin he is shown with a white band painted across his mouth, which signifies "five" and identifies him as one of a certain group of gods which have this number as part of their names. They were all gods of pleasure—pulque¹ drinking, dancing, singing and intercourse.

It is impossible to say how long the worship of Nanahuatzin had endured, but since he plays an important role in the creation myth when he becomes the sun, we can be certain that he was no newcomer to the Mexican pantheon. He was definitely a pre-Aztec god, and can therefore boast of a history of high antiquity. Mention might also be made of another of the "five" gods—Macuilxochitl, the God of Pleasure. Friar Sahagun, the great sixteenth-century ethnographer, who was in Mexico from 1529 to 1590, describes him thus:

"Another divinity was called Macuilxochitl, and was also considered as a god, like the god of the fire. He was especially the god of those who dwelt in the houses of lords or in the palaces of the chiefs. The feast celebrated in his honour was the one called Xochilhuitl. . . . All those who celebrated this feast, men or women, fasted for four days previous, and if during this feast any man had intercourse with a woman or vice versa, they said he or she soiled their fast, and this offended the god terribly, so that he gave them dreadful diseases of the privy parts if they did misbehave, such as piles, furuncles, venereal diseases, bubo, etc., . . ."²

Dr Thompson tells me that continence before both tribal and individual ceremonies is still strictly observed in many parts of Central America. I told him that I understood that among the Aztec syphilis was regarded as a disease of the nobility. In answer Dr Thompson tells me that in the Aztec-Spanish dictionary of Alonso de Molina the only word for the disease is *tecuilnanahuatl* meaning "syphilis of the lords." The same source quotes a passage from Francisco Ximenez in which he is speaking of the Quichomaya of the highlands of Guatemala. He says that their chief god

¹ This was the drink made from the sap of the agave or maguey (*agave americana*). The juice obtained is called *aguamiel* and after about ten days of fermentation becomes the *madre pulque* which when added to fresh *aguamiel* induces rapid fermentation.

² *Historia general de las cosas de Nueva España*. The above translation is by F. R. Baudelier from her *History of Ancient Mexico* by Fray Bernardino de Sahagun . . . Fisk University Press, 1932, vol. I, p. 35.

is named Tepeu. "This," he explains, "signifies the bubas, and in the time of their paganism it was a sign of greatness among their nobles to have them, for it was a sign of greater potency to cohabit with many women, from whom they used to contract it, a thing which the ordinary people could not." Commenting on this passage, Dr Thompson suggests that Ximenez is surely mistaken in saying that Tepeu means "bubas," for it is almost certainly a corruption of the Aztec *tepeua* "Lord." Guatemala, although of Maya speech, was for long dominated by Mexican peoples, and Mexican words and concepts were adopted.

D. G. Brinton in his article, "The names of the gods in the Kiche myths" (*Proc. Amer. Phil. Soc.* vol. xix. Philadelphia, 1882, pp. 621, 622) notes that the Cakchiquel¹ Maya word for "Lord" was *tepex*, and that in his Spanish-Cakchiquel dictionary, Father Coto, in explaining the reference "Bubas, galel or tepex," says that when a person is recovering from the bubas people say "Now he has ceased to be one of the nobility, because he who has the bubas is seated doing nothing, as though he were a lord or lady."

From the above data we can surely conclude that syphilis was a disease endemic among the native tribes of Central America from very early times. It had entered into their folklore and ceremonies. So far from regarding it as the terrible scourge it was to become in Europe among entirely non-immune peoples, it was looked upon as a noble disease, the Aztec even including a God of Syphilis in their pantheon.

Until irrefutable proof to the contrary is forthcoming, we may take Central America as the *fons et origo* of the disease, that from there it was taken to Europe, and with the colonising voyages of the Portuguese reached India at the end of the fifteenth century.

This naturally precludes the possibility of the "poison" of the poison-damsel of Indian tales having anything to do with syphilis. However, as statements have been made to the effect that venereal disease in India is of ancient date, it will be necessary to say a few words on the subject.

The earliest medical book of India is the *Atharvaveda*² in which

¹ The Cakchiquel is also a Maya group of the Guatemala highlands as close linguistically to the Quicho as Portuguese is to Spanish.

² See *Hymns of the Atharva-veda* . . . translated by M. Bloomfield, Sacred Books of the East, vol. xlii, 1897, and his analysis, in *Grundriss d. Indo-Arischen Philologie*, Bd. 2, Heft. B, Strassburg, 1899; *Atharva-veda samhitā*, translated by W. D. Whitney and revised by C. R. Lammman, Harvard Orient. Ser., vols. vii and viii, Cambridge, Mass., 1905. See also M. Winternitz "Folk-medicine in Ancient India," *Nature*, 7th July, 1898, pp. 233-235; J. Jolly "Disease and Medicine (Hindu)" and G. M. Bolling "Disease and Medicine (Vedic)"—both in *Hastings' Ency. Rel. Eth.*, vol. iv, 1911 (2nd impression, 1935).

the diseases are described and addressed as demons, with charms and exhortations to propitiate or frighten the particular demon responsible. The "King of Diseases" was fever, the accompanying symptoms, such as jaundice, headache, cough and itch, showing it was true malarial fever. Other diseases mentioned are lockjaw, epilepsy, dropsy and leprosy. The only references to sores, tumours and postules are in relation to scrofulous diseases, and they are conjured to fall off, or fly away, because they were supposed to have settled like birds on the effected person. There are many charms against the poison of snakes, and poison in general. The Buddhist period of medicine affords no evidence in our inquiry, and in the third period—that of Caraka, Suśruta, Vāgbhata, etc.—we still get no definite mention of syphilis. In the English translation of the *Suśruta Samhitā*¹ we note under the heading "The Upadansam and its five distinct types" that although the word is applied to venereal sores, tumours, etc., the editor points out that this is not syphilis. Moreover, the word *upadamṣa* dates only from the sixteenth century. We shall return to it again shortly. Writing in 1845,² T. A. Wise of the Bengal medical service gives a brief history of the disease and points out that the words used to denote syphilis in India clearly show that it reached that country by two distinct routes. The first was eastwards from Europe via Persia as is shown by such terms as *Nār Fārsī*, "Persian pox," the second by sea with the Portuguese colonists which accounts for the term *Firanga Roga* or "Portuguese disease." Writing of Bhava Mishra (1550) "a jewel of physicians and master of the Shastras," Sir Bhagvat Sinh Jee says³ that Mishra tells us that he had at this time commenced to come into contact with some of the European nations, notably the Portuguese, who suffered from syphilis. He treats of this affection at length under the name of *Firanga Roga*.

The absence of a corresponding Sanskrit term, adds Jee, and the name adopted would suggest that it was introduced by the Portuguese.

Speaking of the King of Calicut, or the Zamorin as he was called, Ludovico di Varthema says,⁴ in 1505, that he found him in ill humour "in consequence of his being at war with the King of

¹ Edited by K. K. L. Bhishagratna, Calcutta, 1911, pp. 81-84. It should be remembered that the term *samhitā* denoted the final editing of a work which had been handed down over a long period.

² *Commentary on the Hindu System of Medicine*, Calcutta, 1845, pp. 375-379.

³ *A Short History of Aryan Medical Science*, London, 1896, p. 37.

⁴ *Travels of Ludovico di Varthema*, J. W. Jones and G. P. Badger, Hakluyt Society, 1853, p. 156; *Itinerary of Ludovico di Varthema of Bologna*, edited by Sir R. C. Temple, Argonaut Press, 1928, p. 63.

Portugal, and also because he had the French disease, and had it in the throat."

In his edition of Van Linschoten,¹ A. C. Burnell quoted this passage as proof that syphilis must have existed in India before Columbus, for, he says, "if introduced by the Portuguese, the Zamorin could not have been affected." In the first place we have no certain proof that "French," which is a translation of the Arabic *Farang* or Frank, referred to syphilis. Sir Richard Temple, in his edition of Varthema, suggests it may well have been cancer of the throat. Secondly, we must remember that Vasco da Gama had reached Calicut in 1498, and we are dealing with 1505, so there was plenty of time for the Zamorin to have been infected, if the disease actually was syphilis.

Pyrard of Laval (1602-1607) refers to the disease in the Maldives, which he says is called *Farangui bæscour* (French piles). In a note on this passage Albert Gray² wisely hesitates in accepting Burnell's conclusions and says that in the Maldives the natives clearly attributed the disease to the Portuguese, and that this opinion is universally entertained in Ceylon and elsewhere in the East. But to return to Burnell's note, he states that the disease is clearly mentioned in Sanskrit medical books before 1500 under the title of *upadamça*. But here he is mistaken. The word in question was first used in the sixteenth—not the fifteenth—century and meant simply "a biting at," and was applied to those sores and tumours mentioned by Suśruta, as we have already noted. In later years the meaning was extended to cover syphilis, for which no Sanskrit word existed.³ Another point worth mentioning is the complete absence of any reference to venereal diseases in the writings of the early erotic Indian authors. The pages of Vātsyāyana, Dāmodara-gupta, and Kalyāna Malla, while dealing fully with every aspect of the *ars amoris indica*, are completely silent on the subject of disease.

And here we can leave this part of our inquiry with assurance that whatever the exact date of the introduction of syphilis into India may have been, and by whatever road it may have entered, the tales of Somadeva ante-date it by several hundred years.

Whatever may be the truth of the origin of the disease it is an

¹ *Voyage of John Huyghen van Linschoten to the East Indies*, edited by A. C. Burnell and P. A. Tiele, Hakluyt Society, 1885, vol. i, p. 239.

² *The Voyage of François Pyrard of Laval*, translated by Albert Gray, assisted by H. C. P. Bell, Hakluyt Society, vol. i, 1887, p. 183 and note.

³ See J. Jolly, *Medicin, Grundriss der Indo-Arischen Philologie und Altertums-kunde*, Bd. iii, Heft 10, Strassburg, 1911, p. 106. See also Jarl Charpentier, "Ein Beitrag zur Geschichte der Syphilis in Indien," *Nordiskt Medicinskt Arkiv (Arkiv för innre Medicin)*, vol. li, Stockholm, 1919, pp. 47-62.

undoubted fact that stories existed in Europe in the Middle Ages which refer to some fell disease which was looked upon as a magic poisoning, the handiwork of a witch, or exceedingly clever woman, whose knowledge was something out of the ordinary. Take, for instance, the legend of the death of King Wenceslaus II of Bohemia in 1305.

According to the contemporary poet, Ottacker,¹ the king grew daily weaker without any apparent cause. Suspicion fell on the king's favourite and trusted mistress, one Agnes, a most beautiful and accomplished woman. It was rumoured that she had accepted bribes from certain men to defile herself in such a manner as to bring about the king's death by her embrace. "How could you do a deed like this?" says the poet. "How could you mix poison with the fathomless sweetness which you carry in your delicate body? Mistress, you betrayed him, just as the Romans did when they betrayed an emperor. They brought up a child on poison, who later became the emperor's mistress, and after he had lain with her he died. But that case was different, as the child had been trained by the Romans that she might poison the emperor."

The poet, in conclusion, curses her and calls down the wrath of heaven on any such treacherous woman.²

About a hundred years later we find a curious tale dealing with the death of King Ladislao (also called Ladislaus, Ladislav or Lászlao) of Naples. He aspired to absolute rule of Italy, but, according to one version, was mysteriously poisoned by a trick of the Florentines in 1414. The story goes³ that they bribed a certain unscrupulous doctor of Perugia, whose beautiful daughter was the mistress of Ladislao. The unnatural father persuaded the girl that if she wanted to be loved exclusively and unceasingly by her royal lover she must secretly rub herself with a certain ointment which he himself had prepared for her. The deluded girl believed him and did his bidding, used the ointment, which was composed chiefly of the juice of aconite (monk's-hood), and both she and the king lost their lives.

Although such stories as these are relevant to our inquiry, they afford no conclusive proof of the existence of venereal disease in Europe before the end of the fifteenth century. It is impossible to

¹ This is the German poet and historian who flourished at the end of the thirteenth and beginning of the fourteenth centuries, and must not be confounded with the King of Bohemia (Ottacker or Ottakar) of about the same date.

² For the complete passage see Hieronymus Pez, *Scriptores rerum Austriacarum veteres ac genuini*, Tom. III, Ratisbonæ, 1745, cap. dcliv, pp. 741-742.

³ Angelo di Costanzo, *Historia del regno di Napoli*, Aquila, 1581, p. 279 *et seq.* or vol. ii, p. 221 *et seq.* of the Milano 1805 edition.

say what was the exact nature of these mysterious illnesses or how they originated.

By the sixteenth century we are on rather more definite ground. For instance, the strange story of how the enemies of Francis I of France encompassed that monarch's death in 1547 may be part fact and part fiction. In this case one of his mistresses, known as "La belle Ferronnière," was said to have been "poisoned" with syphilis germs. Paulin Paris (*Études sur François Premier*, Paris, 1885, vol. ii, pp. 324-372) deals with the matter in detail, while some of the later biographers give little credence to the tale on the score that Francis, with little doubt, was already infected from earlier debauches. Whatever may be the truth of the matter, it is of considerable interest to note that in sixteenth century France a tale was current which has a distinct echo of that of Alexander and the poison-damsel, the only difference being that Francis I had no Aristotle to warn him in time!

As has already been noted, syphilis appears to have been unknown in India until the end of the fifteenth or beginning of the sixteenth century.

But quite apart from such evidence as this, the time the disease takes to show itself is greatly against its use in a story where the effect has to be immediate and causing practically instantaneous death.

It seems, therefore, that we must look for some means of imparting death which (1) existed undoubtedly from olden times in India, (2) is practically instantaneous, and (3) has a distinct connection with poison.

Snake-Bite

Although poisonous plants could be cited, there is a much more obvious and certain thing—namely, the sting of the cobra. Here, I think, we have the clue to the whole idea.

In the first place we are fully aware of the great antiquity of the reverence paid to the cobra in India, a reverence which, however, is naturally mixed with dread. How great that dread must be we can better appreciate when we glance at the amazing statistics of deaths due to snake-bite. The average annual death-roll is about 20,000 people. In 1889 there were 22,480 human beings and 3,793 cattle killed by snakes, the chief being the cobra, the krait and Russell's viper. In more recent years the figures have increased. In 1911 the deaths due to snake-poison were 24,312; in 1915, 26,406, while in 1922 the figure dropped to 20,090.¹ For recent

¹ For further details of deaths from snake-bite in India prior to 1909 see the re-

years full figures are not available. The office of the High Commissioner for India, however, has sent me the following information from the annual health reports of the State Governments: United Provinces (1946) 2,659 deaths from snake bite; Central Provinces (1946) 1,075; Bombay (1944) 1,061; Madras (including insects and wild animals—1947) 1,854; Orissa (ditto—1944) 1,181; and Bihar (ditto—1939) 3,523.

No further evidence is needed to emphasise the deadliness of the sting of the cobra and the krait. If the poison enters a large vein, death is very rapid and all so-called antidotes are unavailing. The poison of a snake becomes exhausted after it has struck frequently, and in cases where a cobra's sting does little harm it is usually to be explained by the fact that the reptile must have already bitten and not yet re-formed its poison.

It is a curious fact that a snake cannot poison itself or one of its own species, and only any other genus of venomous snake in a slight degree. This brings us a step nearer our inquiry. It is obvious that in a country like India, infested with snakes, and where the resulting mortality is so large, the customs of the reptiles should have been studied in detail. This has been largely done by snake-charmers, whose livelihood depends on their ability to catch them alive and train them sufficiently for their particular object in view. A snake-charmer's secret lies chiefly in his dexterity and fearlessness. There is, however, another important factor to be considered—inoculation. It is a well-known fact that snake venom is perfectly digestible, and that if the mouth and stomach are free from abrasions quantities of venom can be taken with no ill effects. It is on this principle that the snake-charmers work, inoculating themselves with increasing doses of venom until they are immune from the bite of the particular snake whose venom they have used. For instance, if cobra-venom is chosen, immunity will be obtained only against cobra-venom, and viper-venom would prove fatal in the usual way.¹

printed papers of Sir Joseph Fayrer, Sir Lauder Brunton and Major Leonard Rogers, in *On the Poison of Venomous Snakes and the Methods of Preventing Death from their Bite*, London, 1909.

¹ I have to thank the late Miss Joan Procter, Curator of Reptiles at the Zoological Society, for giving me valuable information about cobras and vipers. See A. T. Wall, "On the Difference of the Physiological Effects produced by the Poison of Indian Venomous Snakes," *Proc. Roy. Soc.*, 1881, vol. xxxii, p. 333; G. Lamb, *Some Observations on the Poison of the Banded Krait*, Calcutta, 1904; F. W. Fitzsimons, *Snake Bite and its Scientific Treatment*, London, Capetown and Pretoria, 1913; Afranio Do Amaral, *A General Consideration of Snake Poisoning and Observations on Neotropical Pit-vipers*, Harvard Inst. Trop. Biol. and Med. 11, Cambridge, Mass., 1925; Paresa Banerji [Paresa Vandyopādhyāya], *Handbook of Snake-Bite*, Mihijan, 1929 (includes 1,134 case reports).

It is a fairly widely recognised fact that a child who has once had measles is not likely to get it again, for the simple reason that a stronger resistance is set up by the one attack. We are all aware that vaccination is a protection against smallpox, and that anti-typhoid inoculation preserves one to a considerable degree against typhoid fever. In the former case the vaccine lymph actually causes a mild attack of smallpox (just in the same way as the snake-charmer gets slightly poisoned by his repeated bites), and in the latter case dead typhoid bacilli are injected under the skin. Just as cobra-inoculation is no protection against viper-venom, so vaccination is no protection against typhoid.

As the system on which the snake-charmer works became more and more familiar, and experience showed only too well the fatal results of cobra bites to people who are not immune, it is quite reasonable to imagine that this knowledge would find its way into fiction. It would, indeed, be curious if it was not so, for as history affords so many examples of vegetable and mineral poisoning, we can well understand that stories, at any rate, would arise telling of snake-poisons.

All the story-teller had to do was to transfer the idea from the snake-charmer to a beautiful maiden, and introduce the possibility of passing on a poison thus accumulated. The method of doing this would naturally be intercourse, a bite, perspiration and so on.

As is to be expected, we find stories where the poison is definitely stated as being derived from plants. The chief of these was *el-bîš* (the Arabic form of the Sanskrit *visha*). In Qazwîni's¹ *Cosmography* we read: "Among the wonders of India may be mentioned the plant *el-bîš*, which is found only in India, and which is a deadly poison. The Indian kings, we are told, when they went to conquer an enemy ruler, take a new-born girl and strew the plant first for some time under her cradle, then under her mattress and then under her clothes. Finally they give it her to drink in her milk, until the growing girl begins to eat it without hurt. This girl they send with presents to the king whom they wish to destroy, and when he has intercourse with her he dies."

Conclusion

To summarise briefly, I would say that the *motif* of the poison-damsel originated in India at a very early period before the Christian

¹ Silvestre de Sacy, *Chrestomathie Arabe*, 2nd edition, Paris 1826-1827, iii, 398; J. Gildemeister, *Scriptorum Arabum de Rebus Indicis loci*; and Alfred von Gutschmid, "Die Nabatäische Landwirtschaft und ihre Geschwister," *Zeitschr. d. deutschen morg. Gesel.*, pp. 218, 219, Bonnse, 1838. Bd. xv, p. 95, Leipzig 1861.

era. The poison-damsel herself has no existence in actual fact, but is merely the creation of the story-teller, who derived the idea from what he saw around him. First of all he was acquainted with poisonous herbs and knew something of the uses to which they were put, but he was still more familiar with the ways of the snake-charmer and the methods of his gradual inoculation. He could not help being fully aware of the fatal results of the bite of the cobra and krait, and the reverence and fear of the snake throughout India was everywhere evident. Thus there was plenty of material for the creation of the poison-damsel, and in later days the knowledge of opium and other foreign drugs would merely introduce some new variant of the tale.

But apart from all these rather obvious sources, we must not overlook another, and deeper, origin of such tales, of which even the story-teller himself knew but little and probably cared less. I refer to the psychological fears, ignorance and superstitions that form the basis of so many folk-tales and beliefs—a fertile ground indeed, where the seed of the story-teller could produce exotic blooms of fantasy and exaggeration.

Like so many Eastern stories, the legend of the poison-damsel travelled slowly westwards, and received its greatest impetus by becoming attached to the Pseudo-Aristotelian myths of mediæval Europe. Its inclusion in such a famous collection as the *Gesta Romanorum* was a further means of its increasing popularity.

I need hardly say that I have touched only the very fringe of the subject. Whilst many important and extremely interesting queries have been raised in the course of this Essay, I have, for the most part, refrained from offering any solution, and have been content with stating facts and giving references.

Most readers will, I think, agree with me that, despite her many disadvantages, there is much that is attractive about the poison-damsel.

THE TALE OF THE TWO
THIEVES

THE TALE OF THE TWO THIEVES

THE story of Ghāṭa and Karpara as told by Somadeva (*The Ocean of Story*, vol. v, pp. 142-151) is composed of two distinct tales. The first, ending with the final success of Ghāṭa's tricks, is a Sanskrit version of the well-known tale of Rhampsinitus in Herodotus (ii, 121). The second consists of several incidents, quite likely of Kashmirian origin, dealing with the favourite subject among Orientals—the inconstancy of woman.

It is only with the first of these tales that we are here concerned. It is as follows:

"There were in a certain city two thieves, named Ghāṭa and Karpara. One night Karpara left Ghāṭa outside the palace, and breaking through the wall,¹ entered the bed-chamber of the princess. And the princess, who could not sleep, saw him there in a corner, and suddenly falling in love with him, called him to her. And she gave him wealth, and said to him: 'I will give you much more if you come again.' Then Karpara went out, and told Ghāṭa what had happened, and gave him the wealth, and having thus got hold of the king's property, sent him home. But he himself again entered the women's apartments of the palace. Who that is attracted by love and covetousness thinks of death? There he remained with the princess, and bewildered with love and wine, he fell asleep, and did not observe that the night was at an end.

"And in the morning the guards of the women's apartments entered, and made him prisoner, and informed the king, and he in his anger ordered him to be put to death. While he was being led to the place of execution, his friend Ghāṭa came to look for him, as he had not returned in the course of the night. Then Karpara saw Ghāṭa, and made a sign to him that he was to carry off and take care of the princess. And he answered by a sign that he would do so. Then Karpara was led away by the executioners, and being at their mercy, was quickly hanged up upon a tree, and so executed.

¹ Breaking through the wall and digging a tunnel into a house are the recognised methods adopted by the Indian thief. See Maurice Bloomfield's article, "The Art of Stealing in Hindu Fiction," *Amer. Journ. Phil.*, vol. xlv, Baltimore, 1923, pp. 97-133 and 193-229. Sir William Halliday reminds me that the ancient Greek word for burglar, τοιχωρύχος, is "the man who digs through the wall." Cf. *Job* xxiv, 16.

"Then Ghata went home, sorrowing for his friend, and as soon as night arrived he dug a mine and entered the apartment of the princess. Seeing her in fetters there alone, he went up to her and said: 'I am the friend of Karpapa, who was to-day put to death on account of you. And out of love for him I am come here to carry you off, so come along before your father does you an injury.' Thereupon she consented joyfully, and he removed her bonds. Then he went out with her, who at once committed herself to his care, by the underground passage he had made, and returned to his own house.

"And the next morning the king heard that his own daughter had been carried off by someone who had dug a secret mine, and that king thought to himself: 'Undoubtedly that wicked man whom I punished has some audacious friend, who has carried off my daughter in this way.' So he set his servants to watch the body of Karpapa, and he said to them: 'You must arrest anyone who may come here lamenting, to burn the corpse and perform the other rites, and so I shall recover that wicked girl who has disgraced her family.'

"When those guards had received this order from the king, they said, 'We will do so,' and remained continually watching the corpse of Karpapa.

"Then Ghata made inquiries, and found out what was going on, and said to the princess: 'My dear, my comrade Karpapa was a very dear friend to me, and by means of him I gained you and all these valuable jewels; so until I have paid to him the debt of friendship I cannot rest in peace. So I will go and see his corpse, and by a device of mine manage to lament over it, and I will in due course burn the body, and scatter the bones in a holy place. And do not be afraid. I am not reckless like Karpapa.'

"After he had said this to her, he immediately assumed the appearance of a Pāsupata ascetic, and taking boiled rice and milk in a pot, he went near the corpse of Karpapa, as if he were a person passing that way casually, and when he got near it he slipped, and let fall from his hand and broke that pot of milk and rice, and began lamenting: 'O Karpapa full of sweetness,'¹ and so on. And the guards thought that he was grieving for his pot full of food, that he had got by begging. And immediately he went home and told that to the princess. And the next day he made a servant, dressed as a bride, go in front of him, and he had another behind him, carrying a vessel full of sweetmeats, in which the juice of the Datura

¹ *Karpapa* is the Sanskrit for "pot." In fact the two friends' names might be represented in English by Pitcher and Pot.

had been infused. And he himself assumed the appearance of a drunken villager, and so in the evening he came reeling along past those guards, who were watching the body of Karpara. They said to him: 'Who are you, friend, and who is this lady, and where are you going?' Then the cunning fellow answered them with stuttering accents: 'I am a villager; this is my wife; I am going to the house of my father-in-law, and I am taking for him this complimentary present of sweetmeats. But you have now become my friends by speaking to me, so I will take only half of the sweetmeats there; take the other half for yourselves.' Saying this, he gave a sweetmeat to each of the guards. And they received them, laughing, and all of them partook of them. Accordingly Ghāṭa having stupefied the guards with *Datura*, at night brought fuel and burnt the body of Karpara.

"The next morning, after he had departed, the king, hearing of it, removed those guards who had been stupefied, and placed others there, and said: 'You must guard these bones, and you must arrest whoever attempts to take them away, and you must not accept food from any outsider.' When the guards were thus instructed by the king, they remained on the look-out day and night, and Ghāṭa heard of it. Then he, being acquainted with the operation of a bewildering charm granted him by Durgā, made a wandering mendicant his friend, in order to make them repose confidence in him. And he went there with that wandering mendicant who was muttering spells, and bewildered those guards, and recovered the bones of Karpara. And after throwing them into the Ganges he came and related what he had done, and lived happily with the princess, accompanied by the mendicant."

It is not surprising to find a version of the tale of Rhampsiñitus included in the great Kashmirian collection. Its general appeal, added to the fact that it appears in what is perhaps the most interesting and popular book of Herodotus, has made it travel far and wide to the most diverse parts of the world.

Versions of the story have found their way into nearly every important collection. To such an extent, indeed, has the tale circulated, that it would require a volume to give all the versions in their entirety. In the present Essay, then, I can do no more than give an occasional extract, but full references showing the extensive ramifications of this most interesting story will be added. Thus readers, who so wish, will be able to follow up the subject to any length.

Before tracing the different versions in both Eastern and Western collections, it will be of considerable interest to try to determine

whether the tale told to Herodotus was really Egyptian in origin or an early migrant from another country altogether.

First, then, let us look at the story as told by Herodotus (ii, 121).¹

"This king [Rhampsinitus], they said, possessed a great quantity of money, such as no one of the succeeding kings was able to surpass, or even nearly come up to; and he, wishing to treasure up his wealth in safety, built a chamber of stone, of which one of the walls adjoined the outside of the palace. But the builder, forming a plan against it, devised the following contrivance: he fitted one of the stones so that it might be easily taken out by two men, or even one. When the chamber was finished, the king laid up his treasures in it; but in course of time the builder, finding his end approaching, called his sons to him, for he had two, and described to them how (providing for them that they might have abundant sustenance) he had contrived when building the king's treasury; and having clearly explained to them everything relating to the removal of the stone, he gave them its dimensions, and told them, if they would observe his instructions, they would be stewards of the king's riches. He accordingly died, and the sons were not long in applying themselves to the work; but having come by night to the palace, and having found the stone in the building, they easily removed it, and carried off a great quantity of treasure.

"When the king happened to open the chamber, he was astonished at seeing the vessels deficient in treasure; but he was not able to accuse anyone, as the seals were unbroken, and the chamber well secured. When, therefore, on his opening it two or three times, the treasures were always evidently diminished (for the thieves did not cease plundering), he adopted the following plan: he ordered traps to be made, and placed them round the vessels in which the treasures were. But when the thieves came as before, and one of them had entered, as soon as he went near a vessel he was straightway caught in the trap. Perceiving, therefore, in what a predicament he was, he immediately called to his brother, and told him what had happened, and bade him enter as quick as possible and cut off his head, lest, if he was seen and recognised, he should ruin him also. The other thought that he spoke well, and did as he was advised; then, having fitted in the stone, he returned home, taking with him his brother's head.

"When day came, the king, having entered the chamber, was

¹ I choose the version from the Baehr text by Henry Cary, in Bohn's Classical Library, 1877, pp. 141-144. Apart from Rawlinson's translation (to be mentioned later), I would draw special attention to that by A. D. Godley, issued in 1920, in the Loeb Classical Library. Like all the volumes in this excellent "Library," the translations and the text are printed on opposite pages. The text followed is that of Stein.

astonished at seeing the body of the thief in the trap without the head, but the chamber secure, and without any means of entrance or exit. In this perplexity he contrived the following plan: he hung up the body of the thief from the wall, and having placed sentinels there, he ordered them to seize and bring before him whomsoever they should see weeping or expressing commiseration at the spectacle.

"The mother was greatly grieved at the body being suspended, and coming to words with her surviving son, commanded him, by any means he could, to contrive how he might take down and bring away the corpse of his brother; but, should he neglect to do so, she threatened to go to the king, and inform him that he had the treasures.

"When the mother treated her surviving son harshly, and when with many entreaties he was unable to persuade her, he contrived the following plan: having got some asses, and having filled some skins with wine, he put them on the asses and then drove them along; but when he came near the sentinels that guarded the suspended corpse, having drawn out two or three of the necks of the skins that hung down, he loosened them; and when the wine ran out he beat his head and cried out aloud, as if he knew not to which of the asses he should turn first. But the sentinels, when they saw wine flowing in abundance, ran into the road, with vessels in their hands, and caught the wine that was being spilt, thinking it all their own gain; but the man, feigning anger, railed bitterly against them all. However, as the sentinels soothed him, he at length pretended to be pacified, and to forgo his anger. At last he drove his asses out of the road, and set them to rights again.

"When more conversation passed, and one of the sentinels joked with him and moved him to laughter, he gave them another of the skins; and they, just as they were, lay down and set to to drink, and joined him to their party, and invited him to stay and drink with them. He was persuaded, forsooth, and remained with them. And as they treated him kindly during the drinking, he gave them another of the skins; and the sentinels, having taken very copious draughts, became exceedingly drunk, and being overpowered by the wine, fell asleep on the spot where they had been drinking.

"But he, as the night was far advanced, took down the body of his brother, and by way of insult shaved the right cheeks of all the sentinels; then having laid the corpse on the asses, he drove home, having performed his mother's injunctions.

"The king, when he was informed that the body of the thief had been stolen, was exceedingly indignant, and, resolving by any

means to find out the contriver of this artifice, had recourse, *as it is said*, to the following plan—a design which to me seems incredible: he placed his own daughter in a brothel, and ordered her to admit all alike to her embraces, but before they had intercourse with her, to compel each one to tell her what he had done during his life most clever and most wicked, and whosoever should tell her the facts relating to the thief, she was to seize, and not suffer him to escape.

“When, therefore, the daughter did what her father commanded, the thief having ascertained for what purpose this contrivance was had recourse to, and being desirous to outdo the king in craftiness, did as follows: having cut off the arm of a fresh corpse at the shoulder, he took it with him under his cloak, and having gone in to the king’s daughter, and being asked the same questions as all the rest were, he related that he had done the most wicked thing when he cut off his brother’s head, who was caught in a trap in the king’s treasury; and the most clever thing when, having made the sentinels drunk, he took away the corpse of his brother that was hung up. She, when she heard this, endeavoured to seize him, but the thief in the dark held out to her the dead man’s arm, and she seized it and held it fast, imagining that she had got hold of the man’s own arm. Then the thief, having let it go, made his escape through the door.

“When this also was reported to the king, he was astonished at the shrewdness and daring of the man; and at last, sending throughout all the cities, he caused a proclamation to be made, offering a free pardon, and promising great reward to the man, if he should discover himself. The thief, relying on this promise, went to the king’s palace; and Rhampsinitus greatly admired him, and gave him his daughter in marriage, accounting him the most knowing of all men; for that the Egyptians are superior to all others, but he was superior to the Egyptians.”

There are several points to notice about this story which seem to indicate that Herodotus heard only an abridged version of a more detailed tale, the complete incidents of which had either been long since forgotten or which his informers did not happen to know.

In the first place the builder is represented as entirely devoid of all principles. Although he is apparently the chief architect at the court of the richest of all the Egyptian kings, and as such would be a very wealthy man, yet he deliberately arranges matters so that if necessary he can rob the king of all his treasures. Such a necessity, however, never arises; but when on his death-bed he tells his secret to his two sons without any scruples, knowing that by doing so he

is almost bound to turn them into a couple of thieves. Had there been some motive for such an action, such as revenge or poverty, it would be more comprehensible.

Then, again, it seems curious that when the one brother is caught in the trap, the other cuts his head off without any expressions of sorrow whatever. As we shall see later, many subsequent versions (e.g. *Dolopathos* and its derivatives) particularly mention the bitter anguish which fills his heart before he can bring himself to do such a terrible deed.

But of most importance is the fact that we have a detailed description of how the king hung up the body of the thief, and surrounded it with guards, in the hope that some relation of the dead man would give himself away by excessive grief at such a terrible sight. Yet we hear nothing more of this, and no one goes near it. The one person who would obviously be most likely to act thus is the mother, who, as far as we are given to understand, never leaves her house at all. Several writers seem to have noticed this, as in many versions we find the thief is nearly given away by this ruse. It seems such an obvious omission that because we find it restored in later versions, I do not think we need conclude for a moment that there was another, and hitherto unknown, source of the story.

It will be seen that the difference between the tale of Herodotus and that of Somadeva is considerable.

In fact, the only points of similarity, apart from the general outline, are:

- (1) The number of the thieves is two.
- (2) One of them is caught.
- (3) Guards watch the body to see if anyone laments.
- (4) They are overcome by trickery.
- (5) The king's efforts are futile.
- (6) Pardon (or a reward) is offered.

There is no mention in the Sanskrit tale of a treasury, and consequently the trap and beheading of the brother do not occur. No mother appears, and neither the shaving of the guards nor the prostitution of the king's daughter is found.

The hand of the Hindu is clear, however, in many places. The favourite Indian methods of thieving—digging through a wall and digging a mine into the house—are brought in twice. The incident of a princess falling in love with the thief is not uncommon in Sanskrit literature, and occurs twice in *The Ocean of Story* (vols. vii, p. 37, and viii, p. 119).

The incident of the guards waiting to see if anyone laments has a sequel, for the desire to pay the last homage to his dead friend makes Ghata conceive a plan by which he *can* personally lament and purify the body with milk. Here we have the gap in the Herodotus story filled. But according to Hindu ritual other rites have to be performed over the body, so our story-teller introduces a second device by which he can burn the corpse and throw the bones into the holy Ganges.

The ending of the story has naturally been altered, because Somadeva is tacking on to it another story altogether, and does not want the princess and the thief to dwell happily together.

We can now proceed to the crux of our inquiry. Was the tale of Rhampsinitus as told to Herodotus of true Egyptian origin?

The first question one naturally asks is whether the identity of King Rhampsinitus can be ascertained. Is he purely legendary, or is he a real Pharaoh to whom the above story has been attributed, either rightly or wrongly? The generally accepted theory is that by Rhampsinitus is meant Rameses III, although nothing definite can be said on this point.

The reasons for the supposition are twofold, etymological and general.

The true etymology of Rhampsinitus is unknown, and thus we are handicapped from the start, but it seems to be connected in some way with Rameses. According to Brugsch it is a Greek form of *Ramesu pa nuter*, "Rameses the God," but most scholars now agree with Maspero, who would derive the first half from Rameses III and the second half from Amasis II. Some further explanation is necessary.

Rameses III was a Pharaoh of the twentieth dynasty, and had his capital at Thebes, with Amon as chief deity. Amasis II was a Pharaoh of the twenty-sixth dynasty, with his capital at Sais, in the Delta, and Neith, the goddess of the hunt, as deity.

The correct form of his name is Aah-mes-si-neit, *aah* meaning "moon," and *si-neit*, "son of Neith." Now in order to arrive at the Greek form Rhampsinitus, the two words *si-neit* must be added to Rameses, making Ra-mes-si-neit. Thus half the name belongs to one Pharaoh of one dynasty, and half to another Pharaoh of another dynasty. "It is," said Sir Flinders Petrie in a letter to me on the subject, "as if a cathedral verger talked now of 'our sailor King William III,' unconsciously borrowing from William IV."

It is quite conceivable that the jumbled name was due to ignorance, and at any rate was good enough for foreigners.

When describing the Ægean coasts we may consider Herodotus

to have had sufficient personal knowledge of what he was writing about to check any traditions he heard, or accounts he may have read. But in Egypt matters were very different. Here he went as an ordinary tourist, even without "letters of introduction," and, being unable to speak the tongue, he was dependent on the half-caste dragomans and any inferior temple-servants who were not above receiving *bakhshish* for answering questions put to them by the inquisitive Greeks.

Most of the *ciceroni* were Karians, who acted as interpreters between natives and the travellers, like the Maltese in modern times. As Herodotus himself was born in Karia, we can imagine his preferring a fellow-countryman through whom to make his searching inquiries.

Professor Sayce considered the tale to be "colonial Greek," and he explained this view in a letter to me. "It is," he said, "the kind of story the Greek tourist delighted to hear from his Karian or other semi-Greek dragoman. He was anxious about the origin or causes of what he saw, and the dragoman had a story to account for each of them which was sufficiently non-Oriental to appeal to the Greek mind."

Supposing that Ra-mes-si-neit was the original form in which Herodotus heard the name, we must not be surprised at his accepting it, for he knew *si-neit* was a correct appendage to a royal name, as it is he who supplies us with most of our information about Amasis II.

Turning to general considerations, the first thing to strike us in the story about the king is his great wealth and the fact that he built a treasury. This could well refer to Rameses III, for, as the Papyrus Harris shows, his riches were enormous and not only did he build a treasury, but it has actually been discovered in the temple at Medinet Habu. In one record Rameses himself says: "I filled its treasury with the products of the land of Egypt: gold, silver, every costly stone by the hundred-thousand. . . ."

The rooms forming this treasury are Nos. IV-VIII in Porter and Moss, vol. ii, p. 186. Dr Harold H. Nelson, formerly in charge of the excavations still continuing at Medinet Habu, tells me that although the rooms are not entered by a secret door, it looks very much as if something of the sort once existed, for the entrance cuts right through a relief. The door may have been concealed, Dr Nelson adds, by having the interrupted relief continued across it. As the remains of the door-sockets do not suggest anything very massive, the door could hardly have been of stone. In the rear of the temple there is a low doorway leading from room L to room LI

(in the Porter-Moss plan) the object of which is unknown. There are no subterranean crypts at Medinet Habu as at Dendera. We shall shortly consider the building of secret chambers in some detail.

The great victories of Rameses III against such Levantine peoples as the Thekel (or Zakkal), Pulesti (or Peleset-Philistines), Washasha, and the Meshwesh (ancestors of the Berber tribes of North Africa), and the consequent saving of the Egyptian Empire in Asia, would naturally make him the hero of many a tale. The increased wealth of the temples, the elaborate ritual observed and encouraged by Rameses, and, above all, the fact that Amon-Ra became the figurehead of the Egyptian religion, were all factors which would help to keep the memory of this Pharaoh green, especially when his death marked the beginning of the final catastrophe which led to the collapse of the Empire.

Thus, quite apart from etymological evidence, Rhampsinitus might well be intended for Rameses III.

There is, however, another point to be considered. Immediately following this story Herodotus (ii, 122) tells a further tale about the same king:

"After this they said, that this king descended alive into the place which the Greeks call Hades, and there played at dice with Ceres, and sometimes won, and other times lost; and that he came up again and brought with him as a present from her a napkin¹ of gold."

This curious statement has an echo in the ancient Egyptian tales occurring in the cycle of Satni-Khamois (Maspero, *Popular Stories of Ancient Egypt*, pp. 133, 134), where Satni descends into the tomb of Nenoferkephtah and plays dice for the magic book of Thoth. Plutarch, *Isis et Osiris*, records an old Egyptian myth connected with the birth of Osiris to account for the five supplementary days in the Egyptian calendar. The god Hermes (*i.e.* Thoth) played dice or draughts with the moon and won from her a seventy-second part of every day, and from these parts compounded the five intercalary days (*cf.* the Mayan "Uayeb").

It looks as if Herodotus had been told the strange tale about Ceres and Hades by his dragomans who know that any garbled version of a tale would suffice for the ignorant Greeks! He may have seen the dice-playing scene on the Fortified Gate at Medinet Habu and asked its meaning. Dr Nelson says that he finds the tale very un-Egyptian and would give it no credence. Incidentally,

¹ In D. W. Turner's *Notes on Herodotus*, 1857, p. 146, the golden napkin is regarded as symbolical of the golden crop shortly to rise from the earth.

the term "Hades" is quite wrong as applied to the Egyptian world of the dead. Various scholars have sought an interpretation of the tale. Birch,¹ in referring to the reliefs on the Fortified Gate at Medinet Habu, says that the females who are playing draughts wear on their heads the flowers of the lotus and papyrus, emblems of the Upper and Lower Country, or as goddesses of the heaven or upper world, and the earth or lower world. From this he argues that the sculptures might have been considered in the popular legends as offering to the spectator the allegory of the scene of the game of draughts between the king and the goddess Isis, whom Herodotus has called Demeter (Ceres), as he named Osiris the Dionysius of the same people.

The great excavations carried on at Medinet Habu by the Oriental Institute of the University of Chicago have included a most detailed survey of the Fortified Gate, the final results of which will not be published for several years. Dr Nelson has sent me a drawing of the floral head-dresses of the *harēm* ladies. It is hard to say if they represent flowers at all, as the main portion consists of round objects like balls on the top of long stems. If a highly conventional form of the papyrus is intended it would be quite different from the usual way the plant is represented on head-dresses. At each end there is a little flower like a lily. Thus Birch's theory seems untenable. As to the game of draughts itself, Dr Nelson says that it is depicted in other reliefs in private tombs and has no particular significance otherwise than of portraying the activities of the persons represented, as in the case of the King on the Fortified Gate passing his time quietly among the ladies of his *harēm*. There is no evidence that they were in any way connected with Isis.

We now pass on to the incidents in the story. It is these which form the real clues to the origin or migration of a story.

Several leading Egyptologists of the past century (see, e.g., G. Rawlinson, *History of Herodotus*, 4th edition, 4 vols., 1880, vol. ii, p. 193^{nt}) considered that the story under discussion could not be of Egyptian origin for the following reasons:

- (1) Egyptians did not wear beards.
- (2) The practice of hanging a criminal from a wall to the public gaze was unknown in Egypt.
- (3) The idea of a Pharaoh prostituting his daughter is absurd.

¹ "Rhampsinitus, and the Game of Draughts," *Trans. Roy. Soc. Lit.*, 2nd Ser., vol. ix, 1870, pp. 256-270.

Let us take each of these points in turn.

(1) The note in Rawlinson's *Herodotus*, already referred to, was written by Wilkinson, and shows the results of a too hasty study of the monuments, for although the majority of pure Egyptians were clean-shaven, the custom was not compulsory, and monuments of all periods have revealed men with beards. But in this particular case we are dealing only with police, who were not all natives. They were usually recruited from a Nubian or Sūdānī tribe, called Mazaiu or Matiu by Maspero, and Matchaiu by Budge. All foreigners were exempt from general usages, so there is nothing surprising or un-Egyptian in the police being bearded. Wilkinson quoted the shaving of Joseph before entering the presence of Pharaoh (Gen. xli, 14) as showing it was customary to shave, but to me it rather proves that the lower-class Egyptian troubled little about shaving, and any sudden honour such as being taken before Pharaoh would necessitate shaving. This was, of course, exactly opposite to the customs of Babylon and Assyria, where commoners were clean-shaven and royalty heavily bearded. The veneration of the beard seems not to have been nearly so developed in early Egypt as it was to become in other parts of the East, with the advent of Mohammedanism, although the false beard was worn by a Pharaoh as a symbol of dignity at certain festivals. In the present story, I feel the shaving of the beards was not done so much for insult (as in 1 Chron. xix, 4, etc.), as to show the consummate cleverness of the thief, a *motif* which has an international appeal.

(2) As another proof that the tale is not Egyptian, Wilkinson and other Egyptologists have stated that in a country where social ties were so much regarded, the civil law would not permit such an exhibition as stated to have been held by Rhampsinitus.

It will suffice to quote the well-known case of Amenhetep II, who hung the bodies of seven vanquished chiefs at the bow of his boat, and later exposed them on the walls of Thebes and Napata. (See Budge, *Osiris and the Egyptian Resurrection*, vol. i, p. xxii.) As Maspero says, that which was done by a real Pharaoh may well have been done by the Pharaoh of a romance, even if it was exceptional.

(3) The proceeding of the king in sending his daughter to a public brothel (οἶκον can only have this meaning here, it being most improbable that he would use a "certain room" in the palace for such a purpose, as translated by A. D. Godley in the Loeb Library edition) may seem strange to us, but it must not be dismissed as merely the invention of the *ciceroni*, nor must we believe,

with Wilkinson, that it would be repeated by Greeks just because it gave them particular pleasure to recount such tales about kings and their daughters.

Although our knowledge of the intimate social customs of the Egyptians is as yet very small, there would appear to be sufficient evidence to prove the existence of sacred prostitution in Egypt, at least in Ptolomaic times. In the *Guide to the Cairo Museum* (Cairo, 1903, p. 223), Maspero refers to the *Khenritu* who probably represented the inferior portion of the divine harēm, a sort of body of sacred courtesans similar to those of Phœnicia, Syria and Chaldaea. I deal with the question more fully in the *Essay on Sacred Prostitution*, p. 178 *et seq.*

According to Herodotus (ii, 126), when Cheops was in sore need of money "he prostituted his own daughter in a brothel, and ordered her to extort, they did not say how much; but she exacted a certain sum of money, privately, as much as her father ordered her. . . ."

Apart from the possibility of such occurrences being historical, there are several examples in Egyptian tales of prostitution in order to obtain some desired end.

For instance, in the "Adventure of Satni-Khamois with the Mummies" (Maspero, *Popular Stories of Ancient Egypt*, pp. 137-140), Tsubui invites Satni into her chamber in order to get from him the magical book of Thoth at the cost of her body.

It would appear that among Egypt's neighbours cases of kings' daughters serving as temple prostitutes are definitely known. Thus in discussing sacred prostitution in Babylonia and Assyria, Morris Jastrow (*Civilisation of Babylonia and Assyria*, p. 308) stresses the high standing of the female temple prostitutes and votaries, and says that kings set the example by devoting one of their daughters to the service of the deity. See further his "Bildermappe zur Religion Babyloniens und Assyriens, Nr 26; and Dhorme's article "La fille de Nabonide," in the *Revue d'Assyriologie*, xi, pp. 105-117.

Professor Elliot Smith considered it probable that the story of a king publicly prostituting his daughter is a perversion of the ancient myth of Osiris, the dead king, being seduced by Isis, his own daughter (and wife).

However this may be, the incident of a Pharaoh acting in such a manner must not be dismissed as absurd, and even if such an action has no historical foundation, both Egyptian mythology and folk-tales can supply examples.

Finally, we must consider the point as to whether the Egyptians were accustomed to building secret chambers concealed by movable stones.

It has been said that the movable stone was not an Egyptian invention, and that although the Egyptians built with stones of enormous size, they were quite incapable of constructing one of the kind described by Herodotus. There is overwhelming proof to the contrary. As early as the first quarter of the Christian era Strabo (xvii. 1, 33) displays a thorough knowledge of the concealed entrance to the Great Pyramid. As his text has been so continually wrongly translated we shall consider it in some detail. The text reads:

ἔχει δ' ἐν ὕψει μέσως πῶς τῶν πλευρῶν λίθον ἐξαίρεσιμον.
ἀρθέντος δὲ σύριγξ ἐστὶ σκολιὰ μέχρι τῆς θήκης.

It is translated (for the first time correctly!) by H. L. Jones¹ as follows: "High up, approximately midway between the sides, it has a movable stone, and when this is raised up there is a sloping passage to the vault." The first point to note is that μέσως πῶς goes with τῶν πλευρῶν, not with ἐν ὕψει, and so clearly shows that what Strabo is saying is that an *inconvenient* position was chosen high up, for the sake of secrecy, and that it was *approximately* midway between the edges of one (the north) face of the pyramid. Had it been *exactly* midway the workmen employed in the ninth century by the Caliph Al-Ma'mūn would have been saved a large portion of their 100-feet dig through solid masonry before they struck twenty-four feet east of the central point, and so at last met the original sloping passage. This is clearly shown in the "Horizontal Section of the Great Pyramid . . ." between pp. 138, 139 of R. A. Proctor's *The Great Pyramid*, 1883.

The next point to note is the fact that in order to open the concealed passage the movable stone had to be *raised up*. This is not sufficiently explicit for us to be certain how it worked. Thus it could be either a flap-door that worked on a stone pivot, as reconstructed by Petrie from the door at Dahshūr, or else a flat slab easily tilted up, as explained by Ludwig Borchardt in his article "Der λίθος ἐξαίρεσιμος" (*Zeit. f. Ägyptische Sprache u. Alterthumskunde*, Bd. 35, Leipzig, 1897, pp. 87-89, "Zur Geschichte

¹ *The Geography of Strabo*, Loeb Classical Library, vol. viii, 1932, pp. 91, 93. See also W. M. Flinders Petrie, *The Pyramids and Temples of Gizeh*, 1883, pp. 167-169, with the two bottom diagrams on Plate XI. The door to the Great Pyramid is restored from that of the South Pyramid of Dahshūr—see Petrie, p. 145, sect. 109. It should be noted that on p. 168 he not only inserts μᾶς ("one") into his incorrect translation of Strabo, but gives "foundations" for θήκης when "vault" or "tomb" is its only meaning.

der Pyramiden"). Whichever it was, it apparently successfully fulfilled its function, as no trace of its existence was revealed to the keen eyes of Al-Ma'mūn's Arabs. A similar method was also used for concealing store-rooms, treasuries and hiding-places in temples. Of these by far the most familiar to visitors in Egypt is the Temple of Hathor at Dendera. Here there are no less than twelve secret crypts, the entrances to which are concealed either by stone panels in the walls or stone slabs in the floor. Of these twelve crypts, six are subterranean, while the other six are in the thickness of the walls at the back of the temple. Nine of them are elaborately decorated and have been fully reproduced in the fine works of Auguste Mariette,¹ and, more recently, by Émile Chassinat.² In his *Supplément aux Planches*, 1874 (Plate E), Mariette shows by plans exactly how the movable stone falls into place flush with the wall of the room. In Plates CCCLIX and CCCLX Chassinat gives a fine "close-up" photograph of the opening, both from the crypt and from the room in the Temple. Here the actual thickness of the wall shows the size of movable stone necessary. To-day the opening is closed by a steel door. When exploring all these crypts in 1936 I found that in some cases there was a considerable drop from the level of the floor to the subterranean crypt below. The length of such a drop is seen in Chassinat, Plates CCCXXX, CCCXXXI. It looked to me as if some of the upper steps had been removed in course of time. Of particular interest is the inscription in Crypt No. 3, where it is stated that all possible precautions were taken to prevent the secret openings being known, not only to strangers, but even to the lesser members of the priesthood. Only the prophets of the goddess held the secret, and those who looked for an opening were doomed to disappointment. The large number of the secret chambers or crypts at Dendera, and the fact that most of them were so beautifully sculptured and brightly painted, clearly proves that they were chiefly used for the sacred rites of the goddess Hathor, who was identified with Isis. Some, however, as the inscriptions testify, were treasuries in which were kept not only the temple revenues but all the valuable jewellery and objects of ritual connected with the worship of Hathor.

¹ *Dendérah: description générale du Grand Temple de Cette Ville*, volume of text, Paris, 1880, pp. 222-266; vol. iii (Planches), Paris, 1871, sectional plans, Plates 1-6, mural decorations and inscriptions, Plates 7-83.

² *Le Temple de Dendérah*, vol. i, Le Caire, 1934 Plates XXXVII, XXXVIII (subterranean); vol. v, Deuxième Fasc. Planches, Le Caire, 1947, Plates CCCXVI-CCCXXII (sections). Apart from the Plates mentioned in the text above, see also Plates CCCLVII, CCCXCIII and IV, CCCC, CCCCH and CCCCXIII. For full details of the reliefs and paintings in the crypts see Porter and Moss, *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts*, vol. vi, Oxford, 1939, pp. 81-91.

Hidden crypts and secret rooms are found in many other temples still standing, or partially so, and we may safely conclude that they also existed in many of the hundreds of temples long since destroyed. At Abydos there is a little room¹ behind the chapels in the Temple of Sethos I to which there is no opening whatever, neither door nor window. But as the roof is destroyed it seems highly probable that the only entrance was through a moving stone slab in the floor of the room above. There was also another secret room beneath this one to which no apparent entrance has been discovered. It seems, however, that the two rooms may have formed a double treasury. In her entertaining work on Egyptian temples,² Miss Murray, describes several secret rooms and hidden staircases. At Kom Ombo,³ for instance, the middle chamber of the inner corridor has a movable stone in the floor which, when raised, gives access to an underground passage in the thickness of the wall separating the North and South Sanctuary. "The passage," continues Miss Murray (p. 173), "was connected by an opening in its roof with another passage in the thickness of the same wall; and an opening in the roof of the second passage led to a third passage on a higher level; in other words, there are in the one wall three levels of passages, one above the other, entirely hidden from those in front of the sanctuaries, and of which the secret entrance could have been known only to the priests." At Debōd, ten miles south of Assouan (Aswān), there is a small chamber hidden in the thickness of the wall reached through an opening only large enough to admit a human body. At Kalābsha, twenty miles farther south, the temple walls contain a bewildering number of secret stairs, chapels and crypts. The temples at both Dakka and Abahūda also afford examples of the hidden chamber or treasury.

It is thus abundantly clear that the Egyptians were experts at building secret chambers hidden by movable stones, either in the thickness of a wall or as crypts beneath the apparently solid floor. Herodotus saw Egypt as far south as Assouan, and such secret rooms may well have been pointed out to him by his dragomans—surely a proof positive of the truth of their tale!

Taking all the above evidence as a whole, I can see little to

¹ See Porter and Moss, vol. vi, p. 21. The little room is K' of Mariette (*Abydos*, i, pp. 27-28) and 13 of A. M. Caiverley (*Temple of King Sethos I at Abydos*).

² *Egyptian Temples*, Margaret A. Murray, London [1931], see in the index under "Secret Chambers."

³ See the plan in Porter and Moss, vol. vi, p. 186. The staircase-chamber lies right at the top, off the inner corridor, with three chambers either side. It is Room IV in Baedeker's *Egypt*, 1929, facing p. 375.

support the view that the tale in question is not of Egyptian origin. Gaston Paris, however, in an excellent monograph in the *Revue de l'Histoire des Religions*, vol. lv, 1907, pp. 151 *et seq.*, 267 *et seq.*, does *not* believe in the Egyptian origin of the tale. He looked to the Semitic Orient as the country of origin, and based his theory on the account of the prostitution of the Babylonian women at the temple of Mylitta. But, as Krappe observes, this conclusion is inadmissible since it reposes on the common fallacy of assuming that fiction must inevitably reflect reality, which as a matter of fact it rarely does in tales of this nature.

Professor Maspero would not commit himself too far. He said that if it was not actually invented in Egypt, it had been Egyptianised long before Herodotus wrote it down. The evidence of several of our leading Egyptologists appears to favour its being an Egyptian tale, and I am indebted to them for their valuable opinions. Sir Flinders Petrie considered it to be of late Egyptian origin, with some of its details affected by outside influence. Sir Ernest Wallis Budge said that to him the story *smelt* Egyptian. Professor Griffith could see nothing seriously un-Egyptian in it, while Dr Hall said he has little doubt about its true Egyptian origin.

Classical Versions

In classical Greece there was a story resembling the tale of Rhampsinitus in several points. It concerns the two master-builders, Agamedes and Trophonius. In some accounts Agamedes is described as the stepfather of Trophonius, whose own father was commonly said to be Apollo. In other versions it was Agamedes who was the son of Apollo and Epicaste, while Trophonius was *his* son. The best-known story, however, is that the two were sons of Erginus, King of Orchomenus, and that they built a treasury for Hyrieus, King of Hyria in Boeotia.

Pausanias (ix, 37, 4, 5) tells us that after the Minyae (the original inhabitants of Orchomenus) had been conquered by the Thebans, Erginus made peace with Hercules, and gradually retrieved his former wealth. But in so doing he was overtaken by a wifeless and childless old age. So he consulted the Oracle at Delphi, where the Pythian priestess bade him marry and so "put a new tip to the old plough-tree."

"So he married a young wife, according to the oracle, and had by her Trophonius and Agamedes. But Trophonius is said to have been a son of Apollo, and not of Erginus, and I believe it, and so does everyone who had gone to inquire of the oracle of

Trophonius.¹ It is said that when Trophonius and Agamedes were grown up they became skilful at building sanctuaries for gods and palaces for men; for they built the temple at Delphi [see Pausanias x, 5, 13] for Apollo and the treasury for Hyrieus. In the treasury they contrived that one of the stones could be removed from the outside, and they always kept pilfering the hoard; but Hyrieus was speechless, seeing the keys and all the tokens undisturbed, but the treasures steadily decreasing. Wherefore over the coffers in which were his silver and gold he set traps, or at any rate something that would hold fast anyone who should enter and meddle with the treasures. So when Agamedes entered he was held fast in the snare; but Trophonius cut off his head, lest at day-break his brother should be put to the torture and he himself detected as an accomplice in the crime. The earth yawned and received Trophonius at that point in the grove at Lebadea where is the pit of Agamedes, as it is called, with a monument beside it." (J. G. Frazer's translation, vol. i, p. 490 *et seq.*)

Aristophanes, *Nubes* 508, speaks of the oracle of Trophonius, and the scholiast on the passage, quoting from the historian Charax, gives a version different from that of Pausanias.²

Agamedes, Prince of Stympthalus, had two sons, Trophonius and Cercyon, by his wife Epicaste. Trophonius was born out of wedlock, but Cercyon was legitimate. Now Agamedes and Trophonius were famed for their skill; they built the temple of Apollo at Delphi, and they made a golden treasury for King Augeas at Elis. But they took care to leave a secret entrance into the treasury, by means of which they and Cercyon used to enter and rob the king. Augeas was at a loss what to make of it, but by the advice of Dædalus, who was staying with him, he set traps about his coffers. Agamedes was accordingly caught in one of them, but Trophonius, to prevent recognition, cut off his father's head and escaped with Cercyon to Orchomenus. Hither they were pursued by the messengers of Augeas; so Cercyon fled to Athens and Trophonius to Lebadea, where he made for himself an underground chamber in which he lived. (Frazer, *op. cit.*, vol. v, p. 177.)

For a useful note on the passage see Starkie's edition of the *Clouds*, 1911, pp. 325, 326.

¹ For this see Pausanias ix, 39, 5-14; under "Oraculum" in Smith's *Dictionary of Greek and Roman Antiquities*, vol. ii, 1891, p. 291; and especially under "Trophonios" in Pauly-Wissowa, *Real-encyclopädie* (Gerhard Radke), Stuttgart, 1939.

² See Carolus Müllerus [i.e. Carl Wilhelm Ludwig Müller], *Fragmenta Historicorum Græcorum*, vol. iii, Paris, 1849—"Charax Pergamenus," pp. 636-645. For the version in question, given in Greek and Latin, see p. 637 "E Libro Quarto. 6."

Apart from the mention of Trophonius by Aristophanes, later writings also show the antiquity of mythical tales about these two men. For instance, Plutarch, in his *Consolatio ad Apollonium*, 14, says that Pindar relates of Agamedes and Trophonius that after building the temple at Delphi, they asked Apollo to grant them a reward for their work. He replied that they would have one in seven days, but in the meanwhile they were to go on living freely and indulge their genius. Accordingly they obeyed the dictate, and on the seventh night they died in their beds.

The same legend is also mentioned by Cicero, *Tusc. Disp.*, i, 47, but here the interim is given as only three days.

This curious incident of the sudden death of both brothers at the same moment calls for some explanation, and it would seem that we can find it if we regard Trophonius and Agamedes not merely as brothers, but also as twins. The strange mental sympathy between twin-children often led to a simultaneous death—e.g. Castor and Polydeuces (Lat. Pollux)—the Dioscuri; the Molionides; Calais and Zetes, the sons of Boreas; the Christian Amicus and Amelius; Gervasius and Protasius; Cosmas and Damian, etc. With this hint of the possible twinship of Trophonius and Agamedes it is necessary to see if the story itself provides any more concrete evidence. In the first place one of the brothers is reputed to be the son of a God, the other mortal. So it was with the Dioscuri, the Molionides, Amphion and Zethus, Heracles and Iphikles; the Vedic Ásvins. The birth of twins was always regarded as something so unusual that some explanation of a divine character, quite outside the normal action of mortal man, was the only possible one to account for the phenomenon. As Rendel Harris has shown in his three works on twins,¹ the event was regarded among many primitive peoples with such dread that the twins were often killed and their mother banished for life.

In the second place, as Dr Krappe has pointed out,² many sets of twins were regarded as excellent stone-masons and builders. Examples include Amphion and Zethus, Apollo and Poseidon, Castor and Polydeuces, Romulus and Remus, Florus and Laurus, Thomas and Christ, Cain and Abel, and the Egyptian Horus and Set. As to why so many twins were builders is explained by Krappe as due to the fact that owing to twins being regarded as uncanny by primitive man, it was customary to exile them and their mother to

¹ *The Dioscuri in the Christian Legends*, London, 1903; *The Cult of the Heavenly Twins*, Cambridge, 1906; and *Boanergetes*, Cambridge, 1913. See also the article "Twins" by E. Sidney Hartland, in *Hastings' Ency. Rel. Eth.*, vol. xii, pp. 491-500.

² *Archiv für Religionswissenschaft*, vol. xxx, 1933, p. 232.

desert places or islands, to rid the community by this drastic measure of the baneful influence exercised by them. In time these places of twin exile developed into places of refuge, and the twins themselves were regarded as the founders of these twin cities—the classical example being, of course, ancient Rome. Krappe also shows that our twins are also givers of rain, and heroes of the fertility of the soil—but yet another function of the Heavenly Twins of particular interest to us is the Egyptian twinship of Horus and Set. Here we are dealing with the earliest cult of Set, long before he was the great rival of Horus and the power of evil. Here he is equal in all respects with Heru-ur, *i.e.* "Horus the Elder," and in early mythological scenes the heads of the two gods are set upon a single body.¹ Heru-ur was the god of the sky by day, and Set the god of the sky by night. Even at this early period the opposite attributes of the two are discernible—in time to become personifications of Light and Darkness, Day and Night, Life and Death, Good and Evil, etc.

In an article on "The early colonists of the Mediterranean,"² Dr J. Rendel Harris refers to an early religious hymn addressed to the Sun-god by Horus and Set, who declare themselves to have been the architects of the temples at Luxor and Thebes. As proving that the two gods are both twins and architects, he quotes the following from the hymn in question:

"Set the architect, and Horus the architect, he says: I was a superintendent in thy temple, an architect in thy sanctuary, without error, in the sanctuary which thy beloved son Amenophis III has built for thee (Amon-Ra). My lord had commanded me to carry out thy building; because he knew my vigilance . . .

"Never do I take joy in lying words; my joy is in my brother, who is like to myself in kind; over whose thoughts I have joy; since we came together out of the mother's womb, Set the architect and Horus the architect."

Harris then compares the Egyptian twins with Zethus and Amphion, the builders of Boeotian Thebes, and suggests that in Zethus we really have Set (the Σῆθ of Plutarch).

In that case the Theban twins, Set and Horus, have migrated to the Greek Thebes, and the one city is named after the other, just as the one twin is the transliteration of the other. As Krappe justly remarks, such an introduction into Boeotia must have been by prehistoric Egyptian colonists.

We can conclude, then, that there is considerable justification in

¹ See the Plate facing p. 242 of vol. ii of Budge's *Gods of the Egyptians*.

² *Bull. of the John Rylands Library, Manchester*, vol. x, 1926, p. 342.

regarding Trophonius and Agamedes as twins, and that by doing so many of the textual difficulties disappear.¹

From the above evidence, then, we notice that whereas myths connected with the two master-builders were current in Greece from at least 500 B.C. (Aristophanes' *Nubes* was first produced in 423 B.C.) the incident of the robbery of the treasury as one of their exploits does not appear, as far as we know, till the time of Pausanias (second century A.D.), while the priest and historian Charax Pergamenus post-dates Cæsar and Nero.

All this seems to point to Herodotus as the introducer of the incident into Greece. I cannot see sufficient evidence to justify, in its entirety, the view of K. O. Müller in his *Geschichten hellenischer Stämme und Städte: Orchomenos und die Minyer*, Breslau, vol. i, 1820, p. 94 *et seq.*, where he states that it is very probable that the tradition took its rise among the Minyæ, was transferred from them to King Augeas, and was known in Greece long before the reign of Psammetichus (664-610 B.C.), the Saïte king of the twenty-fifth dynasty, during whose reign intimate relations between Egypt and Greece were opened. His theory or, at any rate, part of it, *may* be correct, but until further evidence is available I am inclined to favour the Egyptian origin of the story.

As both Sir William Halliday (*Folk-Lore*, vol. xxxvii, 1926, p. 199) and Dr A. H. Krappe (*Archiv für Religionswissenschaft*, vol. xxx, 1933, p. 239) take me to task for suggesting that it was Herodotus who introduced the incident of the two master-builders into Greece, it is necessary to consider the point in some detail. Halliday agrees with me that the story is Egyptian in origin, but adds that it must have been known to the Greeks before the time of Herodotus as "there is very good reason for thinking that the version, which has been preserved, was alluded to in the *Telegonia* of Eugammon of Cyrene, the last of the Cyclic poets." For evidence of this he refers us to the article on "Agamedes" in the *Real-encyclopädie der Klassischen Altertums-wissenschaft*. We shall return to this later. Krappe is dealing with the question as to when the story reached Greece from Egypt. He writes as follows:

"Here again scholarly opinion is divided. In the first place K. O. Müller (*Orchomenos*, p. 94) was right in so far as he assumed that the story was current in Greece before the time of the beginning

¹ For a good general article see W. H. Roscher's *Ausführliches Lexikon der Griechischen und Römischen Mythologie*, vol. v, cols. 1265-1278, Leipzig, 1916-1924.

of Greek colonization in Egypt in the reign of Psammetichus I (664-610 B.C.). For it is clearly referred to in an old epic poem [the *Telegonia*] of which we still have some traces."

For evidence of the latter statement he quotes U. v. Wilamowitz-Moellendorff, *Homerische Untersuchungen* in *Philolog. Unters.*, VII (1884), p. 186, and Albert Hartmann, *Untersuchungen über die Sagen vom Tode des Odysseus*, München, 1917, p. 65 ff. (which he had not personally seen). Krappe then continues:

"The silence of Herodotus about it and the legend of the edifying death of the two master-builders do not militate against this view, for Herodotus was not omniscient, and a legend circulated by the Delphian priesthood could well afford to ignore the thieves' story. At all events, the conclusion of Mr Penzer that it was Herodotus who introduced the story into Greece is altogether inadmissible, not only on account of the chronological difficulties referred to above and into which such a theory would lead us, but also because this would be a unique example of migratory legend of recent introduction being attributed, arbitrarily, to one of the legendary figures of prehistoric Greece. The last objection also holds good for the 'Cyreniac' theory of J. Vürtheim (*De Aiakis origine, cultu, patria*, p. 202), who believed that the story had been introduced into Greece from Egypt *via* Cyrene. In other words, I believe K. O. Müller to have been fundamentally right when he considered the story as essentially Minyan, *i.e.* current in prehistoric Boeotia and carried by the Minyans to the Peloponnesos. He was wrong in concluding from this fact that the tale was also of Minyan origin and carried from Greece to Egypt, which is plainly quite a different problem."

If we turn to the article on "Agamedes" by Dr O. Kern in the Pauly-Wissowa *Real-encyclopädie*, as mentioned by Halliday, we read that Eugammon of Cyrene in his *Telegonia* speaks of a krater given as a present by King Polyxenus to Odysseus. It was decorated by reliefs depicting the story of Trophonius, Agamedes and Augeas. This is the total evidence. The Epic Cycle was a series of poems arranged to complete the story of Troy, and dates from about 800 to 550 B.C. It was lost sometime soon after the second century A.D., but an epitome in the *Chrestomathia* of Proclus was preserved in the *Bibliotheca* of Photius. According to him the *Telegonia* completed the *Odyssey* by continuing events to the death of Odysseus by Telegonus, and the marriage of Telegonus and Penelope, and of Telemachus and Circe.

The whole subject is considered in detail in Albert Hartmann's *Untersuchungen über die Sagen vom Tode des Odysseus*, München,

1917. He gives the text of the *Telegonia* passage on p. 64, the reference to the presence of the krater being as follows:

... καὶ ξενίζεται παρά Παλυξένῳ δῶρόν τε λαμβάνει κράτηρα, καὶ ἐπὶ
τούτῳ τὰ περὶ Τροφώνιον καὶ Ἀγαμέδην καὶ Αὔγειαν' . . .

Of considerable interest is the fact that a fragment of a krater found in Samos depicts part of a scene which may possibly be intended for the story of Trophonius and Agamedes. It has been described and reproduced by Boehlau.¹ Unfortunately it is so broken as to afford little idea of the scene represented. To the left of the krater is a nude male figure holding in his hands a large round object with a central boss. He appears to be either placing it on the top of, or removing it from, a building faced with a series of decorated bands of masonry. Below there remains a single column, with a Doric abacus, suggesting a main entrance into the building. Whether some of the decorated bands are really an elaborate entablature is hard to determine. Remains of a border of ducks completes the fragment. If our story is really represented here, it has been suggested that a second figure originally faced the existing one, and the two brothers were depicted as either fixing the movable stone, or removing it.

However this may be interpreted, the evidence of the *Telegonia* passage remains, although, it must be conceded, the mere mention of the names of the brothers gives us no information whatever as to the incidents in the legend current at this early period. Whatever they were, I suggest that by the time of Herodotus they had, at most, a purely local reputation—even if they had not been altogether forgotten. The very fact that Herodotus included the tale at all is surely proof that he imagined that he was bringing it to Greece for the first time.

After careful consideration of Krappe's erudite article I feel that I can only modify my statement, and say that although legends connected with Trophonius and Agamedes existed in Greece early in the seventh century B.C., it is to Herodotus and to him alone that the enormous spread of the Tale of Rhampsinitus was due.

Mediæval Versions

The wave of Oriental story migration in the eleventh, twelfth and thirteenth centuries not only brought Indian, Persian and Arabian tales to Europe, but introduced a form of presentation hitherto

¹ *Aus Ionischen und Italischen Nekropolen* . . ., Leipzig, 1898, pp. 127, 128, with Tafel X, fig. 4. See further Hartmann, *op. cit.*, p. 67.

unknown in the West—the “tale-within-tale” system. Its popularity was due not only to its novelty, but also to the opportunities it offered the story-teller, for he could add and subtract as he thought fit without altering the “frame” of the work in any way. The crusader, the pilgrim and the merchant would, on their return home, relate any stories heard on their travels which had made a strong appeal to their imaginations, and as the stories circulated, the compilers would naturally enough substitute tales from their own stock-in-trade, if they liked them better, or if any tale had become confused and pointless in course of repetition. Thus many an Eastern collection has become greatly altered in the hands of Western editors, translators, and the like, so as to leave little of the Eastern original except the “frame.” The husk would remain, but the kernel would be different. No better example of such alterations could be quoted than those connected with the great cycle of stories known as the *Book of Sindibād*. The collection was so called owing to the tradition that a certain Indian philosopher named Sindibād was its chief character. In all the main Eastern versions the name varies but little: the Syriac is Sindban, the Greek, Syntipas, and the Hebrew, Sendebār. Only eight Eastern versions survive and all have the same “frame” tale. Briefly this is as follows:

A young prince is taught wisdom by his tutor. He learns but slowly, and the tutor realises that some evil star is for the time being in the ascendant. Further investigations show that a fatal seven days is at hand, and accordingly the prince is warned not to speak a word during this period. The king is much concerned at his son's silence, and one of his wives says she will find out the reason. Accordingly she sees him alone, but tempts him to adultery with the promise of the kingdom. He repulses her, and realising her position if he *does* speak, she hastens to the king with the tale that he has attempted to ravish her. The king orders him to be killed, but seven wise men of the court each tell stories to show the wickedness of women. In reply the wife tells counter-stories, and thus the ill-omened period is past. The prince speaks and the queen is executed.¹

Now when the *Book of Sindibād* reached Europe it retained this frame-story, but little else. The title was changed to *The Seven*

¹ Readers will no doubt notice some resemblance between this tale and the story of Adoka and his son Kuṇāla which is a good example of the “women whose love is scorned” motif (see *The Ocean of Story*, vol. ii, p. 120). Benfey was, I believe, the first scholar who drew attention to this (see his *Orient und Occident*, Göttingen, 1866, vol. iii, p. 177).

Wise Masters or *Seven Sages of Rome* and Sindibād himself disappeared.

Research seems to show that from India the work passed to Persia, Arabia, Syria and the Holy Land. Thence it was probably brought to Europe by some crusader who was attracted by the novelty and merit of the tales. Unfortunately the parent Western version is lost, so that we cannot say exactly which of the Eastern versions gave rise to the European version. Evidence is slightly in favour of the Hebrew version, but nothing definite can be said on the point. The date of the parent Western version is probably not later than A.D. 1150.¹

The popularity of the work in Europe was enormous, and at least forty different versions have been preserved. So altered have been the tales in the Western versions that only four have survived from the East. Then again, in the Western versions the sages only tell one story each, and with the queen's counter-stories there are only fifteen, but in the Eastern versions the sages usually tell two stories.

There are several other differences which need not be detailed here. The important point to notice is that the reason of the great difference must be that, whereas the *Book of Sindibād* was written, the *Seven Sages* derived its stories from oral tradition. In fact, the compiler probably never saw an Eastern version.

Now among the tales which found their way into the *Seven Sages* was a version of the tale of Rhampsinitus. It might easily have been brought over from Egypt or Syria by some pilgrim or traveller and become incorporated with the "frame" story of the *Seven Sages*, and owing to its excellence as a good story, would quite naturally be chosen in lieu of many others known to the compiler.

The oldest form in which the Western type is known to us is that bearing the title of *Dolopathos*. It seems very probable, however, that the better-known *Seven Sages of Rome*, MSS. of which date from only a little later than the earliest MS. of *Dolopathos*, preserves more closely the original form of the Western parent version. It was under this form that it acquired its immense popularity. The *Dolopathos* exists in two versions, one in Latin prose by Joannes de Alta Silva, and the other in an old French poem by Herbert.

Silva, whose proper name was Jean de Hautesville, translated the work from the Greek. It was edited by Hermann Oesterley²

¹ See Killis Campbell, *The Seven Sages of Rome*, p. xv. Boston, etc., 1907.

² *Johannis de Alta Silva Dolopathos, vive de Rege et Septem Sapientibus*, Strassburg, 873. See pp. 45-51.

in 1873, and by Alfons Hilka¹ in 1912, and contains the "Gaza"² or "treasure" story as its second tale. This version is very curious as containing numerous details which are found nowhere else.

The lack of any motive for the treasurer turning thief, or making his sons thieves, must have struck the compiler, for at the beginning of the story we are told that the father had been driven to steal owing to the reckless extravagance of his son. After the theft has been detected, the king, on the advice of a blind old man who is an ex-thief himself, burns a pile of green grass in the treasury. Then, having closed the door, he walks round the building and notices smoke issuing from between the stones where the entrance had been made. The incident found its way into several variants, while in others the king shuts himself in the treasury and observes if any light comes in through the walls. The tricks of the thief in the *Dolopathos* version are elaborate. He first escapes by stabbing himself, then by stating that a child belonging to his family, who has been discovered crying, is only crying for its mother. But the method by which he retrieves his father's body is very curious. The blind old man tells the king to get forty men to guard the body, twenty in black armour on black horses, and twenty in white armour on white horses. It will then be impossible for any stranger to make his way unperceived to the body. The thief, however, is not to be put off so easily.

"At vero fur ille suum patrisque obprobrium ferre non volens, malensque semel mori, quam diu infelicitate vivere, deliberavit in animo, quod aut patrem turpi ludibrio subtraheret, aut ipse cum eo pariter moreretur. Subtili ergo ingenio arma partita fabricat, tota scilicet ab una parte alba, et nigra ab altera, quibus armatus equum hinc albo, inde nigro panno opertum ascendit. Sicque lucente luna per medios transit milites, ut nigra pars armorum eius viginti albos deluderet et alba pars deciperet nigros, putarentque nigri unum esse ex albis, et albi unum ex nigris fore. Sic ergo pertransiens venit ad patrem depositumque a ligno asportavit. Facto autem mane milites videntes furem furtim sublatum sibi confusi redierunt ad regem, narrantes, quomodo eos miles albis nigrisque armis pertitus³ decepisset. Desperans

¹ *Historia Septem Sapientum*, II. Heidelberg, 1912. See pp. 49-56.

² The stories in the Western group are now always known by their Latin names: *canis*, *gaza*, *senes*, *creditor*, etc. They were first applied by Karl Goedeke, *Orient und Occident*, Göttingen, 1866, vol. III, pp. 422, 423.

³ Hilka reads *partitis*, which is obviously correct.

ergo iam rex posse recuperari perdita et furem et thesaurum
cessavit querere."

(H. Oesterley, *op. cit.*, p. 51.)

At this point the Latin version ends, but the French version of Herbert adds other incidents which were copied largely in subsequent variants.¹

After the corpse has been recovered, the thief lies with the princess, who marks him with coloured dye for future identification. The following short extract will give some idea of the style of the Old French:

"La pucele nul mot ne dit
Que ces pères l'ot contredit,
Qui la boiste li ot donnée
Où la coulour fu destremprée,
Et² ce li dist k'ele féist³
Tout ce ke cil li requéist
Tant k'el' front l'eüst bien seignié,
Einsi com li ot enseignié.
La pucele s'en entremist,
Et tele enseigne el' front li mist
Que bien pot estre conéuz.
Cil ne s'en est apercéuz;
Tant i demora longuement
Qu'il s'en departi liément;
A son ostel revint arrière;
Biau semblant fist et bele chiére."

(*Li Romans de Dolopathos*, Charles
Brunet et Anatole de Montaiglon,
Bib. Elzevirienne, Paris, 1856, pp.
215, 216.)

He marks everyone else and escapes detection. Then follows the incident of a child being employed to pick him out from a crowd by giving the "wanted" man a knife. He manages, however, to give the child a bird previously, and so the knife is looked upon as being merely a return gift. Finally he marries the princess.

¹ These two versions of *Dolopathos* have not been sufficiently distinguished by Campbell and other authors on the subject.

² Si.

³ Qu'il reféist.

The *Dolopathos* agrees with the *Book of Sindibād* in that there is only one instructor. His name, however, is changed to Virgil. It preserves only one story from the Eastern version, but four stories (including *gaza*) which also occur in the *Seven Sages*. This fact seems to indicate that Silva was acquainted with some version of the latter. The contention that the work was derived from oral tradition is borne out by Silva's own statement that he wrote "non ut visa, sed ut audita." The Herbert version was made from the above somewhere about 1223, and was edited by Brunet and Montaiglon in 1856 under the title *Li Romans di Dolopathos*. It is very long, being over 12,000 lines, and is written in the octo-syllabic couplet.

For further details reference should be made to G. Paris, *Deux Rédactions du Roman des Sept Sages de Rome*, Paris, 1876; and to the work by Campbell already mentioned.

We now come to the *Seven Sages of Rome*, of which versions exist in nearly every European language. The earliest ones known are in French and must date from about 1150, which, as we have already seen, is the latest date of the Western parent version.

The usual number of stories is fifteen, and the scene of action is laid in Rome. The names of the Emperor, Prince and Sages vary considerably, but this is of no importance in our inquiry. The best work on the whole subject is still that by Gaston Paris mentioned above.

The treasury story is nearly always the fifth, but in two versions it forms the ninth, and in one version the eleventh story.

It is told much more simply than in *Dolopathos*, and only one trick is employed—the wounding of the thief in order to account for his mother's (or her children's) weeping.

In one of the nine Middle English versions¹ (Cambridge University, MS. Dd. I, 17 (III), f. 54) the tale ends abruptly after the weeping incident.

As an example of the language and style of these versions I will quote from the so-called Cotton Galba E. ix MS., following the edition by Campbell, *Seven Sages of Rome*, pp. 45-49.

The tale is told of Octavian. He had "klerkes twa." One was

¹ K. Campbell, *Study of the Romance of the Seven Sages with Special Reference to the Middle English Versions*, Baltimore, 1898, p. 42. For a more recent study of the English versions see Karl Brunner, *The Seven Sages of Rome (Southern Version)*, Early English Text Society, Orig. Ser. No. 191, London, 1933. This deals with the five following MSS.: the "Auchinleck" of the Nat. Lib. of Scotland; Arundel 140 and Egerton 1995 of the British Museum; Ff. II, 38, f. 134, of the University Library, Cambridge; and 354 of Balliol Col. Lib., Oxford. The "Gaza" story, with variants from the different MSS., is on pp. 49-59.

liberal, but the other was a miser. Octavian chooses the miser to guard his treasures (there is no question of his *building* the treasury), but before long, with his son's help, the liberal man digs a tunnel and removes a portion of the gold, filling in the hole with the stone. On discovering the loss, the miser digs a trench and fills it with tar and pitch, "ter *and* pik."

The story then continues (line 1,363):

"Al had þai spendeð sone sertayn;
 þe fader *and* þe son wendeð ogayn.
 Bitwene þam toke þai out þe stane;
 þe fader crepis in sone onane,¹
And down he fals in ter *and* pik,—
 Wit 3e wele, þat was ful wik.²
 Loud he cried *and* said 'Allas!'
 His son askes him how it was.
 He said: 'I stand vp til þe chin
 In pik, þat I mun³ neuer out win.'
 'Allas,' said þe son, 'what sal I do?'
 He said: 'Tak my swerd þe vnto,
And smite my heuid fra my body.'
 þe son said, 'Nai, sir, sekerly⁴;
 Are⁵ I sold myseluen sla.'
 'Son,' he said, 'it most be swa,
 Or else þou *and* al þi kyn
 Mun be shent,⁶ bath mare *and* myn⁷;
And if mi heuid be smeten oway,
 Na word sal men of me say.
 parfore, son, for mi benisown,⁸
 Smite of my heuid, *and* wend to town,
And hide it in som preue⁹ pit,
 So þat na man mai knaw it.'
 His fader heuid of smate he þare,
And forth with him oway it bare.
 Wele he thought it for to hide,
 For shame þat efter might bitide;
 For if men wist, it wald be wer,¹⁰
And lath¹¹ him was to bere it fer.
 Als he went biside a gang,¹²
 Into þe pit þe heuid he slang.

¹ At once.

⁴ Certainly.

⁷ Of greater and lesser importance.

¹⁰ Worse.

² Wicked.

⁵ Sooner.

⁸ Blessing.

¹¹ Averse.

³ Shall.

⁶ Disgraced.

⁹ Secret.

¹² Privy.

þan went he hame wightli¹ *and* sone,
And tald his moder how he had done.
 þe whif weped, so was her wa;
 So did his breþer *and* sisters als wa.
 On þe morn þe senatoure
 Went arly vnto þe toure;
 In þe pit he findes a hedles man,
 Bot knaw him for nothin[g] he can.
 He kowth noght ken þan his felaw
 pat he wont ful wele to knaw.
 He gert haue of þe pik bidene,²
And wass þe body faire *and* clene.
 He loked byfore þan *and* bihind;
 Knowlageing³ kowth he none find.
 þan gert⁴ he bring twa stalworth hors,
And bad þam draw þe hedeles cors;
And whoso þai saw sorow make,
 He bad biliue⁵ þai sold þam take,
And at⁶ þai war to preson led,
 For þai er al his awin kinred.
 pat hedles body by þe fete
 Was drawen in Rome thorgh ilka⁷ strete,
 Vntil þai come bifor þe dore
 Where þe ded man wond⁸ bifore;
 þare þai murned *and* made il chere,
 Whif and childer, al in fere.⁹
 þe seriantes toke þarto gude kepe,
 þam for to tak þat þai saw wepe.
 þe childer þan war sare adred;
 'Allas,' þai said, 'now er we ded!'
 þe son, þat wist of al þe care,
 Hirst himseluen wonder sare;
 He smate himseluen in þe cheke;
 þaire sorrow sone so gan þai eke.
 þai tald to þam þat wald þam take,
 þat þai wepid for þaire broþer sake.
 þai shewed þe wonde of þaire broþer,
And said þai wepid for nane oper.
 þe seriantes saw þe wound sertain;
 þai trowed þam wele *and* turned ogain."

¹ Quickly.⁴ Caused.⁷ Every.² Immediately.⁵ Quickly.⁸ Dwelt.³ Means of identifying.⁶ That.⁹ Together.

Apart from the nine Middle English versions already mentioned, there are numerous other versions of the *Seven Sages* which contain the story of the king's treasury.

Although, even if space permitted, there is no need to discuss them here,¹ mention must be made of the largest group of all—that of which the Latin *Historia Septem Sapientum* is the type. It was from a version of this group that the English translation, printed by Wynkyn de Worde (1520),² was made, and from it were derived the metrical version of Rolland,³ the Copland edition (now lost), and numerous other English versions, chiefly bearing the title of *The Seven Wise Masters*.

The *Historia* became very popular in Europe and is found in nearly every language, including Icelandic and Armenian. A new version of the latter was published with a posthumous introduction by Chauvin.⁴

With at least forty versions of *The Seven Sages* penetrating to every part of Europe, it is not surprising to find the story of the treasury appearing in all parts of the world.

Ali Baba and the Forty Thieves

It has long since been pointed out⁵ that the well-loved tale of *Ali Baba* contains several incidents which occur in the Egyptian story of Rhampsinitus. From the variants of the Herodotus story, especially the *Dolopathos* group, "improvements," such as marking the culprit with chalk, have crept in, and so by the time *Ali Baba* had assumed the form so familiar to us it had become a first rate story. It is, therefore, of interest to know something of its origin. Unfortunately, however, this is no easy matter. There has always been a mystery connected with its history, and it was even suspected by some that Galland made it up himself. Briefly, the facts are

¹ These have been fully dealt with by G. Paris in his *Deux Rédactions*, where he classifies under eight different headings. See also Campbell, *op. cit.*, pp. xxii, xxiii.

² *History of the Seven Wise Masters of Rome*, edited by G. L. Gomme. Villon Society, London, 1885.

³ *The seven Seages: Translatit out of prois in Scottis meter be Iohne Rolland in Dalkeith*. 1578 [1560]. Reprinted by D. Laing for the Bannatyne Club, Edinburgh, 1837 (*The Seven Sages in Scottish Metre*).

⁴ *La Version Arménienne de L'Histoire des Sept Sages de Rome*. Mise en Français par F. Macler. Introduced by Chauvin. Paris, 1919.

⁵ J. W. Thomas, "Arabian Tales and their Sources," *Notes and Queries*, 8th April, 1854, 1st Ser., vol. ix, pp. 319, 320; W. A. Clouston, *Popular Tales and Fictions*, Edinburgh, 1887, vol. ii, p. 160; *idem.*, in Burton's *Supplemental Nights to the Book of the Thousand Nights and a Night*, Benares, 1887, vol. iii (vol. iv of the seventeen-volume reprint), pp. 390-395 and 650, 651; and J. P. Lewis, "Note on the Story of Rhampsinitus," *Orientalist*, Bombay, 1888-1889, vol. iii, pp. 148, 149.

as follows. In his *Journal* for 27th May, 1709, Galland had entered an abstract of *Ali Baba* as told him by Hanna, a Maronite of Aleppo, whom he had met at the house of Paul Lucas, the oriental traveller. The story was ready for publication by the middle of 1712, but for some reason or other was not published until 1717 when it appeared in vol. xi of Galland's *Les Mille et Une Nuit*, i.e. at least two years after his death.

It at once became a popular favourite, and as no Arabic version could be found every effort was made to discover one in the MS. collections of the world's leading libraries. Like many other orientalist, Sir R. F. Burton firmly believed in the genuineness of the tale although all his efforts to find an original failed. It fell to the lot of my valued friend and correspondent, the late Dr Duncan B. Macdonald, to "discover" it safe and sound in the Bodleian, where it had laid awaiting recognition since 1860 when it had been bought in Paris for 8s.¹ This unexpected find occurred in 1908, and Macdonald duly recorded the discovery both in America and England.² As far as can be determined the recension is comparatively modern,³ the suggestion being that there existed in Syrian Arabic a folk-tale of *Ali Baba*, presumably with Turkish and Slavonic affiliations. It was then worked over into what was considered elegant form and literary Arabic—the result being what we find in the Bodleian MS. As is clear from a comparison of the text of Galland's diary³ with the resulting tale as printed in 1717, he must have had access to some other written source—but what that source was, and what relation it bore to the Bodleian version, is quite unknown.

The one thing we can be certain of is that *Ali Baba* never formed part of the *Arabian Nights*, but enjoyed a separate existence of its own—doubtless a *chef d'œuvre* of the story-teller's stock-in-trade, certain to attract an appreciative and thrilled audience in the *sūks* from Cairo to Aleppo.

As has already been mentioned, the somewhat unpleasant and "messy" incident of the severed arm in the Rhampsinitus tale was soon changed to the much better and more convenient "marking the culprit" *motif*, which was destined to have a well-deserved

¹ "The Arabic MS. of *Ali Baba*," *The Nation*, New York, 8th October, 1908, p. 335; "Ali Baba and the Forty Thieves in Arabic from a Bodleian MS," *Journ. Roy. As. Soc.*, 1910, pp. 327-386. The number of the MS. is "Bodl. Orient. 633."

² The Keeper of Oriental Books at the Bodleian tells me that the appearance of the paper, ink, style of writing, and the fact that the MS. throughout looks as if it had been written with a steel pen, all point to a date not much before the 'thirties of the nineteenth century.

³ Printed by Macdonald in *Journ. Roy. As. Soc.*, 1913, pp. 41-47, from the Bib. Nat., MS. fr. 19277, p. 140.

popularity.¹ The famous "Open Sesame!" *motif* remained in most modern variants, but underwent strange and amusing transformations.² Other changes, such as the fatal mistake being due not to forgetting the magical words but to miscounting the number of robbers, are found in a modern Egyptian version.³

But to return to the *Ali Baba* of Galland and the Bodleian MS., a close comparison with the tale of Rhampsinitus will, I suggest, show that there is not merely a resemblance of incident, but also an identity of structure—and this is the important thing to look for in tracing variants.

In order to simplify comparison we cannot do better than follow the side-by-side arrangement of the incidents as given by Thomas in the article in *Notes and Queries* already mentioned.

The Egyptian Tale

- (1) The King constructs a stone edifice for the security of his vast riches.
- (2) In the wall of this treasury is a stone so artfully disposed that a single person can move it, so as to enter and retreat without leaving any trace of his having done so.
- (3) Two brothers become acquainted with the secret opening into the treasury, and enter it for the purpose of enriching themselves.

The Arabian Tale

- (1) In a rock so steep and craggy that none can scale it, a cave has been hewn out, in which the robbers deposit their prodigious wealth.
- (2) In this rock is a door which opens into the cave, by means of two magical words, "Open Sesame," and closes again in like manner by pronouncing the words "Shut Sesame."
- (3) Two brothers become acquainted with the door of the cave, and the means of opening and shutting it; and they enter it for the purpose of enriching themselves.

¹ See Stith Thompson's *Motif-Index of Folk-Literature*, K.415, and the various other references given later on p. 117.

² W. R. Halliday, *Indo-European Folk-Tales and Greek Legends*, Cambridge, 1933, pp. 35 and 38; and see his Foreword, p. xxiv to vol. viii of *The Ocean of Story*.

³ A. H. Sayce, "Cairene and Upper Egyptian Folk-Lore," *Tale XIV, Folk-Lore*, vol. xxxi, 1920, pp. 187-197, and cf. Halliday's notes on pp. 321-323 of the same volume. For a modern Greek version see H. C. Coote, "Folk-Lore the Source of some of M. Galland's Tales," *Folk-Lore Record*, vol. iii, pt. ii, 1881, pp. 185, 186, and cf. the further tale on pp. 187, 188. The tales came from Sakellarios' *Kypriaca*, the title of the first being "The Story of Three Eyes." See further R. M. Dawkins, *Forty-five Stories from the Dodekanese*, 1950, p. 103n⁴.

The Egyptian Tale

- (4) One of the brothers becomes rich by abstracting large sums of money from the royal treasury.
- (5) The other brother is caught in the snare which the King had laid within the treasury, for the detection and apprehension of the intruders.
- (6) At his own request the brother thus caught is beheaded by the other to avoid recognition, and to secure the escape of one. The dead body is hung from the wall of the treasury for the purpose of discovering his accomplice.
- (7) The surviving brother, at his mother's earnest request, carries off the dead body, and brings it home on the back of one of his asses.
- (8) The King, unable to ascertain how his treasury had been entered, is enraged at the removal of the body, and alarmed at finding that someone who possesses the secret still survives.
- (9) The King has recourse to stratagem, for the purpose of detecting the depredator, but without success.
- (10) The surviving brother baffles the King's first attempt to detect him, by means of

The Arabian Tale

- (4) Ali Baba, one of the two brothers, becomes rich by carrying off a great quantity of gold coin from the robbers' cave.
- (5) Cassim, the other brother, is caught as in a snare, by forgetting, when in the cave, the magical words by which alone an exit could be obtained.
- (6) Cassim, in his attempt to escape, is killed by the robbers, and his dead body is quartered, and hung up within the door of the cave, to deter any who might be his accomplices.
- (7) Ali Baba, at the instance of Cassim's widow, carries off his remains from the cave, and brings them home on the back of one of his asses.
- (8) The robbers, unable to guess how their cave has been entered, are alarmed at the removal of Cassim's remains, which proves to them that someone who possesses the secret still survives.
- (9) The robbers have recourse to stratagem, for the purpose of discovering the depredator, but without success.
- (10) Ali Baba, assisted by his female slave, baffles the robber captain's first at-

The Egyptian Tale

some asses, which, in the character of a wine-seller he had loaded with wine-flasks, making the King's guards drunk, and leaving them all fast asleep.

- (11) In the darkness of the night, the surviving brother tells the King's daughter, whom her father had employed to detect him, the story of his exploits in baffling the guards and carrying off the body of his brother.

- (12) The King's daughter attempts to seize the brother, but he baffles her by leaving in her hand a dead arm instead of his own—[the identifying by marking with chalk is introduced in the *Dolopathos* versions].

- (13) The King, who admires the audacity and ingenuity of the surviving brother, offers him, by proclamation, pardon and reward; and, on his coming forward, gives him his daughter in marriage.

The Arabian Tale

tempt upon him, by means of some oil in a jar, his men being concealed in the other jars, with which the captain, in the character of an oil-merchant, had loaded some asses: thus the latter, who thought his men asleep, finds them all dead.

- (11) In the dusk of the evening, Baba Mustapha relates to the two robbers in succession, who had been employed to detect Ali Baba, the story of his having sewed a dead body together; and, blindfold, himself conducts each of them to Ali Baba's door.

- (12) The two robbers successively mark the house of Ali Baba with chalk, but his female slave baffles them by putting a similar mark on the other houses, in consequence of which they are put to death instead of her master.

- (13) Ali Baba, saved from the robber captain's designs by the courage and ingenuity of Morgiana, his female slave, gives her freedom, and marries her to his son.

Readers can now judge for themselves what debt *Ali Baba* owes to Rhampsinitus, and whether or not there is an identity of structure common to the two tales.

Chauvin¹ gives useful references to the main *motifs* and variants of both tales.

¹ *Bib. des Ouvrages Arabes*, v, 79-84, and viii, 185, 6. See also Stith Thompson, *op. cit.*, *motifs* K.312, J.1141, 6, D.1552.2, N.455.3 and F.721.4.

Modern Versions

Several attempts have been made to enumerate all the modern versions of the tale of Rhampsinitus.

A list of the chief references is given by Chauvin, *op. cit.*, viii, pp. 185, 186.

In his edition of Pausanias' *Description of Greece*, vol. v, pp. 176-179, J. G. Frazer gives a list of twenty-eight variants. A much fuller list (of forty-one variants) appears in Campbell's *Seven Sages of Rome*, pp. lxxxvi, lxxxvii.

The latest, and, as yet, by far the most comprehensive bibliography, however, is that by Bolte and Polívka in their *Anmerkungen zu den Kinder- und Hausmärchen der Brüder Grimm*, vol. iii, pp. 395-406. It should be consulted in conjunction with their vol. v, 1932, where the references are given in greater detail, the bibliographies arranged topographically, an index of folk-motifs added, etc. The languages in which our story is found in one form or another include: English, Irish, Scotch, French, Danish, Norwegian, Swedish-Finnish, Finnish, Icelandic, Lettish, Polish, Czech, Gypsy, Italian, Portuguese, Dutch, numerous German and Austrian dialects, Greek, Armenian, Tartar, Roumanian, Serbian, Bulgarian, Russian, Hungarian, Arabic, Berber, Tibetan, etc. Précis of several of these are given by Clouston, *Popular Tales and Fictions*, vol. ii, pp. 121-165. See also his *Book of Sindibād*, pp. 330-332.

I shall here give selections from one or two versions from different countries which will illustrate the effect of local environment on the story and show the introduction of fresh incidents.

First I select the story as told by Ser Giovanni in his *Il Pecorone*, Day IX, Nov. 1. The exact date of this work and the true identity of the author have not yet been determined. The date given in the book itself in an introductory verse is 1378, but scholars consider the work is probably early fifteenth century.

A translation appeared in Painter's *Palace of Pleasure*, I, No. xlviii, edited by J. Jacobs, II, p. 8 *et seq.*, London, 1890 (see Bolte and Polívka, vol. iii, p. 399ⁿ¹).

The following extract is taken from the English translation by W. G. Waters, London, 1897, p. 102 *et seq.* A précis will suffice for the introductory part:

A certain Florentine master-builder, named Bindo, undertakes to repair the campanile at Venice. So well does he do the work

that the Doge gives him an order to build a palace containing a treasury. This Bindo does, but secretly builds a moving stone into one of the treasury walls.

By this time Bindo and his family have moved to Venice, and his son, Ricciardo, becomes so extravagant that Bindo is forced to have resource to the treasury. He tells his son about the secret entrance and together they make their way into the treasury, and remove a valuable golden cup.

The loss would not have been noticed had not a cardinal paid the Doge a visit, in whose honour the gold plate was to be used. The chamberlains, in whose keeping were the keys of the treasury, can find no explanation of the mystery. Grass is burnt in the treasury and the smoke reveals the loose stone. The Doge bids all keep silent and places a cauldron of boiling pitch just under the entrance. Bindo and his son soon call again, and the father is caught in the pitch. Ricciardo weeps bitterly when Bindo bids him cut off his head, but he finally does so.

The body is dragged through the streets and Bindo's wife cries out with grief and Ricciardo only escapes by stabbing himself with a dagger and saying his mother is weeping at the sight of his wound.

The body is now hung publicly in the piazza. Once again the mother weeps, demanding that Bindo's body be taken down and properly buried.

At this point fresh incidents are introduced which are of considerable interest.

The tale then continues:

"When the young man perceived that his mother was minded to do this thing, he began to deliberate how he might best rescue from the gibbet his father's body. He procured twelve black hoods of the sort worn by friars; next he went out one night to the harbour, and brought back with him twelve porters, whom he made enter the house by the door behind, and then he took them into a small room where he gave them to eat and drink all they could desire. And as soon as these fellows were well filled with wine, he made them dress themselves in the monks' hoods, and put on certain masks made in hideous imitation of the human face. Then he gave each one of them a torch of lighted fire to bear in his hand, and thus they all seemed to be veritable demons of the pit, so well were they disguised by the masks they wore. And he himself leapt upon a horse, which was covered all over with black housings, the cloth thereof being all studded with hooks, to every one of which

was fastened a lighted candle. Then having donned a mask, wrought in very wonderful fashion, he put himself at the head of his band, and said to them: 'Now every one of you must do what I do.' And in this wise they took their way to the piazza, where the body was exposed on the gibbet; and when they arrived there they all set themselves to run about the piazza, now here, and now there, the hour being well past midnight, and the night very dark.

"When the guards saw what strange thing had come to pass, they were all seized with dread, and fancied that the forms they espied must be those of devils from hell, and that he who sat upon the horse in such guise must be no other than great Lucifer himself. Wherefore, when they saw him making his way towards the gibbet, they all took to their heels through fright, while the young man seized the body and placed it in front of him upon the saddle-bow. Then he drove before him his troop, and took them back with him to his house. After he had given them a certain sum of money, and taken away from them the friars' hoods, he dismissed them, and then went and buried the corpse in the earth as privily as he could.

"The following morning the news was taken to the Doge how the body aforesaid had been snatched away; whereupon he sent for the guards and demanded to know from them how the corpse could have been stolen. The guards said to him: 'Signor, it is the truth that last night, after midnight had struck, there came into the piazza a great company of devils, amongst whom we distinctly saw the great Lucifer himself, and we believe that he seized and devoured the body. On this account we all took to flight when we saw this great troop of devils coming against us to carry off the body.' The Doge saw clearly that this theft had been done by some crafty dealing, and now set his wits to work to contrive how he might find out the one who had done it; so he called together his secret council, and they determined to let publish a decree that for the next twenty days it should not be lawful for anyone to sell fresh meat in Venice, and the decree was issued accordingly, and all the people were greatly astonished as what the Doge had commanded to be done.

"But during this time he caused to be slaughtered a very delicate suckling calf, and ordered it to be offered for sale at a florin a pound, charging the man who was to sell the same that he should consider well all those who might come to buy the meat. He deliberated with himself and said: 'As a rule the thief is bound to be a glutton as well; therefore this fellow will not be able to keep himself long

from coming for some of this meat, and it will never irk him to spend a florin for a pound thereof.

"Then he made a proclamation setting forth that whosoever might desire any of the meat must come for it into the piazza. All the merchants and the gentlefolk of the city came to buy some of it, but not one of them deemed it to be worth a florin a pound, wherefore no one bought any of it. The news of what was being done was spread through all the place, and it soon came to the ears of the mother of the young man Ricciardo. As soon as she heard it she said to her son: 'In sooth I feel very great longing for a piece of this veal.' Then Ricciardo answered and said: 'Mother, be not in too great a hurry, and let some others take the first cut therefrom. Then I will see that you get some of the veal; but I do not desire to be the one who shall take the first portion.'

"But his mother, like the foolish woman she was, kept on begging him to do her will, and the son, out of fear lest she might send someone else to purchase the meat, bade her make a pie, and himself took a bottle of wine and mixed in the same certain narcotic drugs; and then when night had fallen he took some loaves of bread, and the pie, and the wine aforesaid, and, having disguised himself in a beard and a large cloak, he went to the stall where the carcass of the calf, which was still entire, was exposed for sale.

"After he had knocked, one of those who were on the watch cried out: 'Who is there, and what is your name?' Whereupon Ricciardo answered: 'Can you tell me where I shall find the stall of a certain one named Ventura?' The other replied: 'What Ventura is it you seek?' Ricciardo said: 'In sooth I know not what his surname may be, for, as ill luck will have it, I have never yet come across him.' Then the watchman went on to say: 'But who is it who sends you to him?' 'It is his wife,' answered Ricciardo, 'who sends me, having given me certain things to take to him in order that he may sup. But I beg you to do me a service, and this is, to take charge of these things for a little, while I go back home to inform myself better where he lives. There is no reason why you should be surprised that I am ignorant of this thing, forasmuch as it is yet but a short time since I came to abide in this place.'

"With these words he left in their keeping the pie, and the bread, and the wine, and made pretence of going away, saying: 'I will be back in a very short time.' The guards took charge of the things, and then one of them said: 'See the Ventura¹ that has come to us this evening'; and then he put the bottle of wine to his mouth, and drank and passed it on to his neighbour, saying: 'Take some of

¹ *I.e.* "Good Fortune."

this, for you never drank better wine in all your life." His companions took a draught, and as they sat talking over this adventure, they all of them fell asleep.

"All this time Ricciardo had been standing at a crevice of the door, and when he saw that the guards were asleep he straightway entered, and took hold of the carcass of the calf, and carried it, entire as it was, back to his house, and spake thus to his mother: 'Now you can cut as much veal as you like and as often as you like'; whereupon his mother cooked a portion of the meat in a large broth-pot.

"The Doge, as soon as they had let him know how the carcass of the calf had been stolen, and the trick which had been used in compassing the theft, was mightily astonished, and was seized with a desire to learn who this thief might be. Therefore he caused to be brought to him a hundred poor beggars, and after he had taken the names of each one of them he said: 'Now go and call at all the houses in Venice, and make a show of asking for alms, and be sure to keep a careful watch the while to see whether in any house there are signs of flesh being cooked, or a broth-pot over the fire. If you shall find this, do not fail to use such importunity that the people of the house shall give you to eat either of the meat or of the broth, and hasten at once to bring word to me, and whosoever shall bring me this news shall get twenty florins reward.'

"Thereupon the hundred scurvy beggars spread themselves abroad through all the streets of Venice, asking for alms, and one of them happened to go into the house of Ricciardo; and, having gone up the stairs, he saw plain before his eyes the meat which was being cooked, and begged the mother in God's name to give him somewhat of the same, and she, foolish as she was, and deeming that she had enough of meat and to spare, gave him a morsel. The fellow thanked her and said: 'I will pray to God for your sake,' and then made his way down the stairs. There he met with Ricciardo, who, when he saw the bit of meat in the beggar's hand, said to him: 'Come up with me, and then I will give you some more.' The beggar forthwith went upstairs with Ricciardo, who took him into the chamber and there smote him over the head with an axe. As soon as the beggar was dead, Ricciardo threw his body down through the jakes and locked the door.

"When evening was come all the beggars returned to the Doge's presence, as they had promised, and every one of them told how he had failed to find anything. The Doge caused the tale of the beggars to be taken, and called over the names of them; whereupon he found that one of them was lacking. This threw him into

astonishment; but after he had pondered over the affair, he said: 'Of a surety this missing man has been killed.' He called together his council and spake thus: 'In truth it is no more than seemly that I should know who may have done this deed'; and then a certain one of the council gave his advice in these words: 'Signor, you have tried to fathom this mystery by an appeal to the sin of gluttony; make a trial now by appealing to the sin of lechery.' The Doge replied: 'Let him who knows of a better scheme than this, speak at once.'

"Thereupon the Doge sought out twenty-five of the young men of the city, the most mischievous and the most crafty that were to be found, and those whom he held most in suspicion, and amongst them was numbered Ricciardo. And when these young men found that they were to be kept and entertained in the palace they were all filled with wonder, saying to each other: 'What does the Doge mean by maintaining us in this fashion?' Afterwards the Doge caused to be prepared in a room of the palace twenty-five beds, one for every one of the twenty-five youths aforesaid. And next there was got ready in the middle of the same room a sumptuous bed in which the Doge's own daughter, a young woman of the most radiant beauty, was wont to sleep. And every evening, when all those young men had gone to rest, the waiting-woman came and conducted the Doge's daughter to the bed aforesaid. Her father, meantime, had given to her a basin full of black dye, and had said to her: 'If it should happen that any of these young men should come to bed to you, see that you mark his face with the dye so that you may know him again.'

"All the young men were greatly astonished at what the Doge had caused to be done, but not one of them had hardihood enough to go to the damsel, each one saying to himself: 'Of a surety this is nothing but some trick or other.'

"Now on a certain night Ricciardo became conscious of a great desire to go to the damsel. It was already past midnight, and all the lights were extinguished; and Ricciardo, being quite mastered by his lustful desire, got out of his bed very softly and went to the bed where the damsel lay. Then he gently went in to her, and began to embrace and kiss her. The damsel was awakened by this, and forthwith dipped her finger into the bowl of dye, and marked therewith the face of Ricciardo, who perceived not what she had done. Then, when he had done what he had come to do and had taken the pleasure he desired, he went back to his own bed, and began to think: 'What can be the meaning of this? What trick may this be?'

"And after a short time had passed he bethought him how pleasant was the fare he had just tasted, and again there came upon him the desire to go back to the damsel, which he did straightway. The damsel, feeling the young man about her once more, roused herself and again stained and marked him on the face. But this time Ricciardo perceived what she had done, and took away with him the bowl of dye which stood at the head of the bed in which the damsel lay. Then he went round the room on all sides, and marked with dye the faces of all the other young men that lay in their beds so softly that no one perceived what he was doing; and to some he gave two streaks, and to some six, and to some ten, and to himself he gave four over and above those two with which the damsel herself had marked him. Having done this he replaced the bowl at the head of her bed, and gathered her with the sweetest delight in a farewell embrace, and then made his way back to his own couch.

"The next morning early the waiting-woman came to the damsel's bed to help her dress, and when this was done they took her into the presence of the Doge, who at once asked her how the affair had gone. Then said the damsel: 'Excellently well, forasmuch as I have done all you charged me to do. One of the young men came to me three times, and every time I marked him on the face with the dye'; whereupon the Doge sent forthwith for the counsellors who had advised him in the matter, and said to them: 'I have laid hands on my friend at last, and now I am minded that we should go and see for ourselves.'

"When they had come into the room, and had looked around on this side and on that, and perceived that all the young men were marked in the face, they raised such a laugh as had never been raised before, and said: 'Of a truth this fellow must have a wit more subtle than any man we have ever seen'; for after a little they came to the conclusion that one of the young men must have marked all the rest. And when the young men themselves saw how they were all marked with dye they jested over the same with the greatest pleasure and jollity.

"Then the Doge made examination of them all, and, finding himself unable to spy out who had done this thing, he determined to fathom the same by one means or another. Therefore he promised to the one concerned that he would give him his daughter to wife, with a rich dowry, and a free pardon for all he had done; for he judged that this man must needs be one of excellent understanding. On this account Ricciardo, when he saw and understood what the Doge was minded to do, went to him privily and narrated

to him the whole matter from beginning to end. The Doge embraced him and gave him his pardon, and then with much rejoicing let celebrate the marriage of Ricciardo and his daughter. Ricciardo plucked up heart again and became a man of such worth and valour and magnanimity that wellnigh the whole of the government of the state fell into his hands. And thus he lived many years in peace and in the enjoyment of the love of all the people of Venice."

The above version contains nearly all the important incidents found in so many later variants, but is clearly based on the French version of *Dolopathos*.

The death of the beggar is not quite so common. It occurs, however, in a Sicilian, French, Kabail, Aramaic and Georgian version.

The marking of the thief by the princess is found in several other versions: Old French, Dutch, South Siberian and Swedish-Finnish (see translation below on p. 125). In another French version, as well as in two North African variants, the princess clips off a bit of his beard or moustache for future recognition.

In an Italian tale, "Crich e Croch," in Comparetti's *Novelline Popolari Italiane*, Torino, 1875, No. 13, p. 52 *et seq.*, she cuts off a portion of his clothes.

This "marking the culprit" motif is, of course, very common in folk-tales; see Clouston, *Popular Tales and Fictions*, vol. ii, pp. 129, 164-165; and the numerous examples given in Chauvin, *op. cit.*, v, p. 83ⁿ²; A. C. Lee, *The Decameron, its Sources and Analogues*, 1909, pp. 67-70; and Bolte and Polivka, *op. cit.*, vol. iii, p. 395.

We will now look at a gypsy version from Roumania. It forms No. 6, "il dui cior (cei doui hoti)" in Dr Barbu Constantinescu's *Probe de Limba Si Literatura Tiganilor din România*, Bucharest, 1878, pp. 79-87. The stories are given in the original Rómani with a Roumanian translation. It then appeared in English with notes by F. H. Groome in the *Journal of the Gypsy Lore Society*, vol. III, July 1891, pp. 142-151 (*cf.* also W. A. Clouston, *Academy*, 29th November, 1890, pp. 506-507).

The "thief" variety of story appears to be very popular amongst the gypsies, for in his *Gypsy Folk-Tales* (London, 1899) F. H. Groome gives no less than five "master thief" stories, one of which is a fairly close variant of the tale of Rhampsinitus. The end of it, however, resembles Grimm's "Meisterdieb," No. 192, and is found more complete in a Slovak-Gypsy story,¹ and is given in Groom, *op. cit.*, pp. 46-48, and *Jour. Gypsy Lore Soc.*, *op. cit.*, pp. 147-148.

¹ See R. von Sowa, *Die Mundart der slowakischen Zigeuner*, Göttingen, 1887, No. viii, "O romi th-o rašai," p. 174 *et seq.*

"The Two Thieves," as the story we are about to discuss is called, is one of the fifteen (not thirteen as stated by Groome, *op. cit.*, p. liii) stories in Constantinescu's collection. As he notes in his most interesting Introduction, the gypsies form an important channel of story-migration, and one, I would add, which folklorists have rather neglected.

"The gypsies quitted India," says Groome (p. lxxxii), "at an unknown date, probably taking with them some scores of Indian folk-tales, as they certainly took with them many hundreds of Indian words. By way of Persia and Armenia, they arrived in the Greek-speaking Balkan Peninsula, and tarried there for several centuries, probably disseminating their Indian folk-tales, and themselves picking up Greek folk-tales. . . . From the Balkan Peninsula they have spread since 1417, or possibly earlier, to Siberia, Norway, Scotland, Wales, Spain, Brazil, and the countries between, everywhere probably disseminating the folk-tales they started with and those they picked up by the way, and everywhere probably adding to their store. Thus I take it they picked up the complete Rhampsinitus story in the Balkan Peninsula, and carried it thence to Roumania and Scotland. . . ." Space will not permit any further discussion of this fascinating and highly important question.

I can merely give here the story of "The Two Thieves," which appears on pp. 41-46 of Groome's work. Reference should be made to pp. 46-53, where the Slovak-Gypsy variant of Grimm's story is given, followed by other versions and some useful notes on the story under discussion.

"There was a time when there was. There were two thieves. One was a country thief, and one a town thief. So the time came that the two met, and they asked one another whence they are and what they are.

"Then the country thief said to the town one: 'Well, if you're such a clever thief as to be able to steal the eggs from under a crow, then I shall know that you are a thief.'

"He said: 'See me, how I'll steal them.'

"And he climbed lightly up the tree, and put his hand under the crow, and stole the eggs from her, and the crow never felt it. Whilst he is stealing the crow's eggs, the country thief stole his breeches, and the town thief never felt him. And when he came down and saw that he was naked, he said: 'Brother, I never felt you stealing my breeches; let's become brothers.'

"So they became brothers.

"Then what are they to do? They went into the city, and took one wife between them. And the town thief said: 'Brother, it is a sin for two brothers to have one wife. It were better for her to be yours.'

"He said: 'Mine be she.'

"But, come now, where I shall take you, that we may get money.'

"Come on, brother, since you know.'

"So they took and departed. Then they came to the king's, and considered how to get into his palace. And what did they devise?

"Said the town thief: 'Come, brother, and let us break into the palace, and let ourselves down one after the other.'

"Come on.'

"So they got on the palace, and broke through the roof; and the country thief lowered himself, and took two hundred purses of money, and came out. And they went home.

"Then the king arose in the morning, and looked at his money, and saw that two hundred purses of money were missing. Straightway he arose and went to the prison, where was an old thief. And when he came to him, he asked him: 'Old thief, I know not who has come into my palace, and stolen from me two hundred purses of money. And I know not where they went out by, for there is no hole anywhere in the place.'

"The old thief said: 'There must be one, O King, only you don't see it. But go and make a fire in the palace, and come out and watch the palace; and where you see smoke issuing, that was where the thieves entered. And do you put a cask of molasses just there at that hole, for the thief will come again who stole the money.'

"Then the king went and made a fire, and saw the hole where the smoke issues in the roof of the palace. And he went and got a cask of molasses, and put it there at the hole. Then the thieves came again there at night to that hole. And the thief from the country let himself down again; and as he did so he fell into the cask of molasses. And he said to his brother: 'Brother, it is all over with me. But, not to do the king's pleasure, come and cut off my head, for I am as good as dead.'

"So his comrade lowered himself down, and cut off his head, and went and buried it in a wood.

"So, when the king arose, he arose early, and went there where the thief had fallen, and sees the thief there in the cask of molasses, and with no head. Then what is he to do? He took and went to the old thief, and told him: 'Look you, old thief, I caught the thief, and he has no head.'

"Then the old thief said: 'There! O King, this is a cunning thief. But what are you to do? Why, take the corpse and hang it up outside the city gate. And he who stole his head will come to steal him too. And do you set soldiers to watch him.'

"So the king went and took the corpse, and hung it up, and set soldiers to watch it.

"Then the thief took and brought a white mare and a cart, and took a jar of twenty measures of wine. And he put it in the cart, and drove straight to the place where his comrade was hanging. He made himself very old, and pretended the cart had broken down, and the jar had fallen out. And he began to weep and tear his hair, and he made himself to cry aloud, that he was a poor man, and his master would kill him. The soldiers guarding the corpse said one to another: 'Let's help to put this old fellow's jar in the cart, mates, for it's a pity to hear him.'

"So they went to help him, and said to him: 'Hullo! old chap, we'll put your jar in the cart; will you give us a drop to drink?'

"That I will, deary.'

"So they went and put the jar in the cart. And the old fellow took and said to them: 'Take a pull, deary, for I have nothing to give it you in.'

"So the soldiers took and drank till they could drink no more. And the old fellow made himself to ask: 'And what is this?'

"The soldiers said: 'That is a thief.'

"Then the old man said: 'Hullo! deary, I shan't spend the night here, else that thief will steal my mare.'

"Then the soldiers said: 'What a silly you are, old fellow! How will he come and steal your mare?'

"He will, though, deary. Isn't he a thief?'

"Shut up, old fellow. He won't steal your mare; and if he does, we'll pay you for her.'

"He will steal her, deary; he's a thief.'

"Why, old boy, he's dead. We'll give you our written word that if he steals your mare we will pay you three hundred groats for her.'

"Then the old man said: 'All right, deary, if that's the case.'

"So he stayed there. He placed himself near the fire, and a drowsy fit took him, and he pretended to sleep. The soldiers kept going to the jar of wine, and drank every drop of the wine, and got drunk. And where they fell there they slept, and took no thought. The old chap, the thief, who pretended to sleep, arose and stole the corpse from the gallows, and put it on his mare, and carried it into

the forest and buried it. And he left his mare there and went back to the fire and pretended to sleep.

"And when the soldiers arose, and saw that neither the corpse was there nor the old man's mare, they marvelled, and said: 'There! my comrades, the old man said rightly the thief would steal his mare. Let's make it up to him.'

"So by the time the old man arose they gave him four hundred groats, and begged him to say no more about it.

"Then when the king arose, and saw there was no thief on the gallows, he went to the old thief in the prison, and said to him: 'There! they have stolen the thief from the gallows, old thief! What am I to do?'

"Did not I tell you, O King, that this is a cunning thief? But do you go and buy up all the joints of meat in the city. And charge a ducat the two pounds, so that no one will care to buy any, unless he has come into a lot of money. But that thief won't be able to hold out three days.'

"Then the king went and bought up all the joints, and left one joint; and that one he priced at a ducat the pound. So nobody came to buy that day. Next day the thief would stay no longer. He took a cart and put a horse in it, and drove to the meat-market. And he pretended he had damaged his cart, and lamented he had not an axe to repair it with. Then a butcher said to him: 'Here, take my axe, and mend your cart.' The axe was close to the meat. As he passed to take the axe, he picked up a big piece of meat, and stuck it under his coat. And he handed the axe back to the butcher, and departed home.

"The same day comes the king, and asks the butchers: 'Have you sold any meat to any one?' They said: 'We have not sold to any one.'

"So the king weighed the meat, and found it twenty pounds short. And he went to the old thief in prison, and said to him: 'He has stolen twenty pounds of meat, and no one saw him.'

"Didn't I tell you, O King, that this is a cunning thief?'

"Well, what am I to do, old thief?'

"What are you to do? Why, make a proclamation, and offer in it all the money you possess, and say he shall become a king in your stead, merely to tell who he is.'

"Then the king went and wrote the proclamation, just as the old thief had told him. And he posted it outside by the gate. And the thief comes and reads it, and thought how he should act. And he took his heart in his teeth and went to the king, and said: 'O King, I am the thief.'

"'You are?'

"'I am.'

"Then the king said: 'If you it be, that I may believe you are really the man, do you see this peasant coming? Well, you must steal the ox from under the yoke without his seeing you.'

"Then the thief said: 'I'll steal it, O King; watch me.' And he went before the peasant, and began to cry aloud: 'Comedy of Comedies!'

"Then the peasant said: 'See there, God! Many a time have I been in the city, and have often heard "Comedy of Comedies," and have never gone to see what it is like.'

"And he left his cart, and went off to the other end of the city; and the thief kept crying out till he had got the peasant some distance from the oxen. Then the thief returns, and takes the ox, and cuts off its tail, and sticks it in the mouth of the other ox, and came away with the first ox to the king. Then the king laughed fit to kill himself. The peasant, when he came back, began to weep; and the king called him, and asked: 'What are you weeping for, my man?'

"'Why, O King, whilst I was away to see the play, one of the oxen has gone and eaten up the other.'

"When the king heard that, he laughed fit to kill himself, and he told his servant to give him two good oxen. And he gave him also his own ox, and asked him: 'Do you recognise your ox, my man?'

"'I do, O King.'

"'Well, away you go home.'

"And he went to the thief. 'Well, my fine fellow, I will give you my daughter, and you shall become king in my stead, if you will steal the priest for me out of the church.'

"Then the thief went into the town, and got three hundred crabs and three hundred candles, and went to the church, and stood up on the pavement. And as the priest chanted, the thief let out the crabs one by one, each with a candle fastened to its claw; and he let it out.

"And the priest said: 'So righteous am I in the sight of God that He sends His saints for me.'

"The thief let out all the crabs, each with a candle fastened to its claw, and he said: 'Come, O priest, for God calls thee by His messengers to Himself, for thou art righteous.'

"The priest said: 'And how am I to go?'

"'Get into this sack.'

"And he let down the sack; and the priest got in; and he lifted him up, and dragged him down the steps. And the priest's head

went *tronk*, *tronk*. And he took him on his back, and carried him to the king, and tumbled him down. And the king burst out laughing. And straightway he gave his daughter to the thief, and made him king in his stead."

It will be seen that in its chief incidents the above gypsy version resembles the original Rhampsinitus tale, but, like many other variants, has had portions of another story added to it. As in *Dolopathos*, and nearly a dozen other variants, it is an "old man," at one time a thief himself, who tells the king what schemes to employ in order to catch the thief.

The incident of the meat is found in about ten variants, apart from the tale in *Il Pecorone*. The incident of the one thief taking the breeches off the other occurs, with differences, in the Kashmiri tale of "Shabrang, Prince and Thief" (J. H. Knowles, *Folk-Tales of Kashmir*, London, 1888—2nd edition, 1893—p. 111), but here the thief has to secure the *paijamas* of a labourer by sheer trickery.

As has already been noticed, the latter part of the gypsy variant closely resembles Grimm's No. 192. Here the crabs crawl about the churchyard, and the thief, disguised as Peter, says they are the spirits of the dead who have just risen, and are now searching for their bones.

Although the "crab and candle" incident is not in the main portion of the gypsy story, we have seen (p. 112) that in the version of Ser Giovanni candles are used on the horses' trappings to disguise the thief as Lucifer. And in three other versions (Sicilian, French and North African) the guards are frightened by a herd of goats to whose heads are attached pots containing candles.

We will now contrast an interesting Finnish version in Old Swedish, which, as far as I know, has never before been translated into English. The story appears to have been very popular in Finland, where about fifteen versions are found (see Antti Aarne, "Verzeichnis der Märchentypen," Helsinki, 1910, and "Finnische Märchenvarianten," Hamina, 1911, *FF Communications* 3, p. 40, and 5, p. 77). Bolte describes the version given below as Swedish, but in reality it is Finnish, being written in the Swedish spoken by the Finns about the fifteenth century.

The version in question is to be found in G. A. Åberg, *Nyländska Folksagor*, 2 häftet, Helsingfors, 1887, and is here translated literally—the somewhat disjointed style of the Old Swedish and constant use of short sentences being preserved.

The Bank Thief

"Once there was a student. He went to a town to learn building. When they had built the bank, he said to his master: 'Now we will go and steal in the bank to-night.' 'How is that to be done? It is strongly built, and then there are guards,' said the master. 'I have made a secret door, and we can go through that,' said the other. They went, and the two following nights the student entered, but on the third night he let the master go in. He went. But now the king had found out about the theft. So he put in a machine, that cut off the thief's head. But the student knew what to do, and took the head away. As the king could not recognise [the thief by] the body alone, he put it on a cart and drove it up and down the streets, thinking that somebody, his wife at least, would recognise the body, and, on seeing it, cry out loudly. When the student heard about this, he went up to the window and stood there looking out. Just when they were passing by with the headless body, he cut his chin a little. When the wife saw the body, she cried out. The king asked what all the noise was about. The student answered: 'The mistress became so frightened when I cut my chin a little while shaving.' As the king could not find out who was the thief in this way, he caused a watch-house to be built outside the town, and placed the body inside. Six men were put to guard it outside and six inside. The king thought that somebody would try to take the body away, and that this would be the one to whom it belonged. When the student heard about this, he ordered twelve clerical gowns to be made, and when he had got them, he went from one toll-gate to the other and bought a large amount of liquor.

"Then he went to the watch-house, asking if he might stay there for one night. But the guards were strictly forbidden to let anybody stay there, and dared not keep him over the night. He said: 'Why can't you let me stay for one night? I will help you to guard, if you let me stay.' Thus, he was allowed to stay. He then gave them some of the liquor. At first they would not touch it, but when he said that he would keep watch if they chanced to go to sleep, they took some of it. Before long they were all asleep. Then he dressed them all in the clerical gowns and took the corpse away. When the first guard awoke and saw what had happened, he called the others, saying to each of them: 'Good morning, your Reverence! That traveller has gone away with the corpse and now the devil will take us! I suggest that we all go to the king and ask him for a parish each.' So they did. The king thought: 'Where

the devil have all these priests come from?' However, he gave them a parish each.

"When the king could not find out the thief in this way, he arranged for a large party, to which he invited all his subjects. The student was there too. The king threw some money on the floor, saying to himself: 'He who stole in the bank will not leave this alone either.' When the student saw what had been done, he fixed something under his boots which caught up the money. Thus, when he saw a coin, he at once stepped on it, and going outside took it off.

"When the king was unable to find the thief in this way, he said: 'Everybody that has been to this party must stay here to-night,' thinking that he who was such a rascal could not leave the princess alone, but would go and sleep with her. He gave her a bottle [of colour or dye] so that she could mark the one who went to her. All happened [as had been expected] and the student slept with the princess. She marked him, but while she was asleep he took the bottle and marked her and all the others too. When the king woke up and saw this, he said to himself: 'They have all been sleeping with the princess, so now I cannot find the thief. He must be a very clever man.' Then he said to them: 'He who has stolen in the bank and taken the head away from the body and the body away from the twelve guards and made them priests, and who dared to take the money from my floor, he shall be my son-in-law.' Then the student went up to the king, bowed and said he had done it. 'Oh, is it you, you rascal?' said the king, and gave him his daughter and also the country."

In the above version, the most noticeable divergence from other variants is the incident about the cutting off of the head, in that it is done by a machine put in the bank by the king and not by the son or accomplice.

The main incidents from Herodotus still appear. A new addition is the amusing incident of the "priests" obtaining a parish each, although in the Old Dutch poem,¹ "*De Deif van Brugghe*" the guards are dressed in monks' clothing. The scattering of the money is found in several versions, modern Greek, Aramaic, South Siberian, Kabail and Georgian. The marking of the thief by the

¹ See the reprint, from a MS. in the Royal Library at Stockholm, by G. W. Dasent in *Zeit. f. Deutsches Alterthum*, herausg. von Moriz Haupt, Bd. v, Leipzig, 1845, pp. 385-404 (see p. 399). See also R. Köhler's review of J. F. Campbell's "*Tales of the West Highlands*" in *Orient und Occident*, Bd. ii, Göttingen, 1864, pp. 306, 307; and W. A. Clouston, *Popular Tales and Fictions*, vol. ii, pp. 137, 138.

princess has already (p. 117) been referred to when dealing with the version of Ser Giovanni.

Inquiries made at the University of Upsala convince me that the Finns and Swedes got the story from Russia, possibly in the fourteenth or fifteenth century, but certainly prior to the Russo-Swedish War of 1571-1577.

In conclusion I would return to the East and mention the Tibetan version, which is of considerable interest, because we know it was directly derived from Sanskrit and was incorporated in the sacred Tibetan Canon—the *Ka-gyur* (or *Kanjur*).

In the twelfth and thirteenth centuries many Indian Buddhist refugees settled in Tibet, and, with the active assistance of the most learned of the Lāmas, proceeded to translate the Sanskrit texts of Indian Buddhism into Tibetan. The huge work involved can be appreciated when we remember that the *Ka-gyur* runs to 100 volumes (or in some editions to 108, the sacred number).

Details of these sacred texts will be found in the excellent Introduction by W. R. S. Ralston to Schiefner's *Tibetan Tales*, London, 1882.

The Tibetan version occurs in the *Ka-gyur*, iv, 132-135, and appears on pp. 37-43 of the above work. It is also given nearly in full by Clouston, *op. cit.*, vol. ii, pp. 145-148, so that there is no need to repeat it again here. I would, however, give a brief *résumé* of the tale owing to its relationship with that of Somadeva.

A certain widow entrusts her son to a weaver, his uncle. In time the son learns that his uncle is a thief by night, and is anxious to join him in his adventures. The son soon proves his capabilities for such work. They start house-breaking and make a hole [*cf.* Somadeva's tale where they break through a wall into a house]. The nephew reproves his uncle for putting his head in the hole first instead of his feet. Hardly is the change effected when the cry of "Thieves!" is raised. The son cuts off the head. The body is exposed and guarded. The son pretends he is mad and goes about embracing everybody and everything—including, of course, the body of his uncle. He then drives up disguised as a carter with a load of wood, to which he sets fire and so burns the body. Next he assumes the garb of a Brāhman and makes an oblation of cakes on the spot where the body was burned. He now appears as a Kāpālika [*i.e.* a Śaiva mendicant—skr. *kāpāla*, "a skull"] and so manages to fling the bones into the Ganges. By a further trick he enjoys the king's daughter and a son is born. Later the boy

chooses his father out of the assembled populace and gives him a wreath of flowers. He is thus discovered,¹ but the king considers he is far too clever to be killed, and the wedding takes place.

In this version we see at once the close relationship with our story of Ghata and Karpura. Both versions have given prominence to the necessity for the proper Hindu burial rites to be performed, and it is only after their due completion that the thief can find contentment of mind.

The Tibetan version, however, has the incident of the child and wreath of flowers. This occurs, with variations, in *Dolopathos* (French version), in a West Highland and in a Mingrelian (Caucasian) version. The Tibetan tale is unusual in that the thief is caught by this ruse, most variants following *Dolopathos*, and allowing him to escape once again.

To summarise briefly, I would regard the "Story of Ghata and Karpura" as one of the numerous variants of the "Tale of Rhampsinitus" as told by Herodotus (Book II, p. 121).

Exactly how and when it got to India are questions I do not even hope to answer. My own opinion is that it found its way across the Indian Ocean in Ptolemaic times, very possibly during the reign of Philadelphus (284-246 B.C.), when the trade and diplomatic relations between Egypt and India were in progress. The natural appeal of the tale soon caused it to be gathered into Guṇādhya's net, and so it appears in Somadeva.

As to the "Tale of Rhampsinitus" itself, until fresh evidence to the contrary is produced, I would look upon it as of undoubted Egyptian origin. All the main incidents are Egyptian, though minor alterations and fresh incidents might have been added by

¹ This "means of recognition" or "paternity" motif occurs in the tale of Peruonto in the 1st Day, 3rd Div. of the *Pentamerone* where, in order to discover who is the father of the princess's two children, the king gives a feast to all the riff-raff of the city. As soon as Peruonto appears the children run to him, recognising him as their father. See *The Pentamerone of Giambattista Basile*, B. Croce and N. M. Penzer, vol. i, 1932, p. 38. On p. 42 I have given a large number of variants supplied me by Dr Krappe. The motif is dealt with under H.480-H.486. 2 in Stith Thompson's *Motif-Index of Folk-Literature* (vol. iii, pp. 318, 319) and includes various tests such as the handing of an apple by the child to the true father, the ignoring of gold on the street by the father, the adhesion of blood of the real son to the father's bones, etc. A more curious means of recognition is found among North American Indian folk-tales where the child urinates on the real father as it is passed round from man to man. See Stith Thompson, *Tales of the North American Indians*, p. 336, note 212, and E. W. Voegelin "Paternity Test" in *Dict. of Folklore Mythology and Legend*, vol. ii, 1950, p. 847. See also p. 666 of the same volume under "Maira-monan" where a bow and arrow is the paternity token.

Karian dragomans as the centuries rolled by. It seems quite possible that the tale may date back to an early dynasty and in some way be connected with the myths of Isis and Osiris, and of Horus and Set.

Portions of it found their way to Greece sometimes prior to 664 B.C., and after some two hundred years were very largely forgotten. About 430 B.C. Herodotus brought to Greece a much fuller version of the tale which soon achieved great popularity and wide circulation. It received fresh impetus by its inclusion in the *Seven Sages*, and kindred mediæval collections. The numerous languages into which these collections were translated spread the tale of the Two Thieves all over Europe. This dissemination may have been considerably helped by the gypsies, who picked up the tale in the Balkans and included it in their general stock-in-trade of stories.

The "Tale of Rhampsinitus," therefore, affords one of the most interesting and perfect examples of the longevity and migration of a really good tale, the history of which can be traced for over two thousand, five hundred years.

SACRED PROSTITUTION

SACRED PROSTITUTION

IN the story of Rūpiṇikā (Tale 7 in *The Ocean of Story*, vol. i, p. 139) laid in "a city named Mathurā, the birthplace of Kṛishṇa," we read that the lady herself who is described as a courtesan, at the time of worship went into the temple to perform her duty.

From this passage it is quite clear that Rūpiṇikā combined the professions of prostitution and temple servant, which latter consisted chiefly in dancing, fanning the idol and keeping the temple clean. She was, in fact, a *dēva-dāsī*, or "handmaid of the god." As we shall see in the course of this Essay, the name applied to these so-called "sacred women" varied at different times and in different parts of India.

Mathurā is the modern Muttra, situated on the right bank of the Jumna, thirty miles above Agra. From at least 300 B.C. (when Megasthenes wrote) it had been sacred to Kṛishṇa, and we hear from reliable Chinese travellers that in A.D. 400 and 650 it was an important centre of Buddhism and at a later date again became specially associated with the worship of Kṛishṇa, owing to the fact that Mathurā was the scene of the adventures and miracles of his childhood as described in the *Vishṇu Purāṇa*. Thus Mathurā has always been one of the most sacred spots in Hindu mythology.¹

It has suffered from the Mohammedan invaders more than any city of Northern India, or nearly so, for it was first of all sacked in 1017-1018 by the Sultan Mahmud of Ghazni, and again in 1500 by Sikander Lodi, in 1636 by Shāh Jahān, in 1669-1670 by Aurang-zēb, by whose commands the magnificent temple of Kēśavadēva was levelled to the ground, and by Ahmad Shāh in 1756. By this time every temple, image and shrine had been destroyed and a large part of the population had embraced Mohammedanism. The history of Mathurā is typical of what has occurred in many cities of Northern India, and I consider it is an important factor in the explanation of why sacred prostitution is much more developed in Southern India.

At the date when Somadeva wrote (*circa* A.D. 1070) the city must have recovered from its first sacking and the religious life have been

¹ See F. S. Growae, *Mathurā: A District Memoir*, 2nd edition, 1880. Published by the N.W. Provinces & Oudh Government Press.

assuming its normal course. It was *after* our author's day that the systematic and thorough destruction began, and in consequence we hear less about Hindu temples of Northern India.

In view of the anthropological importance of the connection of religion and prostitution, and of the interesting ritual, customs and ceremonies which it embodies, I shall endeavour to lay before my readers what data I have been able to collect, with a few suggestions as to the possible explanation of the curious institution of the *dēva-dāsīs*.

Ancient India

Owing to the lack of early historical evidence it is impossible to say to what extent sacred prostitution existed in ancient India.

Even in modern times it is often hard to differentiate between secular and sacred prostitution, while, through the clouds of myth and mystery which cover the dawn of Indian history, any distinction must be looked upon as little more than conjecture. In common with so many other parts of the world secular prostitution in India dates from the earliest times and is mentioned in the *Rig-Veda*, where terms meaning "harlot," "son of a maiden," "son of an unmarried girl," etc., occur. In the *Vājasaneyi Samhitā* it seems to be recognised as a profession,¹ while in the law-books the prostitute is regarded with disfavour. (Manu, ix, 259; iv, 209, 211, 219, 220; v, 90.) In the Buddhist age Brāhmans were forbidden to be present at displays of dancing or music, owing to their inseparable connection with prostitution; yet on the other hand we see in the *Jātakas* (tales of the previous births of the Buddha) that prostitutes were not only tolerated, but held in a certain amount of respect.²

We also hear of the great wealth of some of the women and the valuable gifts made to the temples, which reminds us of similar donations among the *ἐταῖραι* of ancient Greece. In his article on "Indian Prostitution" in Hastings' *Encyclopædia of Religion and Ethics* (vol. x, p. 407) W. Crooke quotes Somadeva as saying that prostitutes are occasionally of noble character and in some cases acquire enormous wealth. He also gives other references apart from those already quoted.

As literary historical evidence on the subject under discussion is so scarce, the discovery in 1905 of a work on Hindu polity was

¹ See R. Fischel and K. F. Geldner, *Vedische Studien*, Stuttgart, 1888-1889, I, xxv, pp. 196, 275, 309 *et seq.*; ii, p. 120; also A. A. Macdonell and A. B. Keith, *A Vedic Index of Names and Subjects*, London, 1912, i, p. 395; ii, p. 480 *et seq.*

² See index volume to the English translation of the *Jātaka* stories under the word "courtesan." Cambridge, 1913.

of the utmost importance. It is known as the *Arthasāstra*, and gives full details of the social, administrative, fiscal and land systems of the Maurya age. The author is Kautilya (Chāṇakya, or Vishnugupta), who wrote about 300 B.C.¹ Book II, chap. xxvii, deals with the duties of the superintendent of prostitutes (*ganikās*), who held a highly paid post at the Court of Chandragupta. The women enjoyed a privileged position and held the royal umbrella, fan and golden pitcher. They were, however, subject to strict official control, and Kautilya gives a long list of penalties for any breach of the regulations—for instance, a *ganikā* who refused her favours to anyone whom the king might choose received a thousand lashes with a whip or else had to pay five thousand *panas*. A further clause states that all the rules prescribed for the *ganikās* are also to apply to dancers, actors, singers, musicians, pimps, etc. There is no mention of temples, but the fact that the dancer, musician and prostitute are all put on the same basis is important in attempting to trace the history of sacred prostitution.

The corruption of the Court at this period is partly shown by the fact that every *ganikā* had to pay to the government each month the amount of two days' earnings. They were, moreover, sometimes used as secret service agents and acquired position and wealth.

We shall see later that a similar state of affairs existed at the great city of Vijayanagar in the sixteenth century.

The Christian Era (First Eleven Centuries)

In the first eleven centuries of the Christian era more attention seems to have been paid to what we may politely call the Science of Erotics, and many such works were written.² Very few, however, are now extant, and it is of interest to note that those which do exist usually mention numerous other similar writings from which they have largely drawn. In most cases they deal in all seriousness with some quite trivial point (such as the best way for a courtesan to rid herself of a lover whose wealth is nearly spent) by listing the various opinions of previous writers and then giving their own opinion as the most acceptable.

¹ See the English translation by R. Shama Sastri in *Mysore Review*, 1900-1909, Books i-iv, and *Indian Antiquary*, 1909-1910, Books v-xv; also list of modern articles, etc., on the *Arthasāstra* on pp. 679, 680, of vol. i of the *Cambridge History of India*, 1922. Both author and date are, however, still doubtful.

² See J. J. Meyer, *Kāvyaśaṅgraha: erotische und exoterische Lieder. Metrische Übersetzungen aus indischen und anderen Sprachen*. Leipzig (1903). *Das Weib im altindischen Epos. Ein Beitrag zur indischen und zur vergleichenden Kulturgeschichte*. Leipzig, 1915. Also R. Schmidt, *Beiträge zur Indischen Erotik; das Liebesleben des Sanskritvolkes nach den Quellen dargestellt*. Leipzig, 1902; Berlin, 1911.

It was a method used in 300 B.C. by Kauṭilya, and again by Vātsyāyana, who was the earliest and most important erotic writer of the Christian era. His work, the *Kāma Sūtra*, dates from about A.D. 250, and has been translated into most European languages, including English.¹ Although Vātsyāyana devotes a whole book (six chapters) to courtesans, there is no direct reference to sacred prostitution. He mentions, however, dancing, singing and the playing of musical instruments as among the chief requirements not only for a prostitute, but also for any married woman wishing to keep her husband's affections. He divides prostitutes into nine classes, the most honourable of which is the *ganikā*, which, as we have already seen, was the name used by Kauṭilya. "Such a woman," says Vātsyāyana, "will always be rewarded by kings and praised by gifted persons, and her connection will be sought by many people."

Edgar Thurston tells us (*Castes and Tribes of Southern India*, vol. 11, 1909, p. 125) that old Hindu works mention seven classes of *devā-dāsīs*, but unfortunately, he gives no references. The list, however, is worth including here as it shows the different ways in which a girl can become a *devā-dāsī*.

- (1) Dattā, or one who gives herself as a gift to the temple.
- (2) Vikrīta, or one who sells herself for the same purpose.
- (3) Bhritya, or one who offers herself as a temple servant for the prosperity of her family.
- (4) Bhakta, or one who joins a temple out of devotion.
- (5) Hrita, or one who is enticed away, and presented to a temple.
- (6) Alankāra, or one who, being well trained in her profession, and profusely decked, is presented to a temple by kings and noblemen.

7. Rudraganika or Gopika, who receive regular wages from a temple, and are employed to sing and dance.

The next work of importance was by Daṇḍin, who ranks among the greatest poets of India. He flourished in the sixth century. Two of his works give a vivid, though perhaps rather exaggerated, picture of the luxury and depravity of his day. The first is the *Daśa Kumāra Charita*,² or *Adventures of the Ten Princes*, while the second (whose authorship is doubtful, though sometimes ascribed

¹ See *Kāma Shāstra Society* (R. F. Burton and F. F. Arbuthnot) edition, 1883, and that by K. R. Iyengar, Mysore, 1921. Details of various articles on the *Kāma Sūtra* and its author will be found in my *Bibliography of Sir Richard F. Burton*, London, 1923, pp. 166-171.

² Edited by H. H. Wilson; G. Bühler and P. Peterson; and freely translated by P. W. Jacob.

to Daṇḍin) is the *Myrichchakatika*,¹ or *Clay Cart*, which treats of the courtship and marriage of a poor Brāhman and a wealthy and generous prostitute. Both works are important in our discussion as giving some idea of the social condition of middle and low class life of the sixth century.

A certain passage in the *Daśa Kumāra Charita* is of special interest as showing how all female accomplishments were to be found in the courtesan, whose education and conversational powers would certainly be more attractive than the uneducated and paltry household chatter of the wife.

The story goes that a famous dancer, who was, of course, also a prostitute, suddenly pretended to feel the desire to become a devotee. She accordingly went to the abode of an ascetic to carry out her purpose. Soon, however, her mother follows to dissuade her from her intention, and addresses the holy man as follows:

"Worthy sir, this daughter of mine would make it appear that I am to blame, but, indeed, I have done my duty, and have carefully prepared her for that profession for which by birth she was intended. From earliest childhood I have bestowed the greatest care upon her, doing everything in my power to promote her health and beauty. As soon as she was old enough I had her carefully instructed in the arts of dancing, acting, playing on musical instruments, singing, painting, preparing perfumes and flowers, in writing and conversation, and even to some extent in grammar, logic and philosophy. She was taught to play various games with skill and dexterity, how to dress well, and show herself off to the greatest advantage in public; I hired persons to go about praising her skill and her beauty, and to applaud her when she performed in public, and I did many other things to promote her success and to secure for her liberal remuneration; yet after all the time, trouble and money which I have spent upon her, just when I was beginning to reap the fruit of my labours, the ungrateful girl has fallen in love with a stranger, a young Brāhman, without property, and wishes to marry him and give up her profession, notwithstanding all my entreaties and representations of the poverty and distress to which all her family will be reduced, if she persists in her purpose; and because I oppose this marriage she declares that she will renounce the world and become a devotee."²

¹ Apart from the earlier European translations see that by A. W. Ryder, issued in 1905 by Harvard University. It forms vol. ix of the Harvard Oriental Series.

² The extract is from p. 76 of *Early Ideas: A Group of Hindoo Stories*, 1881, by "Anaryan"—that is to say, by F. F. Arbuthnot. He was helped in his translations by Edward Rehatsek, who assisted both Burton and Arbuthnot in the Kāma Shāstra Society publications.

It transpires in the course of the tale that the dancing-girl stays with the ascetic, who falls madly in love with her. She leads him to her home and finally to the palace of the king, where he learns to his great consternation that the whole thing was merely the result of a wager between two court beauties. The participation of the king in the joke and his rewarding the winner clearly shows the importance of the courtesan in this age.

Passing on to the eighth century we have Dāmodaragupta's *Kuṭṭanīmatam*, which resembles Vātsyāyana's *Kāma Sūtra*. Besides a German translation, it has also been translated into French and English.¹

This was followed in the tenth or eleventh centuries by Kalyāna Malla's *Ananga-Ranga*, which is a general guide to *ars amoris indica*. It is very well known in India and has been translated into numerous European languages.²

The only other work worthy of mention is Kshemendra's *Samayamātrikā*. It can best be described as a guide or handbook for the courtesan, but its chief value lies in the fact that the author was a contemporary of Somadeva. His work has been translated into German,³ French,⁴ and English.⁵

The connection between Kshemendra and Somadeva is strengthened by the fact that, besides being contemporary Kashmirian court poets, they both wrote a great collection of stories from a common source—the *Bṛihat-Kathā*. Somadeva's collection was the *Kathā Sarit Sāgara*, while that by Kshemendra was the *Bṛihat-Kathā-Manjari*. The latter work was, however, only a third as long as the former and cannot compare in any way with *The Ocean of Story* as regards its style, metrical skill and masterly arrangement and handling of the stories.

It is practically impossible to say to what extent the above-mentioned works have bearing on sacred prostitution. I have merely endeavoured to acquaint the reader with such literature as exists dealing with the social life of women of these early times. It seems, however, quite safe to assert that from Buddhist times onwards the prostitute, especially the more learned classes, was

¹ See the German translation by J. J. Meyer, 1903 (*Altindische Schelmenbücher*, ii), *Les Leçons de l'Entremetteuse*, by Louis de Langle, Bibliothèque des Curieux, Paris, 1920, p. 127 to end; and English: E. P. Mathers, *Lessons of a Bard*, 1927.

² For the English translation see the edition of the *Kāma Shāstra* Society (Burton and Arbuthnot), 1885. Further details will be found in my *Burton Bibliography*, 1923, pp. 171-173.

³ Translated by J. J. Meyer, 1903 (*Altindische Schelmenbücher*, i).

⁴ *Le Bréviaire de la Courtisane*, Louis de Langle, Bibliothèque des Curieux, Paris, 1920, pp. 1-126.

⁵ E. P. Mathers, *Harlot's Breviary*, 1927.

held in a certain amount of esteem. She was an important factor in the palace and often acquired great wealth. Dancing and singing were among her accomplishments, but to what extent she was connected with temples we are not told. Soon after the twelfth century historical and literary evidence increases and it becomes possible to examine our data under definite geographical headings. Although Southern India yields by far the most material for our discussion, we will begin in the north, and work slowly southwards.

Northern India

In the introductory remarks to this Essay it has been shown to what extent Mathurā suffered from Mohammedan invasion. The whole of Northern India was similarly affected, and the bloody battles, enforced slavery, terrible tortures and complete destruction of Hindu temples and other public buildings during the Mohammedan Sultanate of Delhi (1175-1340) clearly show that the great upheavals so caused made any continual religious practices of the Hindus an impossibility. By 1340 the Sultanate of Delhi was breaking up and in the south Vijayanagar was already a powerful kingdom. I shall have more to say about Vijayanagar in the section on Southern India.

The destruction of the Hindu temples was continued with unabated zeal in the Mogul Empire. In the reign of Akbar (1556-1605) we are told by his most intimate friend, Abul-l Fazl,¹ that the prostitutes of the realm (who had collected at the capital, and could scarcely be counted, so large was their number) had a separate quarter of the town assigned to them, which was called Shaitānpūrah, or Devilville. A *Dāroghah* (superintendent) and a clerk were also appointed for it, who registered the names of such as went to prostitutes, or wanted to take some of them to their houses. People might indulge in such connections provided the toll-collectors heard of it. But, without permission, no one was allowed to take dancing-girls to his house.

The celebrated musician Tānsen, who was attached to Akbar's Court, became a kind of patron saint of dancing-girls. It is believed that chewing the leaves of the tree above Tānsen's grave at Gwālior imparts a wonderful melody to the voice, and consequently girls make pilgrimages there for that purpose.²

¹ *A'in-i-Akbari*, Abū-l-Fazl, Blochmann and Jarrett, *Biblio. Indica*. Calcutta, 1873, 1891, 1894 (3 vols.). See vol. i, p. 192.

² Bholanauth Chunder, *Travels of a Hindoo*, ii, 68 *et seq.* W. H. Sleeman, *Rambles and Recollections of an Indian Official*, ii, 333 *et seq.*, 1844. A. Cunningham, *Archaeological Survey of India (Reports)*, ii, 370; xxi, 110.

In the reigns of the next two Emperors, Jahāngīr (1605-1627) and Shāh Jahān (1628-1658), the luxury, ostentation, extravagance and depravity increased,¹ and it was not till the reign of Aurangzēb (1659-1707) that any attempt was made to check the ruthless waste which was slowly draining the resources of the country. Aurangzēb was a Mohammedan Puritan who lived and died an ascetic. During his long reign thousands of Hindu temples were demolished by his orders, and every effort was made to wipe out prostitution and everything pertaining thereto.

Khāfī Khān,² the historian, tells rather a pathetic story. It appears that Aurangzēb issued public proclamations prohibiting singing and dancing, and at the same time ordered all the dancing-girls to marry or be banished from the kingdom. They did not, however, submit to this treatment without a protest. One Friday as the Emperor was going to the mosque (another account says he was sitting at his audience window) he suddenly saw about a thousand women carrying over twenty highly ornamented biers. Their piercing cries and lamentations filled the air. The Emperor, surprised at such a display of grief, asked the cause of so great sorrow. He was told that Music, the mother of the dancing-girls, was now dead, and they were burying her. "Bury her deep," cried the unmoved Emperor; "she must never rise again."

After the death of Aurangzēb there followed an anarchical period which lasted till the advent of the British. During this time the standard of morality among the princes and public men sank lower and lower. Their lives were vicious and cruel in the extreme, and their gross sensuality naturally affected their courts and, through them, the populace. Prostitution had increased to huge dimensions, and appears to have been entirely secular. Thus we see how, partly owing to foreign conquest and partly to the general spread of immorality, the "religious" element in the temple dancers dropped out and they became ordinary prostitutes, who danced when occasion demanded. They would naturally be called upon if any dancing was wanted for a wedding feast or other private entertainment, for dancing and prostitution had been inseparable in India from the earliest times.

In modern accounts of the tribes and castes of Northern India (which are few enough) we find, therefore, practically no mention of temples or sacred prostitution.

¹ Manucci, *Storia do Mōgor*, edited by W. Irvine. Indian Text Series, London, 1907. See vol. ii, p. 9.

² *Muntakhabu-l-lubāb* (H. Elliot, *History of India*, London, 1867-1877, vol. vii, p. 283).

Certain castes such as the *ṭawāif* and *gandharb* consist entirely of dancers, singers and prostitutes, but their sub-castes are so numerous that it is quite impossible to distinguish or describe them by any definite principle. Details of the *ṭawāif* and similar castes were given by Crooke¹ in 1896, and when writing on the same subject in 1918² he apparently had nothing further to add. The following details are taken from his former work.

The term *ṭawāif* is a general one, but is chiefly used for Mohammedan girls, while the Hindu branch is usually called *pātar*, *pātur*, *pāturīyā* (from the Sanskrit *pātra*, an actor). When they are nubile, the *pātar* girls marry a *pīpal* tree and then commence their career of prostitution. One of the numerous sub-castes is known as *rājanya*, which appears to be the only one whose members actually dance in the Hindu temples. Prostitution is said to be rare among them. The *pātars* have Kṛishṇa as their personal god and Śiva, in the form of Mahādēva, as their guardian deity. Among the *ṭawāifs* the rites are interesting. The girl is taught to dance and sing when about seven or eight years old. At the commencement of her training sweets are offered at a mosque and then distributed among Mohammedan *faqīrs*. At the first lesson the master receives a present of sweetmeats besides his pay. When the girl reaches puberty and her breasts begin to develop the rite of *angīya*, or "the assumption of the bodice," is performed. Certain of the brethren are feasted and the girl is ready for her first paramour. After the price is fixed she goes to him, which rite is known as *sir dhankāi*, or "the covering of the head." When she returns after the first visit, the brethren are again given sweetmeats, after which follows the rite of *missi*, or "blackening of the teeth." She is dressed like a bride and paraded through the streets, afterwards attending a party with singing and dancing. The teeth cannot be stained until the feast is held, but Crooke says that at Lucknow the rule was relaxed. After the rite of *missi* the girl ceases to wear the nose-ring, and hence the ceremony is sometimes known as *nathnī utārnā*, or "the taking-off of the nose-ring."

Somewhat similar ceremonies exist among the *gandharbs*, or *gandharus*, who take their name from the heavenly musicians who attend the gods at Indra's Court. In Northern India they are found only in Benares, Allahābād and Ghāzipur. They are Hindus of the Vaishṇava sect. Gaṇeśa is the patron of the dancing-girls

¹ W. Crooke, *The Tribes and Castes of the North-Western Provinces and Oudh*, 4 vols., Calcutta, 1896: See vol. i, p. 245; vol. ii, p. 379 *et seq.*; and vol. iv, p. 364 *et seq.*

² Hastings' *Encyclopædia of Religion and Ethics*, vol. x, 1918. See article on "Prostitution," by W. Crooke, p. 406 *et seq.*

since he is regarded by them as the author of music. They offer him wreaths of flowers and a sweetmeat made of sesamum and sugar every Wednesday. There are also certain gypsy tribes, such as the *bediyās* and *naṭs*, who are dancers, acrobats and prostitutes. They are divided into a large number of clans whose occupation is, nevertheless, the same. As they have no connection with temple worship, further details here would be superfluous. They have been fully described by B. R. Mitra¹ and W. Crooke.²

Central India

As the ancient kingdoms of India were confined either to the North or South, early travellers were naturally drawn to the most important cities, and tell us but little of Central India, especially as regards the religious practices and social conditions of the towns.

The earliest direct reference to the dancing-girls of Central India which I can find is made by the Chinese traveller Chau Ju-Kua in his work, *Chu-fan-chi*, dealing with the Chinese and Arab trade of the twelfth and thirteenth centuries.³ Speaking of Guzerāt (p. 92) he mentions "four thousand Buddhist temple buildings, in which live over twenty thousand dancing-girls who sing twice daily while offering food to the Buddha (*i.e.* the idols) and while offering flowers." He also speaks of similar customs in Cambodia (p. 53). They are here called *a-nan*, derived from the Sanskrit word *ānanda*, meaning "joy" or "happiness."⁴

We hear little more on the subject till the seventeenth century, when the French traveller Jean Baptiste Tavernier⁵ made his second journey to the East (1638-1643). In describing Golconda (five miles west of the modern city of Hyderabad) he says there are over 20,000 public women entered in the *Daroghia's* [*sic*] register. They danced before the king every Friday. In the evenings they stood before the doors of their houses and as soon as they lighted a lamp or candle all the drinking-places were opened. No tax was levied on the women, for they were looked upon as the chief cause of the large consumption of *tari*, which was a Government mon-

¹ "The Gypsies of Bengal," *Memoirs read before the Anthropological Society of London*, vol. iii, pp. 120-133.

² *The Tribes and Castes of the North-Western Provinces and Oudh*, vol. i, p. 245; vol. iv, pp. 36-80.

³ Translated from the Chinese and annotated by Hirth and Rockhill, St Petersburg Printing Office of the Imperial Academy of Sciences, 1911.

⁴ See Henri Cordier's *Marco Polo, Notes and Addenda*, 1920, pp. 115, 116. Cf., however, *T'oung Pao*, vol. xiii, 1912, p. 467.

⁵ *Travels of Tavernier*, translated by V. Ball, 2 vols., 1889. See vol. i, pp. 157, 158.

opply. No mention is made of the women dancing in the temples, but from the evidence of other writers it seems very probable they did this in their spare time!

We shall return to Hyderabad (Nizam's dominions) later when giving the most recent information, but we now pass on to the east coast and examine the evidence given by W. Ward, the Baptist missionary, who wrote at the beginning of the nineteenth century.¹ He is speaking of the temple of Jagannātha (usually called Puri), in Orissa. "It is a well-authenticated fact," he says, "that at this place a number of females of infamous character are employed to dance and sing before the god. They live in separate houses, not in the temple. Persons going to see Jugūnnat'hu [*sic*] are often guilty of criminal actions with these females." Then in a note he adds: "The officiating Brāhmans there continually live in adulterous connection with them."

Puri is to-day one of the most sacred spots in India. The name Juggernaut, the anglicised corruption of Jagannātha (Lord of the World), is that given to the form of Vishṇu worshipped there. The legend of the sacred blue-stone image, details of the famous Car Festival and the truth about the suicides under its great wooden wheels have been told by Hunter.² The present temple is built in the shape of a pyramid, and is surmounted with the mystic wheel and flag of Vishṇu. The annual rent-roll of the temple was put at no less than £68,000. Since Ward's days little has been written on the *dēva-dāsī* of Central India. Anything of importance was reproduced by R. V. Russell in his work on the tribes and castes of the Central Provinces.³ He says:

"When a dancing-girl attains adolescence, her mother makes a bargain with some rich man to be her first consort. Oil and turmeric are rubbed on her body for five days as in the case of a bride. A feast is given to the caste and the girl is married to a dagger, walking seven times round the sacred post with it. Her human consort then marks her forehead with vermilion and covers her head with her head-cloth seven times. In the evening she goes to live with him for as long as he likes to maintain her, and afterwards takes up the practice of her profession. In this case it is necessary that the man should be an outsider and not a member of the *kasbi*

¹ *A View of the History, Literature and Religion of the Hindoos*, 2nd edition, Serampore, 1815-1818. See vol. ii, p. 327.

² *Orissa*, vol. i, 1872, pp. 81-136; L. S. S. O'Malley, *Puri*, Bengal District Gazetteers, Calcutta, 1908, pp. 87-124; and *Hobson-Jobson* under "Juggernaut."

³ R. V. Russell, *The Tribes and Castes of the Central Provinces of India*, 4 vols., London, 1916. See under the word "Kasbi," vol. iii, p. 373.

caste, because the quasi-marriage is the formal commencement on the part of the woman of her hereditary trade. . . . In the fifth or seventh month of the first pregnancy of a *kasbi* woman 108¹ fried wafers of flour and sugar, known as *gūjahs*, are prepared, and are eaten by her as well as distributed to friends and relatives who are invited to the house. After this they, in return, prepare similar wafers and send them to the pregnant woman. Some little time before the birth the mother washes her head with gram flour, puts on new clothes, and jewels, and invites all her friends to the house, feasting them with rice boiled in milk, cakes and sweetmeats."

The term *kasbi*, derived from the Arabic *kasab*=prostitution, denotes rather a profession than a caste. The term is only used for Hindus, as is also *gāyan*. The Mohammedan dancing-girls are known, as in Northern India, by the name of *ṭawāif*.

In Bengal this class of women become so-called religious mendicants, who join the Vaishṇavī or Bairāgī community. They wander about the country, and, under the cloak of religion, carry on a large trade in kidnapping. They are notoriously licentious, and infanticide is apparently common.²

The following description of the dress and dancing of the better class of *kasbi* women is given by Russell.³

They "are conspicuous by their wealth of jewellery and their shoes of patent leather or other good material. Women of other castes do not commonly wear shoes in the streets. The *kasbis* are always well and completely clothed, and it has been noticed elsewhere that the Indian courtesan is more modestly dressed than

¹ The number 108 is mystical among both Brāhmins and Buddhists. Thus at Gautama's birth the number of Brāhmins summoned to foretell his destiny was 108; there are 108 shrines of special sanctity in India; there are 108 Upanishads; 108 rupees is a usual sum for a generous temple or other donation. In Tibet and China we also find 108 occurring as a sacred or mystic number in connection with architecture, ritual and literature. See Yule's *Marco Polo*, vol. ii, p. 347. London, 1903. The number of beads in both Tibetan and Burmese rosaries is usually 108. Colonel L. A. Waddell refers me to his article "Burmese Buddhist Rosaries," *Proc. As. Soc. Bengal*, December 1892, pp. 189-191, and to his *Buddhism of Tibet*, pp. 203, 204. It is also used in documents before the name of the "Mahārājas" or high priests of the Bhattia caste. In any letter or statement containing a reference to one of these Gosains, the name of the individual invariably appears as "108 Devadīnandan Mahārāj" or "108 Gokulnāthji Mahārāj." M. Pelliot refers me to Bunyiu Nanjio's *Catalogue of the Chinese Translation of the Buddhist Tripiṭaka*, 1883, No. 755 (on the 108 beads of the Buddhist rosary); and to W. F. Meyers, "The Buddhist Rosary and its Place in Chinese Official Costume," *Notes and Queries on China and Japan*, vol. iii, pp. 26-28. M. Pelliot is inclined to see in the number 108 a multiplication of the twelve months by the nine planets. Another suggestion is that it is obtained by the following arrangement of the lucky 3: $((3+3)(3+3))3$.

² Sir H. Risley, *Tribes and Castes of Bengal*, art. "Vaishṇava," Calcutta, 1891.

³ *Op. cit.*, vol. iii, p. 383.

most women. No doubt in this matter she knows her business. A well-to-do dancing-girl has a dress of coloured muslin or gauze trimmed with tinsel lace, with a short waist, long straight sleeves, and skirts which reach a little below the knee, a shawl falling from the head over the shoulders and wrapped round the body, and a pair of tight satin trousers, reaching to the ankles. The feet are bare, and strings of small bells are tied round them. They usually dance and sing to the accompaniment of the *tabla*, *sārangi* and *majira*. The *tabla* or drum is made of two half-bowls—one brass or clay for the bass, and the other of wood for the treble. They are covered with goat-skin and played together. The *sārangi* is a fiddle. The *majira* (cymbals) consist of two metallic cups slung together and used for beating time. Before a dancing-girl begins her performance she often invokes the aid of Sārāsvatī, the Goddess of Music. She then pulls her ear as a sign of remembrance of Tānsen, India's greatest musician, and a confession to his spirit of the imperfection of her own sense of music. The movements of the feet are accompanied by a continual opening and closing of henna-dyed hands; and at intervals the girl kneels at the feet of one or other of the audience. On the festival of Basant Panchmi, or the commencement of spring, these girls worship their dancing-dress and musical instruments with offerings of rice, flowers and a cocoanut."

Proceeding southwards we find that in Hyderabad (Nizam's dominions) the usual term used for Telugu dancing-girls is *bogam*, although several others, including those with which we are already acquainted, are found. The *bogams* are divided into two classes, according as to whether they are Hindus or Mohammedans. If they are the former, the titles *sāni* or *nāyaka* are attached to their names; if the latter, they are called *jān* or *nāyakan*. Siraj Ul Hassan¹ describes them as having been originally attached to the temples of Śiva and Viṣṇu as "servants of the gods," most of whom now earn their living by dancing, singing and prostitution. The initiation ceremonies of a *bogam sāni* include the marriage of the girl to an idol of Kṛishṇa, and those of a *bogam jān* to a dagger. In the former case a marriage-booth of sixteen pillars is put up at the girl's house, whither the idol is brought on an auspicious day.

"The girl is made to stand before the idol as if it were the bridegroom, a curtain is held between them and the officiating Brāhman, reciting the *Mangalashtaka*, or marriage stanzas, weds them in the orthodox fashion. The ceremonies that follow correspond in every

¹ Syed Siraj Ul Hassan, *The Tribes and Castes of H.E.H. the Nizam's Dominions* [Hyderabad], Bombay, 1920. See vol. i, p. 91 et seq.

particular to those of a Kapu or Munnur marriage. On the *Nagveli* day the girl is seated by the side of the idol and made to offer *puja* to Gaurī, the consort of Śiva. Betel-leaves, areca-nuts and *kunkum* (red powder) are distributed to the assembly of dancing-girls, who sing songs, and, after blessing the bride, retire to their houses."

In the case of a *bogam jān* when a girl is married to a dagger the ceremony resembles that above described, with the addition that the rite of *missi* is also performed. It includes not only the blackening of the teeth, as among the *ṭawāif* of Northern India, but also the tying of a string of glass beads round the neck. Girls thus married are to a certain extent envied, for, as their husband is immortal, they can never become widows—a thing to be avoided at any cost! The *bogams* belong to both the Vaishṇava and Śaiva sects. Their chief gods are Kṛishṇa and Gaṇeśa, and in the light tenth of Aswin (October) they worship their dancing dresses, instruments, etc.¹ Their ranks are recruited to a certain extent from girls who have been vowed to temple service by their parents on their recovery from sickness, or on some other similar occasion when they wish to show gratitude to their gods. The training of the *bogams* is most thorough and complete. "Commencing their studies at the early age of seven or eight, they are able to perform at twelve or thirteen years of age and continue dancing till they are thirty or forty years old. Dancing-girls attached to temples are required to dance daily before the idols, while the priests are officiating and offering *puja* to them: but the majority of these are trained to appear in public, when they are profusely ornamented with gold and jewels and sumptuously dressed in silk and muslin."² Their dress, mode of dancing and details of accompanying instruments are the same as already described by Russell. Most of their songs are lewd in character, usually relating to the amorous life of Kṛishṇa.

Turning westwards to Bombay there is in the Ratnāgiri and Kānara districts and in the Sāvāntvāḍi State a Śūdra caste in which the men are known as *devlis* or *nāiks*, and the women as *bhāvins* or *nāikins*. One of their chief strongholds is a district in Goa, which fact may account partly for the suggestion, current in Bombay some years ago, that these women are descended from the illicit unions of Portuguese priests and Hindu women. The late Mr S. M.

¹ In the Central Provinces we saw that this worship was made in the spring, not the autumn. See G. C. Whitworth, *Anglo-Indian Dictionary*, under "Month"; and E. Balfour, *Cyclopædia of India* under "Aswina" and "Month."

² Siraj Ul Hassan, *op. cit.*, p. 94.

Edwardes, however, says that there is little evidence to support this view, and that it is more likely that the women were originally descended from the courtesans of Vijayanagar, who must have taken refuge in the villages of the Carnatic and South Konkan, when the city was finally destroyed by the Mohammedans. The majority trace their descent from the female servants of the *Sāvantvādi* or *Mālvan* chiefs who were regularly dedicated to the service of the local gods. Women from other *Śūdra* castes can become *bhāvins* by simply pouring oil on their heads from the god's lamp in the temple. When a *bhāvin* girl attains puberty she has to undergo a form of marriage known as the *śesha*. The bridegroom is represented by a god from the temple. On an auspicious day *Gaṇapati* is worshipped and the ceremony of *Punyāhavāchana* (holy-day blessing)¹ is performed at the girl's house, and also in a temple, by the *Gurav* or *Rāul* of the temple. The *Gurav* and other servants of the temple then go in procession to the girl's house, taking with them a dagger and the mask of the god. The marriage ceremony is performed with the same details as an ordinary marriage, the mask taking the place of the bridegroom. The *homa*, or marriage sacrifice, is also performed. The ceremony ends with a feast to those assembled, but is frequently dispensed with owing to the expenditure involved. In such cases the young girl performs the worship of *Gaṇapati*, and dressing herself in her best attire goes to a temple to the beating of drums, accompanied by a party of *bhāvins* and temple servants, taking in her hands a cocoanut and a packet of sugar. She places the cocoanut and sugar before the image of the god and bows to him. The *Gurav* and other temple servants then invoke on her the blessings of the god, and the ceremony ends. Her temple duties are confined to sweeping the floor, sprinkling it with fresh cow-dung, and waving the fly-whisk before the god. She practises prostitution promiscuously, and only differs from the secular variety by her being a *dēva-dāsī*.

It is, however, interesting to note that the *bhāvin* is not allowed to dance or sing in public. The *devlis* also serve in the temples, their chief duties being the blowing of horns and trumpets morning and evening. The daughters of *bhāvins* usually follow their mothers' calling; if not, they are married to the sons of other *bhāvins*—i.e. to the *devlis*.²

¹ See Dubois, *Hindu Manners, Customs and Ceremonies*, 3rd edition, 1906 &c., pp. 151-152 "Punyāha-vachana."

² See the *Ethnographical Survey of Bombay*, monograph 60, *Bhāvins and Devlis*, 1900; and monograph 92, *Dāsa*, 1907. Cf. also Kennedy's *Criminal Classes of Bombay*, 1908, pp. 13, 122, 274 and 283, and to R. E. Enthoven's *Tribes and Castes of Bombay*, 3 vols., 1920, under "Bhāvins," "Kālavants," "Padiars," and "Patradavs."

In the Karnātak, Kolhāpur and the States of the Southern Mahrātha country the *dāsa* caste dedicate their men to the temple, and their women only in a lesser degree. Contrary to the usual rule the women so dedicated are not allowed in the temple at all, their duties being only to sweep the temple yard. They live by prostitution.

Reference should also be made to the Mur(a)li and Vāghe (or Wāghya) orders of mendicants, of whom the former are girls and the latter are male children dedicated to the god Khaṇḍobā (Kānhoba or Khaṇḍerav) of Jejuri, i.e. "Sword Father," an incarnation of Śiva, in the Poona district. For further information see Balfour, *Cyclopædia of India*, under "Murli," vol. ii, p. 1012; and Russell, *Tribes and Castes of the Central Provinces*, "Wāghya," vol. iv, pp. 603-606.

Southern India

As has already been mentioned, it is in Southern India that the tenets of the Hindu faith have suffered less from the devastating hand of the invader. Consequently details of ritual have become deeply rooted in the minds of the people, so that in many cases we may expect to find earlier and more original forms of any particular custom or ceremony. Furthermore, the love of building innumerable temples and constantly increasing the Hindu pantheon always appears to have been greater in the South. It is here, therefore, that we get much fuller accounts of sacred prostitution, and nearly all the writings of missionaries and travellers have something to say of the *dēva-dāsīs* of Madras, Mysore or Travancore.

The earliest direct reference to the subject I can find appears in certain Tamil inscriptions dating back to the time of Rājarāja the Great, the most prominent of the Chōla monarchs. He came to the throne in A.D. 985 and, like all the Chōla kings, was a votary of Śiva. One inscription¹ shows that in A.D. 1004 the chief temple at Tanjore had four hundred *tali-cheri-pendugal*, or "women of the temple," attached to it. They lived in the streets surrounding the temple and in return for their service received one of more shares, each of which consisted of the produce of one *vēli*² of land, calculated at 100 *kalam* of paddy. The whole Chōla country was full of temples with *dēva-dāsīs* in attendance, as is clear from this inscription, which gives a long list of the dancing-girls who had been transferred to the Tanjāvūr (Tanjore) temple. After each name details are added showing from what temple the girl originally

¹ E. Hultzsch, *South Indian Inscriptions, Tamil Inscriptions of Rajaraja . . . at Tanjavur*, vol. ii, Pt. iii, pp. 259-303, Archaeological Survey of India, Madras, 1890-1916.

² 26,755 square metres.

came, and the number of shares she was now to receive. Finally, the names and shares of the eunuchs, musicians, dancing-masters, singers, parasol-bearers, barbers and other men connected with the temple are given. It is interesting to note that although Rājarāja was a Śaiva, the temple girls imported came from both Śaiva and Vaiṣṇava temples.

The next mention of the *dēva-dāsīs* is made by Marco Polo, who probably derived his information about the Indian coastal regions from one of his earlier missions. He is discussing the customs of Maabar, i.e. the Coromandel Coast, and gives us an interesting description of the duties of the temple girls. The account as given in Fr. III16 has been considerably enlarged by the Z text. The following translation¹ includes all this fresh matter, as well as a few additions peculiar to VB, the Venetian MS of 1446.

"And again I tell you that they have many idols in their monasteries male and women, to serve which idols many girls are offered in this way. For their mother and their father offer them to the idols, to those which please them most, and yet they live in their fathers houses. And when they have offered them, every time that the monks of the monastery of the idol require those girls who have been offered to the idol to come to the monastery to make amusement for the idol, they come there immediately and sing and sound music and dance and make great festival. And there are great numbers of these girls, for they make great companies. And again those girls bring food to their idols where they are offered many times in the week and the month; and I tell you in what way they bring food there and say that the idol has eaten. I tell you that many of these maidens of whom I have told you would prepare indeed for food both flesh and other good things, and go off to the monastery to their idol and set the table before him with very white cloths upon which they make ready all the viands which they have brought, and leave them there a great space. And always in the mean time all these girls sing and dance and sound music and make the greatest entertainment in the world. And when they have made this entertainment, always as I have said playing and singing, for so great a space that it seems to them that a great baron could have eaten at his ease, then the girls say that the spirit of the idol has eaten all the substance of the food and they take it for themselves and eat it all together with the priests round the idols with great feasting and with great joy. Then each returns to her house. Those lands are full of these monks and priests. And these girls

¹ Marco Polo. *The Description of the World*, A. C. Moule and Paul Pelliot, vol. i, 1938, pp. 393, 394.

✓ do thus together with the priests until they take husbands. And why do they make these entertainments for the idols? Because the priests of the idols often say that the god is vexed with the goddess, nor is one united with the other nor do they talk together. And since they are angry and vexed, unless they are reconciled and make peace together all our affairs will be contrary and will go from bad to worse because they will not bestow their blessing and grace. And so the aforesaid damsels go in the way said above to the monastery, and they are all naked except that they are covered in the natural parts, and sing before the god and goddess. For the god stays by himself on one altar under one canopy and the goddess stays on another altar by herself under another canopy, and those people say that the god often takes his pleasure with her and they are united together, so that when they are vexed they do not join themselves together. And then these damsels abovesaid come there to pacify them, and when they are there [they begin] to sing, dance, leap, tumble, and make different entertainments to move the god and goddess to joy and to reconcile them, and thus they say as they make entertainment, O Master, why are you vexed with the goddess and do not care for her? Is she not beautiful, is she not pleasing? May you thus truly be pleased to be reconciled together and to take pleasure with her, for truly she is very pleasant. And then she who has said so will lift her leg above her neck and will spin round for the pleasure of the god and goddess. And when they have solaced enough they go home. And in the morning the priest of the idols will announce as a great joy that he has seen the god and goddess together and that peace has been made between them, and then all rejoice and are thankful. These maidens indeed ✓ while they are maidens are so firm in flesh that none can by any means take hold of them or pinch them in any part. And for a small coin they will allow a man to pinch them as much as he can. When they are married they are also firm of flesh, but not so much. On account of the firmness their breasts do not hang down but stand up raised and prominent. And girls like this, there are plenty of them throughout this kingdom who do all the things which I have told you."

Polo does not seem to have quite understood the nature of the institution of the temple dancing-girls, for there was no question of marriage as they were already married—either to the god or to some substitute for a bridegroom such as a sword, dagger or drum. Another point to notice is that Polo describes the girls as practically naked. This is in strict contradiction to all accounts which came later; in fact travellers have drawn special attention to the fact that

the attraction of the covered body was fully realised by the dancers.

At the beginning of the section on Northern India we saw that by 1340 the Sultanate of Delhi was breaking up and that in the south Vijayanagar was already a powerful kingdom. The story of the foundation of this great Hindu monarchy, formed to check the onrush of the Moslem hordes which were sweeping gradually southwards, makes a thrilling page of Indian history. The glories of the magnificent capital have been fully described by many travellers,¹ but a complete history of the kingdom has yet to be written. It was not until 1565 that Vijayanagar was destroyed by the Moslems, and even then the peninsula to the south of the Tungabhadra remained unaffected as far as its *dharma* (religion and morality) were concerned. Of the various writers who have described the kingdom the two who give the best description of the social conditions are 'Abdu-r Razzāq, the ambassador from Persia, and Domingos Paes, the Portuguese. 'Abdu-r Razzāq explains how the prostitution of the dancing-girls was a great source of revenue to the kingdom; in fact the entire upkeep of the police (12,000 in number) was paid out of the proceeds of the women. He gives a description of the wealth and splendour of the girls, and says: "After the time of mid-day prayers, they place at the doors of these houses, which are beautifully decorated, chairs and settees on which the courtesans seat themselves. Every one is covered with pearls, precious stones and costly garments. They are all exceedingly young and beautiful. Each has one or two slave girls standing before her, who invite and allure indulgence and pleasure." We get, however, a more detailed account from Paes. He is speaking of the idols in the temples, and after giving some description of Ganeśa says: "They feed the idol every day, for they say that he eats; and when he eats, women dance before him who belong to that pagoda, and they give him food and all that is necessary, and all the girls born of these women belong to the temple. These women are of loose character, and live in the best streets that are in the city; it is the same in all their cities, their streets have the best rows of houses. They are very much esteemed, and are classed among those honoured ones who are the mistresses of the captains; any respectable

¹ (1) Nicolo Conti—1420 (R. H. Major, *India in the Fifteenth Century*, Pt. ii, p. 23, Hakluyt Society, Ser. I, No. XXII, 1858). Cf. John Frampton's translation included in my edition of *Marco Polo*, Argonaut Press, 1929, pp. 127, 128; and see p. 259 for bibliographical notes. (2) 'Abdu-r Razzāq—1443 (H. M. Elliot, *History of India*, vol. iv, 1872, pp. 89-126, and the first section of R. H. Major's work quoted above). (3) Domingos Paes—c. 1520-1522 (R. Sewell, *A Forgotten Empire*, 1900, pp. 236-290). (4) Fernão Nuniz—c. 1535-1537 (Sewell, *op. cit.*, pp. 291-395).

man may go to their houses without any blame attaching thereto. These women are allowed even to enter the presence of the wives of the king, and they stay with them and eat betel with them, a thing which no other person may do, no matter what his rank may be." He also makes special mention of their great wealth: "Who can fitly describe to you the great riches these women carry on their persons?—collars of gold with many diamonds and rubies and pearls, bracelets also on their arms and on their upper arms, girdles below, and of necessity anklets on the feet. The marvel should be otherwise, namely that women of such a profession should obtain such wealth; but there are women among them who have lands that have been given to them, and litters, and so many maid-servants that one cannot number all their things. There is a woman in this city who is said to have a hundred thousand *pardaos*, and I believe this from what I have seen of them."

It seems obvious from the above accounts that in wealthy and powerful kingdoms, such as Vijayanagar was in the fifteenth and sixteenth centuries, secular and "religious" prostitution practically coincide.¹

We saw that in Maurya times, when Chandragupta was at the zenith of his power in Pātaliputra (*circa* 300 B.C.), a similar state of affairs prevailed. Again in the early eighteenth century the reaction which occurred after the death of the Puritan Aurangzēb caused an enormous laxity of morals, and in consequence the "temple" part of the *dēva-dāsīs* entirely dropped out. From the sixteenth to eighteenth centuries travellers gave no detailed descriptions of the *dēva-dāsīs*, and we get but scanty mentions in their respective works.²

We get, however, quite an interesting account from the Icelandic, Jón Ólafsson,³ who described the temples of Tanjore in

¹ For further information on Vijayanagar see Krishnasvāmi Aiyangar, *Śākhottai, A little known chapter of Vijayanagar history . . . A.D. 1450-1509 . . .*, Madras, 1916, and *Sources of Vijayanagar history* (Madras Univ. Hist. Ser., 1.) Madras 1919; Henry Heras, *The Aravidu dynasty of Vijayanagara* (Studies in Ind. Hist. St. Xavier's Coll. Bombay, No. 3) Madras, 1927, and *Beginnings of V. History* (ditto No. 4) Bombay 1929; Bhāskarānanda Śāletore, *Social and Political Life in the V. Empire, A.D. 1346-1646*, Madras 1934; Venkata-Ramanayya, N. *V. Origin of the City and the Empire* (Univ. Madras Bull. Dept. Ind. Hist. & Arch. No. 4) Madras, 1933, and *Studies in the History of the Third Dynasty of V.* (Madras Univ. Hist. Ser. No. 11) Madras 1935—for "Courtesans" see pp. 401-406; *V. Sexcentenary Commemoration Volume*, pub. under the auspices of the V. Sexcent. Ass. and Karnatak Hist. Res. Soc. Dharwar, 1936; and Nilakanta Sastri, K. A. and Venkataramanayya, N. *Further Sources of V. History*, 3 vols. (Madras Univ. Hist. Ser. No. 18), Madras 1946—of which vol. ii is entirely texts.

² For references and quotations see *Hobson-Jobson* under "Bayadère," "Cunchunee," "Dancing-girl," "Dēva-Dāsī," "Nautch-Girl," and "Rum-Johnny."

³ Edited by Sir Richard Temple and Lavinia M. Anstey for the Hakluyt Society, and Ser., No. LXVIII, vol. ii, 1932, pp. 122, 123.

1623. He is speaking of the Hindu festal car and its arrival at the temple: "And when they approached with it, all the harlots came out of the church, *pagôga sirke* [*i.e.* *pagoda-sirukki*, pagoda girls or women (Tamil)] or temple harlots, to dance before the gods, and with them their master, who is called *baldor* [represents the Portuguese *bailador* from *bailar*, to dance, whence the French *bayadère*—see later p. 154]. He hires them out every day for money, both to the soldiers and the bachelors in the town, and this money is put into the treasure-house of the temple and is used for its upkeep, but the harlots get their keep out of the revenues of the temple, paid to them by its warders. The priest, who usually sits by the church door, and is called *brameni* [*i.e.* a *Brâhman*], also goes out to greet the gods with great humility and obeisances, and then they are carried in, in great honour, by three picked men among them, the sons of the priest, with much beating of drums and loud blasts on the trumpets, and other music, and also with the dancing of the temple harlots in their finery, which between whiles, when they are not serving the gods, is hung up in the church. Their costume is as follows. They have, like others, drawers of gold brocade studded with precious stones and pearls and with much money, and a splendid kerchief [bodice], costing a very great sum, over their breast, with other rings and precious stones of surpassing value, placed about their body and taken off as is convenient. At last, their toil being over, every man returns to his own house. These aforesaid temple maidens dance always before the gods every night from nine o'clock till midnight, and about the twelfth hour of the night, that is midnight, each of the twelve gods is carried up one street and down another, in a chariot, with torches, fireworks, trumpet-blowing and dancing, also the beating of drums and other such marks of honour. We who were standing on guard on the walls of the fortress used to hear this every night." Sir Richard Temple says that Jón's memory has quite failed him with regard to this nightly dancing and procession. The temple-women, he says, perform their religious duties morning and evening, and a street procession is not a daily or nightly occurrence. For their number, duties and the special laws concerning them Sir Richard refers us to *Madras Manual of Administration*, iii, p. 267, *s.v.* "Deva."

At the end of the eighteenth and early nineteenth centuries the accounts become more detailed, the two most reliable of which are those of the Abbé J. A. Dubois and Francis Hamilton (formerly Buchanan). Dubois worked in the Madras Presidency in 1792 and went to Mysore in 1799 to reorganise the Christian community.

The outcome of this work was his famous *Hindu Manners, Customs and Ceremonies*, which was translated into English in 1816 direct from the French MS. His remarks on the dancing-girls are interesting. He says¹ that at first they were reserved exclusively for the Brāhmans, and proceeds: "And these lewd women, who make a public traffic of their charms, are consecrated in a special manner to the worship of the divinities of India. Every temple of any importance has in its service a band of eight, twelve, or more. Their official duties consist in dancing and singing within the temple twice a day, morning and evening, and also at all public ceremonies. The first they execute with sufficient grace, although their attitudes are lascivious and their gestures indecorous. As regards their singing, it is almost always confined to obscene verses describing some licentious episode in the history of their gods. Their duties, however, are not confined to religious ceremonies. Ordinary politeness (and this is one of the characteristic features of Hindu morality) requires that when persons of any distinction make formal visits to each other they must be accompanied by a certain number of these courtesans. To dispense with them would show a want of respect towards the persons visited, whether the visit was one of duty or of politeness. [This custom is certainly not observed at the present day.—Beauchamp.]

"These women are also present at marriages and other solemn family meetings. All the time which they have to spare in the intervals of the various ceremonies is devoted to infinitely more shameful practices; and it is not an uncommon thing to see even sacred temples converted into mere brothels. They are brought up in this shameful licentiousness from infancy, and are recruited from various castes, some among them belonging to respectable families. It is not unusual for pregnant women, with the object of obtaining a safe delivery, to make a vow, with the consent of their husbands, to devote the child that they carry in their womb, if it should turn out a girl, to the temple service. They are far from thinking that this infamous vow offends in any way the laws of decency, or is contrary to the duties of motherhood. In fact no shame whatever is attached to parents whose daughters adopt this career.

"The courtesans are the only women in India who enjoy the privilege of learning to read, to dance, and to sing. A well-bred and respectable woman would for this reason blush to acquire any one of these accomplishments. [In these days female education

¹ From the 3rd edition, with notes by Henry K. Beauchamp, Oxford, 1906, pp. 585-587.

is slowly extending to all classes, and the prejudice which formerly existed no longer applies to women learning to read and sing, though dancing is still restricted to the professional dancing-girls, and is not considered respectable.—Beauchamp.]

"The *dēva-dāsīs* receive a fixed salary for the religious duties which they perform; but as the amount is small they supplement it by selling their favours in as profitable a manner as possible."

Like several other writers he mentions the special care taken by the *dēva-dāsīs* not to expose any part of their body, because they fully realise that the imagination is more easily captivated than the eye. Dubois says in the above extract that they dance "twice a day, morning and evening." This agrees with the remarks of the Chinese traveller Chau Ju-Kua of the thirteenth century, but differs from the description to be given by Shortt below.

Francis Hamilton,¹ writing nearly the same time as Dubois, gives a similar account of the *dēva-dāsīs*. He says, however, that if a girl is pretty she is almost certain to be taken from the temple by some "officer of revenue," and seldom permitted to return except in his presence. When a dancing-girl grew too old to be attractive she was turned out of the temple without any means of support given her, and for this reason she always tried to get a good-looking daughter to succeed—and support her. Speaking of the temples at Tulava² he says: "There prevails a very singular custom, which has given origin to a caste named *moylar*. Any woman . . . who is tired of her husband, or who (being a widow, and consequently incapable of marriage) is tired of a life of celibacy, goes to a temple, and eats some of the rice that is offered to the idol. She is then taken before the officers of Government, who assemble some people of her caste to inquire into the cause of her resolution; and, if she be of the Brāhman caste, to give her an option of either living in the temple or out of its precincts. If she choose the former, she gets a daily allowance of rice, and annually a piece of cloth. She must sweep the temple, fan the idol with a Tibet cow's tail (*bos grunniens*),³ and confine her amours to the Brāhmans. . . . The Brāhmany women who do not choose to live in the temple, and the women of

¹ Formerly Buchanan. *A Journey from Madras through the Countries of Mysore, Canara and Malabar*, 3 vols., London, 1807. See vol. iii, pp. 65, 66.

² This name will not be found in maps. Usually written Tuluva, it represents a large portion of the district of South Kānara, known in ancient times by that name, and having its own language called Tulu. For details of its history see J. Sturrock, *South Canara*, Madras District Manuals, vol. i, Madras 1894, pp. 2 and 54-60. For the "Caste named *moylar*," see Thurston and Rangachari, *Castes and Tribes of Southern India*, under "Moyili."

³ This is the *chotwie* or *chotry* (Skt. *chāmara*) made from the bushy tail of the Tibetan yak. See my note in *The Ocean of Story*, vol. iii, pp. 84, 85.

the three lower castes, cohabit with any man of pure descent that they please; but they must pay annually to the temple from one sixteenth to half a *pagoda*.¹

Nothing further of importance on the *dēva-dāsīs* appears to have been published till 1868, when Dr John Shortt read a most interesting paper before the Anthropological Society, entitled "The Bayadère: or, Dancing Girls of Southern India."² His investigations confirm previous accounts, but owing to advantages gained in his medical capacity he was able to obtain details which the ordinary traveller finds so hard to acquire. He differs from Dubois in saying that the girls dance six times a day, *but in turns*. They never marry, and begin a strenuous three-year course of singing and dancing at the early age of five. "When these girls are attached to pagodas, they receive certain sums as wages, the amount of which is dependent on the worth, sanctity, and popularity of the particular temple which they have joined. The money salary they receive is nominal—seldom exceeding a few annas, and sometimes a rupee or two a month. The chief object in being paid this sum as a salary is to indicate that they are servants of the temple; in addition to this, one or more of them receive a meal a day, consisting merely of a mass of boiled rice rolled into a ball." He gives full details of their dress. It differs from that described by Thurston as worn by the girls in Central India. Instead of tinsel-covered dress with skirts reaching below the knees and tight satin trousers, Shortt says:

"Their dancing dress comprises usually the short jacket or *choolee*,³ a pair of string drawers tied at the waist, termed *pyjamas*—

¹ This would doubtless be the gold *pagoda*, the *vardha* or *hin* of the natives. In Hamilton's day it was worth 3½ rupees. The word has a strange history and etymology. See Sir Walter Elliot, *Coins of Southern India*, the International Numismata Orientalia, London 1885, p. 51 note 4 and pp. 143-145; Edgar Thurston, *History of the Coinage of the Territories of the East India Company in the Indian Peninsula* . . . Govt. Cent. Mus. Madras 1890, pp. 11-15; and Hobson-Jobson under, "Pagoda" and "Pardao."

² *Memoirs read before the Anthropological Society of London, 1867-1869*, vol. iii, London, 1870, pp. 182-194. The word *bayadère* is merely a French form of the Portuguese *bailadeira*, from *bailar*=to dance.

³ i.e. *Cholee* or *choli*, also known as *angiyā*, *mahram* and *ānaband* (breast cover). See Balfour, *Cyclop. of India* under "Choli." He quotes R. F. Burton *Scinde*, p. 301. The reference is rather misleading as it does not refer to *Scinde*; or the *Unhappy Valley* of 1851 published in 2 vols., but to *Sindh, and the Races that inhabit the Valley of the Indus*, also published in 1851. On p. 301 Burton writes as follows:

"On the body they wear a Cholo (shift opening in front, and sleeves reaching down to the elbows), the material is either silk, cotton, muslin, or other such stuff, the favourite colours white, blue and red. Under the shift a bit of cloth called *Kanjari*, *Choli*, or *Gaj*, conceals the bosom; when it passes round the sides like a bodice and is fastened behind, its name is *Puthi*. This advisable article of dress is very often omitted in *Sindh*; a fact which may in some measure account for the pendent shape which the bosom assumes even in young women after a first or second child."

both these are generally of silk, and a white or coloured wrapper or *saree*:¹ one end of the *saree* is wound around the waist, and two, three, or more feet, according to the length, is gathered and inserted into the portion encircling the waist, and permitting of a folding fringe or gathering of the cloth in front, and the other end, taken after the usual native fashion over the left shoulder, descends towards the waist, when the end, or *moonthane*, is opened out and allowed to drop in front, one end of it being inserted in the waist on the side, and the other left free. This portion of the *saree* is usually highly ornamented with golden thread, tinsel, etc.—the free end descends to the middle or lower part of the thighs, the other free end of the *saree* hanging down towards the legs is now got hold of, passed between the legs and fastened to the tie around the waist at the back, and the whole encircled by a gold or silver waist belt. By this mode of dress a fold of the muslin *saree* forms a loop round each leg, and descends nearly to the ankles, whilst the gathering hangs in front between the legs free."

They had their own special laws for adoption and inheritance, and were treated with respect and consideration. At one time their ranks were largely increased by kidnapping, but even in Shortt's day this was quite a rare occurrence. This was often done by an aged dancer in order to procure a successor and a maintenance. Once again we see the worst side of a depraved priesthood, for "as soon as a girl attains maturity, her virginity, if not debauched by the pagoda brāhmins, is sold to outsiders in proportion to the wealth of the party seeking the honour, if such it may be termed, after which she leads a continuous course of prostitution—prostituting her person at random, to all but outcasts, for any trifling sum."

See also the notes on p. 417 relevant to the passage quoted.

The various names for the bodice are given by J. Forbes Watson in his *Textile Manufactures and the Costumes of the People of India*, 1867, p. 58. Here it is made clear that the article consists of a closely-fitting jacket with short sleeves, and is found in two distinct styles. The first consists of a piece of muslin or cloth covering the breasts with no opening in front and tied behind with tapes or ribbons. The second has a back and the ends of the bodice tie in front under the breasts. The term *choli*, *cholee*, is strictly applicable to the bodice that has a back, but, like *kachuree*, *kupissa* and *angiyā*, (quoted by Watson) appears to be used indiscriminately for both varieties. See further M. Martin's *Eastern India*, vol. iii, p. 104. Formerly Hindu women would never wear any sewed garments, and Williamson (*East India Vade-Mecum*, vol. i, p. 375) points out that in Bengal, in 1810, it was "deemed immodest to wear the *ungeeat* (*angiyā*), or supporters to the breast. In the upper provinces, a woman would be ashamed to be seen without them."—For a discussion of the *pyjama* see p. 156 *et seq.*

¹ For a good article on the *saree* or *sārfī*, see E. Balfour, *op. cit.* under "Saree;" and J. Forbes Watson, *Textile Manufactures and the Costumes of the People of India*, pp. 39-52, with a note on p. 40 on the terms applied to the *sārfī* in the different parts of India.

Details of the musical instruments and dances are given, special attention being drawn to the surprising feats of strength and bodily powers of endurance the girls undergo. "In what is called the *sterria coothoo*, athletic feats are performed, resting their hands on the ground and flinging their feet in the air with great rapidity, and thus twirling round and round successively performing various somersaults; lying full length on the ground with their hands and feet resting, contorting, twirling, and twisting their bodies in various ways, or whilst resting on the hands and legs, with their backs to the ground and their chest and abdomen turned upwards, drawing the hands and feet as close together as possible; whilst their bodies are thus arched, they, with their mouths, pick up rupees from the ground. In this arched position, beating time with their hands and feet, they work round and round in a circle.¹ During their performance they join their attendants in the songs that are sung, and regulate the various movements of their bodies to the expressions given vent to in the song." In the remainder of his article Shortt confirms what we have already seen—the girls are far more educated than the married women, their songs are lewd, they get most of their wealth *outside* the temple, they are considered an acquisition in a town and form the chief magnet of Hindu society; a wife considers it honourable for her husband to patronise them, and, finally, they are more sinned against than sinning. This is obviously true, for what chance can a child of five have when everything is arranged for her—probably before her birth! Owing to the wise guidance of British rule female education and enlightenment have made great strides since 1868 and we are likely to hear less and less of the *dēva-dāsīs*. Secular prostitution always has existed and always will exist, for the simple reason that, where there is a certain and constant demand, so also is there an equally certain and constant supply.

Before considering the next class of women, the *basivis*, a few remarks on the *pyjama*, mentioned above as part of the dress of the dancing-girls, may be of interest. Apart from the form in the text, the word is also written *pajamas*, and formerly *peijammahs*, *paijamas*, *pyjamahs*, *peijammahs*, *pijammahs*, *piejammahs*, etc. All forms are adaptations, in plural form (cf. *trousers*, *knickers*, *drawers*, etc.) from the Persian and Urdū singular words *pāē*, *pāy* "foot" or "leg" + *jāmāh*, "clothing" or "garment." The word was applied to various types of trousers, usually of linen, cotton or silk worn by Mahomedans of both sexes, and by Sikh men. Writing in the

¹ Cf. the account by William Methwold (1618-1622) in *Relations of Golconda*, ed. W. H. Moreland, Hakluyt Soc. 1931, p. 18.

Ency. Brit. (11th Edition, vol. xiv, pp. 418, 419) Colonel Grant says that the article in question is sometimes loose, sometimes tight all the way, sometimes loose as far as the knee and tight below like Jodhpur riding breeches. The Arabic name is *izār*. We can also compare the Turkish *dizlik*, meaning "knee-things," which is a pair of linen drawers cut very wide and drawn close round the waist by an *uçkur* (formerly *outchkoor*), a tape or string passing through the top edge exactly as in our modern pyjamas. They are tied at the knee, and in modern Turkey the word is applied to "shorts." The longer Turkish variety is the *shalwar*, or *şalvar*, which are looped up below the knee and fall in folds to the ankles. This type is worn in India by the Pathans, Baluchis, Sindis, Multanis, etc. Here the string or band is called *kamarband* or *izārband*. Grant tells us that the varieties of cut are *sharai* or canonical, orthodox, which reach to the ankles and fit as close to the leg as European trousers; *rumi* or *gharāredār*, which reach to the ankles but are much wider than European trousers (worn chiefly by the Shias); and *tang* or *chust*, reaching to the ankles, from which to the knee they fit quite close (if rucked it is called *churidār*).

Although exceptions do occur it can be stated as a general rule that among women the pyjama denotes the Mohammedan, as the *dhoti*, or loin-cloth, does the Hindu. It would appear that the comfort of the pyjama appealed to the Portuguese in sixteenth-century Goa and was adopted by them as a *déshabillé* garment, and then for night attire. In describing the hospital at Goa, François Pyrard (1608) says (vol. ii, p. 9, Hakluyt Society edition): "They have a large stock of drawers, without which no Portuguese in India ever sleeps: these reach down to the feet, because all their shirts are very short, coming down no lower than the mid-thigh." See also vol. ii, p. 112. For further details, and fine Plates, see J. Forbes Watson, *The Textile Manufactures and the Costumes of the People of India*, London, 1867, p. 57 and note. Numerous references will be found in Yule and Burnell, *Hobson-Jobson*, 1903, under "Pyjamas," "Long-drawers," "Mogul Breeches," "Shulwauers" and "Sirdrars." The use of the word *pyjama*, however spelt, appears to be quite recent—early nineteenth century—and is an Anglo-Indian creation. It applied only to a covering for the legs. Its use in England and elsewhere to denote a loose jacket and trousers for sleeping was adopted for convenience by the hosiery trade when the Victorian night-dress was superseded.

Writing in 1810, Thomas Williamson (*East India Vade-Mecum*, vol. i, p. 374) says: "The *pyjama*, or drawers, were formerly worn so tight, as to render it a work of some labor to get them on.

Indeed, to such a length did this taste go at one time, that many of the famous courtezans had themselves painted in imitation of *keemkab* from the waist downwards. In the Upper Provinces, they are now made to fit exactly above the knee, but from thence downwards quite loose, and so long as to press on the shoe. In the Lower Provinces, the exact reverse takes place." In this passage we note the use of the curious word *keemkab*, which undoubtedly calls for some explanation. I may, therefore, be excused if I deal with it at some length. The word has a long and interesting history, and from an etymological point of view has always presented considerable difficulties. *Keemkab* is an earlier, or variant spelling of the more familiar Anglo-Indian *kinco* (see Yule, *Hobson-Jobson*, s.v.), and still appears in that form in the *Oxford English Dictionary*. Yule describes it as meaning "Gold brocade," but here he is mistaken as the history of the word, and even his own quotations, clearly demonstrate.

The Anglo-Indian forms were dependant on the Hindī *kamkhāb*, *kamkhvāb*, *kimkhvāb*, etc. which, in their turn, had developed from the Persian *Kīmḥāb* and *Kāmhāb* (Arabic *Kīmḥāw*). It was, however, the Persian -ā termination types, such as *kamhā* and *kīmḥā* (Arabic *kmḥā*), which led to the great number of mediæval forms in most European languages including English, of which *camoca* is perhaps the most common. This finds confirmation in a mediæval Greek letter (*circa* 1300—quoted by Yule in his "Kinco" article, from *Notices et Extraits*, vi, 38. Here we read of the textile being called *καυχῶν* (accus.) in the Persian tongue. In the inventory of the goods of Marco Polo at the time of his death in a document dated "13 July, 1366," we read (A. C. Moule and Paul Pelliot, *Marco Polo*, vol. i, pp. 556, 557) of various pieces of *chamocha*, and in the pages of Pegolotti (*circa* 1330-1340) it appears as *cammocca*. The forms of the word occurring in mediæval inventories were many and varied. For these see Francisque Michel, *Recherches sur le commerce, la fabrication et l'usage des étoffes de soie, d'or et d'argent . . . pendant le moyen âge*, vol. ii, Paris 1854, pp. 171-174; and Victor Gay, *Gloss. Arch. du Moyen Âge*, whose inventory extracts run from 1313 to 1750. Among them that of Charles V (1380) gives over thirty varieties of form and figure, while that from Rheims cathedral (1622) shows that "Camoca" was clearly identified with damask, as one item reads: "Une tunique et dalmatique de camocas ou damas rouge couverte de plusieurs rondeaulx, pieds et testes d'or." Although the meaning of the word is clearly "damasked silk" it was often used to include weaves of all colours, with gold and silver stripes sometimes added as well. The *O.E.D.* give

"Camaca,"¹ which they define as "a kind of fine fabric, probably of silk," but apparently fail to recognise the connection with "Kincob." Although most of the "camocas" of mediæval times were manufactured in the Near East the word, though immediately adopted from the Persian as we have seen, ultimately goes back to a Chinese term. The original form of this term has not yet been determined. I have good reason for believing that the late Professor Pelliot, who had gone very thoroughly into the question, felt unable to express any certain opinion about it, but held that 金花 *Chin hua* "gold flower" was the nearest approach to a satisfactory solution which had been suggested, though obliged to admit that he did not find *Chin hua* as the specific name of any silk fabric in Chinese books. Du Cange² suggests that *καμουχᾶς*, *camoca*, *camucum* survived in the French *mocade* (mod. *moquette*) usually meaning a velvet-pile upholstery fabric—the English *mockado* (see *O.E.D.*), but this seems highly controversial. In view, however, of Williamson's mention of the pattern of the *keemkab* being painted on the women's bodies, it may be apropos to quote John Dee's *Diary*³ for 10th September, 1579, where he writes: "... my dream of being naked, and my skin all overwrought with work like some kinde of tuft mockado, with crosses blew and red; ..."

We have now to consider a class of women who, although being sacred prostitutes, are hardly ever dancing-girls. Their existence is due to circumstance alone. Among women of the lower Śūdra castes of Southern India, when there is no son to perform the obsequies of the parents, it is customary to endow a daughter with masculine privileges by dedicating her to a deity. Such a woman is known by the name of *basivi*. As is often the custom among *dēva-dāsīs*, girls are frequently dedicated as *basivis* by promise before their birth, or owing to a vow during illness.

Detailed investigations on the *basivis* have been carried out by Mr Fawcett⁴ in the western part of the Bellary district of Madras, and in the portions of Dharwar and Mysore which adjoin it. Although variations of the dedication ceremony occur in different localities, the following description by Mr Fawcett can be taken as generally representative.

¹ See also S. William Beck, *The Draper's Dictionary*, [1882] under "Cammaka;" *The "Mercury" Dictionary of Textile Terms* [1950] "Camaca," and "Kincob."

² *Gloss. ad script. med. inf. Græcitatibus*, Lugduni, 1688, vol. i, col. 364 under "*καμουχᾶς*;" and *Gloss. med. inf. Latinitatis*, reprint 1883 under "Camoca."

³ *Private Diary of Dr John Dee* . . . Edit. J. O. Halliwell, Camden Soc., 1842, p. 6.

⁴ "Basivis: Women who through Dedication to a Deity assume Masculine Privileges," *Journal of the Anthropological Society of Bombay*, vol. ii, 1892, pp. 322-345. This is followed by a note on the same subject by Dr W. Dymock (pp. 345, 346) and an appendix (pp. 346-353).

After the girl has been conducted with music to the temple by her parents, she is dressed in new clothes, usually white, and two seers of rice, five dates, five cocoanuts, five¹ betel leaves, and the same number of areca-nuts, also turmeric² and plantains, a gold *tāli*, a silver bangle, and two silver toe-rings are borne in a tray or basket. On arrival at the temple reverence is made to the idol, and, if he is present, to the *guru*, or high priest, and he, as the officiating priest, receives a fee and the tray or basket of things, and the ceremony is begun. If the *guru* is present he orders the priest and disciples who may be present "to bring the god to the girl," and they proceed with the ceremony. She is conducted to that part of the temple where such ceremonies are generally performed, usually in front of the idol, and is made to sit on a black *camby*, or country-made blanket (never on a white one), facing east, right knee raised and right elbow resting on it, head bent and covered. In front of her is spread some rice, on which are placed the kernels of five cocoanuts, one at each corner and one in the centre, and similarly five areca-nuts, five pieces of turmeric, five dried dates, and five *duddus* and a *ṭankam* in a bran vessel (a *duddu* = 1 anna 8 pies, and a *ṭankam* = 5 annas 4 pies). *Kankanam*, a yellow thread, such as is used in Hindu marriages and once to be used in *satis*, to which a betel leaf is fastened, is tied on her right wrist by the senior *basivi* present. A marriage song is then sung by the *basivi* and married women (not widows), who throw yellow rice over the girl. They put the bangle on her right wrist, and tie the *tāli*, on which is depicted the *nāman*³ of Vishṇu, and which is

¹ Five is a mystical number. It consists of 2 + 3, the first even and first odd numbers—i.e. if unity is God alone, 2 = diversity, while 3 = 1 + 2 = unity and diversity. Thus the two principles of nature are represented.

Mankind has five senses. The Brāhmins worship the five products of the cow, Śiva has five aspects. The Dravidians recognise five divine foods, the Assamese five essentials for worship, and the Avestan doctrine five divisions of human personality. Five wards off the evil eye among the Mohammedans, and, being considered lucky by the Romans, entered into their wedding ceremonies. See further the note in the Essay on betel-chewing, p. 201 n².

² This plant, which is used in India as a substitute for saffron and other yellow dyes, always plays an important part in marriage ceremonies—not only in India, but also in ancient Greece. It has a distinct erotic significance and has magical properties ascribed to it. See the papers by Dr W. Dymock on "The Use of Turmeric in Hindoo Ceremonial" in the *Journal of the Anthropological Society of Bombay*, p. 441 *et seq.* of the volume quoted in note 4, *ante*; and K. R. Kirtikar, "The use of Saffron and Turmeric in Hindu Marriage Ceremonies," *Journ. Anth. Soc. Bombay*, vol. ix, 1913, pp. 439-454. Much interesting information will be found in L. H. Burkill, *Dict. Econ. Prod. Malay Penin.*, vol. i, 1935, pp. 706-712 under "Curcuma domestica."

³ On this Dubois (*Hindu Manners, Customs & Ceremonies*, p. 112) writes, "The followers of Vishnu wear the emblem called *namam*, which they paint on their foreheads. It consists of three lines, one perpendicular and two oblique, meeting at

fastened to a necklace of black beads, round her neck, and they make the girl put on the toe-rings. These marriage tokens, which are worn by Hindu women until their husbands' death, are worn by the *basivi* until her own death. She is given, by way of insignia, a cane about three feet long, as a wand, carried in the right hand, and a *gopālam*, or begging basket, slung on the left arm. She is then branded with a heated brass instrument, with a *chakra* on the right shoulder, in front, similarly on the left shoulder with a *shenk* (*chank*) and over the right breast with a *chakra*. As well known, these are the emblems of Vishṇu.¹ The third mark, over the breast, is never done if there is any suspicion the girl is not a virgin. Sometimes girls are dedicated after maturity. It may be mentioned that, if he is present, the *guru* heats the instruments or holds them a moment ere they are used. After being branded, the girl's forehead is marked with *kunkam*, a red powder commonly used in feminine adornment. A seer and a quarter of rice, two dried cocoanuts minus the shells, betel leaves, a few areca-nuts, five pieces of turmeric and five dates are then tied in her cloth, in front, below the waist, and she is made to rise, taken thrice round the temple and into the god's sanctuary, where she prostrates herself before the image. Alms are distributed, certain sums, determined by the girl's parents, are given to the officiating priest and to the *guru*, and the ceremony is concluded by the priest whispering a *mantram* in the girl's ear. She is told to be good and think of god "Rāma Kṛishṇa," "Govind." For the next five weeks she is required to beg in the village, carrying her insignia and shouting "Rām! Rām!" "Govind!" as she approaches each house. After this there is the *hemm* ceremony to mark the girl's puberty, which corresponds with the *garbhādhāna* ceremony of the Hindus when the bride is of an age for the fulfilment of marriage. An auspicious day is chosen and fixed on if the parents of the girl are not needy; if they are, they wait until they can find the money or some man who, for the sake of securing the girl, will bear the expenses. The girl is given an oil-bath during the day, and in the evening the initiatory ceremony is repeated, with some additions. A sword with a lime stuck on its point is placed upright beside the novice, and it is held in her right hand. It represents the bridegroom, who in the corresponding

the base, and thus forming a sign which resembles a trident. The centre line is red, the two outer lines are white and are painted on with a sort of clay called *namam*; hence the name given to this emblem." It is the sign of the female sex, the counterpart of the *linga* of the Śaivite gods. The three lines in *tristūl*- or trident-form, are sometimes converted into a single red perpendicular line in the centre of the forehead.

¹ The *chakra* is the discus, and *shenk* (*chank*) the shell (*Turbinella rapa*). The other two emblems of Vishṇu are the club and lotus.

ceremony of the Hindu marriage sits on the bride's right. If the *basivi* happens to be a dancing-girl the object representing the bridegroom is a drum, and the girl's insignia consists of a drum and bells. A tray, on which is a *kalasyam* (water jug or vessel) and a lamp, is then produced and moved thrice in front of the girl from right to left. She rises and, carrying the sword in her right hand, places it in the god's sanctuary. The ceremony is concluded between nine and ten P.M. The actual religious duties of a *basivi* are few. They are entirely confined to the temple of her dedication, and consist of fasting on Saturdays, attending the temple for worship, and accompanying processions with her insignia during festivals. Their superior position over married women is due to their bearing the god's mark on their bodies, and by having no widowhood.

Among the Kakatias, a sect of weavers in Conjeeveram (and perhaps the custom obtains elsewhere), the eldest daughter is always dedicated to a deity, but she does not thereby attain any superior right to property. She is taken to a temple, with rice, cocoanuts, sugar, etc., a plantain leaf is placed on the ground, and on it some raw rice, and on that a brass vessel containing water; mango leaves and *darbha* grass are put into the vessel, a coconut and some flowers are placed on the top of it, and the water is purified by *mantrams*, and the leaves, grass and water are lightly thrown over the girl. A thread is then tied to her left wrist, and she swallows a pill of the five products of the cow for purification. She is then branded with a *chakra* on the right shoulder and with a *shenk* or *chank* on the left, and her forehead is marked with the god's *nāman*; the priest prays for her, and she distributes alms and presents. A *tāli*, which has been lying at the god's feet, is then placed on her neck by a senior dancing-girl (there are no *basivis* there), to whom she makes obeisance. She is given *tridham* to drink, a piece of cloth is tied on her head, she is decked with flowers and crowned with the god's cap or mitre, she offers worship through the priest, and is taken home with music. At night she comes to the temple and dances before the idol with bells on her feet. She is not a vestal, and she may ply her music; but she is the god's, and if not dedicated would soon be cut off from the living; so for her own benefit, and chiefly for the benefit of her family, she is dedicated. To avoid legal complications the public ceremony takes place after puberty.

In Mysore the castes among which the dedication of *basivis* is common are the Killēkyātas, Madiga, Dombar, Vadda, Beda, Kuruba and Golla. Details will be found in the pamphlets on

these castes by H. V. Nanjundayya.¹ There is a certain amount of variation in ceremonies, but the general idea is the same in all cases. In his long article on the *dēva-dāsīs* Thurston² gives interesting samples of petitions presented to a European Magistrate or Superintendent of Police by girls or mothers of girls who are about to become *basisis*. One reads as follows:

"I have got two daughters, aged fifteen and twelve respectively. As I have no male issues, I have got to necessarily celebrate [*sic*] the ceremony in the temple in connection with the tying of the goddess's *tāli* to my two daughters under the orders of the *guru*, in accordance with the customs of my caste. I therefore submit this petition for fear that the authorities may raise any objection (under the Age of Consent Act). I therefore request that the Honourable Court may be pleased to give permission to the tying of the *tāli* to my daughters."

The most recent account of the *dēva-dāsīs* is that by Thurston already mentioned. It is drawn mainly from articles in the census reports and gazetteers. Many of the customs have already been discussed in this Essay. There are, however, several important points in the Madras Census Reports for 1901, prepared by Mr Francis, which deserve including.³

"The profession is not now held in the consideration it once enjoyed. . . . It is one of the many inconsistencies of the Hindu religion that, though their profession is repeatedly and vehemently condemned by the *śāstras*, it has always received the countenance of the Church. . . . At the present day they form a regular caste, having its own laws of inheritance, its own customs and rules of etiquette, and its own *pañchāyats* (councils) to see that all these are followed, and thus hold a position which is perhaps without a parallel in any other country. Dancing-girls, dedicated to the usual profession of the caste, are formally married in a temple to a sword or a god, the *tāli* (marriage badge) being tied round their necks by some men of their caste. It was a standing puzzle to the census-enumerators whether such women should be entered as married in the column referring to civil condition.

Among the *dāsīs*, sons and daughters inherit equally, contrary to ordinary Hindu usage. Some of the sons remain in the caste, and

¹ In the order given they form Nos. 22, 17, 13, 11, 3, 1 and 20 of a series of short pamphlets issued by the *Ethnographical Survey of Mysore*, Bangalore, 1906-1911.

² *Castes and Tribes of Southern India*, by Edgar Thurston and K. Rangachari, Madras, 1909, vol. ii, pp. 125-153. See also *Ethnographic Notes in Southern India*, by Thurston, Madras, 1906, pp. 35-41.

³ Thurston, *op. cit.* vol. ii, pp. 126-128, quoting W. Francis, *Census of India*, 1901, vol. xv, Pt I, *Report*, Madras 1902, pp. 131, 152.

live by playing music for the women to dance to, and accompaniments to their songs, or by teaching singing and dancing to the younger girls, and music to the boys. These are called *nattuvans*. Others marry some girl of the caste who is too plain to be likely to be a success in the profession, and drift out of the community. Some of these affix to their names the terms *pillai* and *mudali*, which are the usual titles of the two castes (*vellāla* and *kaikōla*) from which most of the *dāsīs* are recruited, and try to live down the stigma attaching to their birth. Others join the *mēlakkārans*, or professional musicians. Cases have occurred in which wealthy sons of dancing-women have been allowed to marry girls of respectable parentage of other castes, but they are very rare. The daughters of the caste, who are brought up to follow the caste profession, are carefully taught dancing, singing, the art of dressing well, and the *ars amoris*, and their success in keeping up their clientèle is largely due to the contrast which they thus present to the ordinary Hindu housewife, whose ideas are bounded by the day's dinner and the babies. The dancing-girl castes and their allies, the *mēlakkārans*, are now practically the sole repository of Indian music, the system of which is probably one of the oldest in the world. Besides them and the Brāhmins few study the subject. . . .

There are two divisions among the *dāsīs*, called *valangai* (right-hand) and *iḍangai* (left-hand). The chief distinction between them is that the former will have nothing to do with the *kammālar* (artisans) or any other of the left-hand castes, or play or sing in their houses. The latter division is not so particular, and its members are consequently sometimes known as the *kammāla dāsīs*. Neither division, however, is allowed to have any dealings with men of the lowest castes, and violation of this rule of etiquette is tried by a *panchāyat* of the caste, and visited with excommunication. . . .

Among the *kaikōlan* musicians of Coimbatore at least one girl in every family should be set apart for the temple service, and she is instructed in music and dancing. At the *tālī*-tying ceremony she is decorated with jewels and made to stand on a heap of paddy (unhusked rice). A folded cloth is held before her by two *dāsīs*, who also stand on heaps of paddy. The girl catches hold of the cloth, and her dancing-master, who is seated behind her, grasping her legs, moves them up and down in time with the music which is played. In the evening she is taken, astride a pony, to the temple, where a new cloth for the idol, the *tālī*, and other articles required for doing *pūjā* (worship) have been got ready. The girl is seated facing the idol, and the officiating Brāhman gives the sandal and

flowers to her, and ties the *tāli*, which has been lying at the feet of the idol, round her neck. The *tāli* consists of a golden disc and black beads. She continues to learn music and dancing, and eventually goes through the form of a nuptial ceremony. The relations are invited on an auspicious day, and the maternal uncle, or his representative, ties a golden band on the girl's forehead, and, carrying her, places her on a plank before the assembled guests. A Brāhman priest recites *mantrams* (prayers), and prepares the sacred fire (*hōmam*). For the actual nuptials a rich Brāhman, if possible, or, if not, a Brāhman of more lowly status, is invited. A Brāhman is called in, as he is next in importance to, and the representative of, the idol. As a *dāsī* can never become a widow, the beads in her *tāli* are considered to bring good luck to women who wear them. And some people send the *tāli* required for a marriage to a *dāsī*, who prepares the string for it, and attaches to it black beads from her own *tāli*. A *dāsī* is also deputed to walk at the head of Hindu marriage-processions. Married women do not like to do this, as they are not proof against evil omens, which the procession may meet. And it is believed that *dāsīs*, to whom widowhood is unknown, possess the power of warding off the effects of inauspicious omens. It may be remarked, *en passant*, that *dāsīs* are not at the present day so much patronised at Hindu marriages as in olden times. Much is due in this direction to the progress of enlightened ideas, which have of late been strongly put forward by Hindu social reformers. When a *kaikōlan dāsī* dies, her body is covered with a new cloth removed from the idol, and flowers are supplied from the temple to which she belonged. No *pūjā* is performed in the temple till the corpse is disposed of, as the idol, being her husband, has to observe pollution.

In Travancore the institution of the *dēva-dāsīs* affords an interesting comparison with that existing in other parts of India. The following account is taken from data collected by Mr N. S. Aiyer.

While the *dāsīs* of Kartikappalli, Ambalapuzha and Shertallay belonged originally to the Konkan coast, those of Shenkottah belonged to the Pāṇḍiyan country. But the South Travancore *dāsīs* are an indigenous class. The female members of the caste are, besides being known by the ordinary name of *tēvaḍiyāl* and *dāsī*, both meaning "servant of god," called *kuḍikkhar*, meaning "those belonging to the house" (*i.e.* given rent free by the Sirkar), and *peṇḍukal*, or women, the former of these designations being more popular than the latter. Males are called *tēvaḍiyan*, though many prefer to be known as *Nanchināt Vellālas*. Males, like these *Vellālas*, take the title of *Pillai*. In ancient days *dēva-dāsīs* who

became experts in singing and dancing received the title of Rāyar (king), which appears to have been last conferred in A.D. 1847. The South Travancore *dāsīs* neither interdine nor intermarry with the dancing-girls of the Tamil-speaking districts. They adopt girls only from a particular division of the Nāyars, the Tamil Padam, and dance only in temples. Unlike their sisters outside Travancore, they do not accept private engagements in houses on the occasion of marriage. The males, in a few houses, marry the Tamil Padam and Padamangalam Nāyars, while some Padamangalam Nāyars and Nanchināt Vellālas in their turn take their women as wives.

When a dancing-woman becomes too old or diseased, and thus unable to perform her usual temple duties, she applies to the temple authorities for permission to remove her ear-pendants (*tōḍu*). The ceremony takes place at the palace of the Mahārāja. At the appointed spot the officers concerned assemble, and the woman, seated on a wooden plank, proceeds to unhook the pendants, and places them, with a *naṣar* (gift) of twelve *panams* (coins), on the plank. Directly after this she turns about, and walks away without casting a second glance at the ear-ornaments which have been laid down. She becomes immediately a *taikkizhavi*, or old mother, and is supposed to lead a life of retirement and resignation. By way of distinction, a *dāsī* in active service is referred to as *āṭum-pātram*. Though the ear-ornaments are at once returned to her from the palace, the woman is never again permitted to put them on, but only to wear the *pampadam*, or antiquated ear-ornament of Tamil Śūdra women. Her temple wages undergo a slight reduction, consequent on her proved incapacity.

In some temples, as at Kēralapuram, there are two divisions of dancing-girls, one known as the *muzakkudī*, to attend to the daily routine, the other as the *chirappukudī*, to serve on special occasions. The special duties that may be required of the South Travancore *dāsīs* are: (1) to attend the two Ūtsavas at Padmanābhaswāmi's temple, and the Dusserah at the capital; (2) to meet and escort members of the royal family at their respective village limits; (3) to undertake the prescribed fasts for the *apamārga* ceremony in connection with the annual festival of the temple. On these days strict continence is enjoined, and they are fed at the temple, and allowed only one meal a day.

The principal deities of the dancing-girls are those to whom the temples, in which they are employed, are dedicated. They observe the new and full moon days, and the last Friday of every month, as important. The Ōṇam, Śivarātri, Tai-Pongal, Dipāvali and

Chitrapūrṇami are the best recognised religious festivals. Minor deities, such as Bhadrakālī, Yakshi and Gandharva are worshipped by the figure of a trident or sword being drawn on the wall of the house, to which food and sweetmeats are offered on Fridays. The priests on these occasions are *ōchchans*. There are no recognised headmen in the caste. The services of Brāhmaṇs are resorted to for the purpose of purification, of *nampiyans* and *Saiva Vellālas* for the performance of funeral rites, and of *gurus* on occasions of marriage and for the final ceremonies on the sixteenth day after death.

Girls belonging to this caste may either be dedicated to temple service or married to a male member of the caste. No woman can be dedicated to the temple after she has reached puberty. On the occasion of marriage a sum of from fifty to a hundred and fifty rupees is given to the bride's house, not as a bride-price, but for defraying the marriage expenses. There is a preliminary ceremony of betrothal, and the marriage is celebrated at an auspicious hour. The *guru* recites a few hymns, and the ceremonies, which include the tying of the *tālī*, continue for four days. The couple commence joint life on the sixteenth day after the girl has reached puberty. It is easy enough to get a divorce, as this merely depends upon the will of one of the two parties, and the woman becomes free to receive clothes from another person in token of her having entered into a fresh matrimonial alliance.

All applications for the presentation of a girl to the temple are made to the temple authorities by the senior dancing-girl of the temple, the girl to be presented being in all cases from six to eight years of age. If she is closely related to the applicant no inquiries regarding her status and claim need be made. In all other cases formal investigations are instituted, and the records taken are submitted to the chief revenue officer of the division for orders. Some paddy (rice) and five *paṇams* are given to the family from the temple funds towards the expenses of the ceremony. The practice at the Suchindram temple is to convene, on an auspicious day, a *yōga*, or meeting, composed of the Valiya Śrī-kāriyakkar, the Yogattil Potti, the Vattappalli Muttatu, and others, at which the preliminaries are arranged. The girl bathes, and goes to the temple on the morning of the selected day with two new cloths, betel leaves and areca-nuts. The temple priest places the cloths and the *tālī* at the feet of the image and sets apart one for the divine use. The *tālī* consists of a triangular *bottu*, bearing the image of Gaṇeśa, with a gold bead on either side. Taking the remaining cloth and the *tālī*, and sitting close to the girl, the priest, facing to the north, proceeds

to officiate. The girl sits, facing the deity, in the inner sanctuary. The priest kindles the fire, and performs all the marriage ceremonies, following the custom of the Tirukkalyānam festival, when Śiva is represented as marrying Pārvatī. He then teaches the girl the Panchākshara hymn if the temple is Śaivite, and Ashtākshara if it is Vaiṣṇavite, presents her with the cloth, and ties the *tālī* round her neck. The *naṭṭuvan*, or dancing-master, instructs her for the first time in his art, and a quantity of raw rice is given to her by the temple authorities. The girl, thus married, is taken to her house, where the marriage festivities are celebrated for two or three days. As in Brāhmanical marriages, the rolling of a cocoanut to and fro is gone through, the temple priest or an elderly *dāsi*, dressed in male attire, acting the part of the bridegroom. The girl is taken in procession through the streets.

The birth of male children is not made an occasion for rejoicing, and, as the proverb goes, the lamp on these occasions is only dimly lighted. Inheritance is in the female line, and women are the absolute owners of all property earned. When a dancing-girl dies some paddy and five *panams* are given to the temple to which she was attached, to defray the funeral expenses. The temple priest gives a garland, and a quantity of ashes for decorating the corpse. After this a *nampiyan*, an *ōchchan*, some *Vellāla* headmen and a *kudikkāri*, having no pollution, assemble at the house of the deceased. The *nampiyan* consecrates a pot of water with prayers, the *ōchchan* plays on his musical instrument, and the *Vellālas* and *kudikkāri* powder the turmeric to be smeared over the corpse. In the case of temple devotees, their dead bodies must be bathed with this substance by the priest, after which alone the funeral ceremonies may proceed. The *kartā* (chief mourner), who is the nearest male relative, has to get his whole head shaved. When a temple priest dies, though he is a Brāhman, the dancing-girl on whom he has performed the vicarious marriage rite has to go to his death-bed and prepare the turmeric powder to be dusted over his corpse. The anniversary of the death of the mother and maternal uncle are invariably observed.

The adoption of a dancing-girl is a lengthy ceremony. The application to the temple authorities takes the form of a request that the girl to be adopted may be made heir to both *kudi* and *pati*—that is, to the house and temple service of the person adopting. The sanction of the authorities having been obtained, all concerned meet at the house of the person who is adopting, a document is executed, and a ceremony, of the nature of the Jātakarma, performed. The girl then goes through the marriage-rite, and is

handed over to the charge of the music-teacher to be regularly trained in her profession.

In concluding his article, Thurston gives a number of cases about the initiation, laws of inheritance, etc., which have been argued in the Madras High Court, besides a selection of current proverbs relating to dancing-girls. These will be found on pp. 145-153 of the above-mentioned article.

We have now become acquainted with all the important data on the subject under discussion so far as India is concerned.

In summarising we notice the following points:

In Vedic times reliable evidence is insufficient to enable us to form any definite conclusion as to the possibility of distinct connection between religion and prostitution.

Although the law-books regarded the latter with disfavour, and in the Buddhist age Brāhmins were not even allowed to hear music or witness dances owing to their inseparable connection with prostitution, yet it appears that the letter of the law was not carried out in any great strictness. This is especially evident when in the collection of the birth-stories of Buddha (the *Jātakas*) we read of the high esteem in which such women were held, and of the important positions—sometimes even in the king's palace—which they occupied.

It is quite a feasible suggestion that this State approval of prostitutes may have been, even at this early date, largely due to their taking part (however small) in the ritual at the neighbouring temples. Direct historical evidence of the privileges which these women enjoyed is afforded by Kautilya's *Arthasāstra* (circa 300 B.C.), where we learn that, although under strict regulations, the prostitutes often acquired great position and wealth.

In the early Christian era we still find no direct reference to the *dēva-dāsī*, but literary evidence distinctly refers to dancing as one of the chief accomplishments of the courtesan. After about the twelfth century our evidence becomes more definite and geographical.

In the time of Akbar rules were issued relating to the superintendence of the prostitute dancing-girls, and, as the oppression of the Mohammedans increased, so, in inverse ratio, did the "religious" element in the institution of the *dēva-dāsī* become less and less. After the death of the Puritan Aurangzēb the general morality sank to a very low level, and prostitution, now entirely secular, reached huge dimensions.

In modern days the prostitute dancing-castes divide themselves into two branches, according as to whether they are Hindus or

Mohammedans. Only one sub-caste, the *rājṅanyā*, has any definite connection with the temples. Further evidence shows that there is no system of *dēva-dāsīs* as there is in the South, which state of things is due mainly to the Mohammedan conquest in earlier days.

As we proceed southwards direct references to the *dēva-dāsīs* become more common. In Central India we find the system fully developed at Jagannātha, in Orissa, where the sincerity of the worshippers was as undoubted as the viciousness of the priesthood. Thus there existed side by side religion and prostitution. As the latter was recognised and approved by both Church and State, its acceptance by the worshippers of Viṣṇu, who looked to the Brāhman priests for guidance, can be readily understood.

We now come across accounts of the so-called marriage ceremonies of the *dēva-dāsīs* which attach to them a certain amount of envy, owing to the fact that, as they are married to a god, or an emblem of a divine husband, they can never become widows. This fact and the stamping of the bodies of the women with the symbols of the gods are the chief reasons which cause the *dēva-dāsī* to be approved by the ordinary married women and resorted to by their husbands.

Although British rule has done much to suppress the element of vice in the institution of the *dēva-dāsīs*, it is much too deeply rooted to extirpate. We find the ritual still prevalent in parts of Central India and still more so in the South.

It is here that our accounts are much fuller and more reliable, and even as early as A.D. 985 we find the system flourishing under the Chōla monarchs. Mediæval travellers confirm these accounts.

It seems clear, however, that when the wealth and splendour of a kingdom reached its height, as in the case of Vijayanagar in the fifteen and sixteenth centuries, the "service" of the *dēva-dāsī* became almost entirely confined to the streets, while her temple duties were practically non-existent.

Farther south the religious observances had been more closely maintained, and travellers of the seventeenth, eighteenth and nineteenth centuries found the temple-women taking a prominent part at all the chief temples. It is obvious to see from the more detailed accounts that here we have the fuller and more developed form of the system of sacred prostitution as compared with what we find farther north.

The privileges of dedicating a girl to the deity are fully realised by the lower Sūdra castes and, as we see by the strange system of *basivis*, they can actually perform the obsequies of the parents in the place of the son. As the duty to the dead is of such great

importance to the Hindu, it can at once be realised that not only are the dedicated prostitutes regarded with favour, but in many cases are entrusted with the performing of the most sacred duties, thus enabling their parents to die in peace.

On the other hand, the status of the *dēva-dāsī* is not held in the high consideration it once was, and modern education in India has done much to open the eyes of a more enlightened generation.

Surveying the total evidence here collected, the reader naturally asks himself how it was that the sacred and profane became thus united; or, in other words, what was the real origin of "sacred" prostitution. Numerous theories exist as to the true explanation of this strange custom, but none is entirely satisfactory. It will, however, help us in our inquiry to list the chief:

(1) It is a substitute for human sacrifice, being an offering to the deity in order to appease him or to secure blessings for the country in question and its inhabitants.

(2) It is an expiation for individual marriage as a temporary recognition of pre-existing communal marriage.

(3) It springs from the custom of providing sexual hospitality for strangers; and if such hospitality be offered by the mortal wife of a deity, good would be bound to result.

(4) It is a rite to ensure the fruitfulness of the ground and the increase of man and beast on the principle of homœopathic magic.

(5) It arises from the secular and precautionary practice of destroying a bride's virginity by someone other than the bridegroom.

(6) It merely represents the licentious worship of a people, subservient to a degraded and vicious priesthood.

(7) It is a part of the phallic worship which existed in India from early Dravidian times.

All the above theories have been put forward from time to time by men whose opinions have been, or are, respected.

The evidence already laid before the reader shows clearly that most of them are quite insufficient to account for the whole institution of *dēva-dāsīs*, while others, such as Nos. 5 and 6, have already been disproved. No. 4, supported by Frazer and many other scholars¹, seems to be feasible, although it certainly does not account for everything.

The above theories have been presented by men who made

¹ Thus J. H. Hutton (*Caste in India*, Cambridge 1946, p. 143) after a general survey of the subject, writes "There can be little doubt but that the custom of consecrated prostitution originates in a commerce regarded (on some principle of sympathetic magic, perhaps) as essentially necessary to ensure that life should be propagated and that the earth should fructify."

comparisons, and I feel that the fact is often overlooked that the origin of a certain custom in one part of the world may not necessarily be the same as that of a similar custom in another part of the world.

In speaking of sacred prostitution in Western Asia Frazer¹ says: "The true parallel to these customs is the sacred prostitution which is carried on to this day by dedicated women in India and Africa." This is a sweeping statement to make, especially when we bear in mind how scanty is our knowledge of the early Semitic pantheon, the differences of opinion held by some of our greatest Babylonian scholars, and the lack of reliable historic data of the early Vedic period in India.

We must also remember that the religion, ethics and philosophy of India have been ever changing, and nothing is more inapplicable than to speak of the "changeless East" in this respect.

Our knowledge of the early Dravidian religion of India before it was "taken over" by the Aryan invaders is so slight that it is impossible to make any definite statement with regard to the *origin* of any particular custom of ritual or religious observance.

In order, however, to enable readers to make their own deductions and to follow up any branch of the subject, I shall give a few notes on sacred prostitution in countries other than India.

Religious prostitution in Western Asia is first mentioned in some of the earliest records of Babylonia, and has also been traced in Syria, Phœnicia, Arabia, Egypt, Greece and Rome. Similar cults also occur in the Far East, Central America, West Africa and other localities to be mentioned later.

The subject is a very extensive one, upon which volumes could be written. The following remarks, therefore, merely deal with it in a very general manner. Care, however, has been taken to provide ample references, so that the student can pursue the subject to any length.

As Mesopotamia was the original home of sacred prostitution, I shall deal with the Babylonian evidence more fully than with that from other localities outside India, about which the classical writers of Greece and Rome have already made us sufficiently familiar.

Babylonia

In discussing the "sacred servants," or *hierodouloi*, in ancient Babylonia we can conveniently consider the subject under the two following headings:

¹ *Golden Bough, Adonis, Attis and Osiris*, vol. i, p. 61.

- (1) The Code of Hammurabi.
- (2) The Epic of Gilgamesh.

(1) About 2090 B.C.,¹ during the first dynasty of Babylon (which corresponds to the twelfth Egyptian dynasty), Hammurabi set up in the temple of Marduk, the city god, at Babylon, a code of laws embodying the decisions of a long series of judges who were already acquainted with a system of laws probably of Sumerian origin. Babylonian law ran in the name of God, and the temple was naturally a very large factor in the life of the people. It formed an intimate connection between their god and themselves, and their ritual tended to emphasise this fact.

Accordingly their god would dine with them at sacrificial feasts, he would intermarry with them, and would be appealed to as an adviser and helper in times of danger or difficulty. The temple was, moreover, the house of the god and thus was the outward sign of human relations with divine powers. It was also the centre of the country's wealth, the equivalent of the modern bank. Its wealth was derived partly from the land it owned, which was either leased out or used for cattle-breeding, and partly from dues of various kinds.

The Code of Hammurabi² affected the whole realm, and the laws therein applied to every temple, no matter what god or goddess happened to be locally enshrined. Although Marduk was worshipped at Babylon, at Larsa or Sippar it was Shamash, at Erech it was Innini or Ishtar the mother-goddess, in Ur it was Nannar the moon-god, and so on. Each temple had a staff, varying with its size, which in most cases included both male and female *hierodouloi* in its service.

The priestesses and temple women formed several distinct classes which need some detailed description.

The priestesses were of two kinds, the *entu* (*Nin-An*) and the *našitu* (*Sal-Me*). Both classes were held in respect, and the *entu* (brides of the god) were looked upon as the highest class in the land. It is not clear if they married mortal husbands or not, anyway no mention of a father is made. The *našitu* were much more numerous

¹ All these early dates are now being continually pushed forward, so much so that the early volumes of the *Cambridge Ancient History* are being rewritten. Some, such as the date of the Dynasty of Agade, have been shifted from c. 2872 to c. 2370. The early Egyptian dates are equally elastic.

² For further details of the Code see the articles on Babylonian law by C. H. W. Johns in *Ency. Brit.*, vol. iii, p. 115 *et seq.*, and *Ency. Rel. Eth.*, vol. vii, p. 817 *et seq.* Special reference should be made to J. Kohler and A. Ungnad, *Hammurabi's Gesetz*, Leipzig, 1909, and finally to the Bibliography on p. 651 of the *Cambridge Ancient History*, vol. i, 1923.

and were allowed to marry, but were not expected to bear children, a maid being supplied for this purpose. Both the *entu* and the *naṭitu* were wealthy and owned property.

They could either live in the *gagum* (cloister) adjoining the temple or in their own houses. If they chose the latter they were forbidden, on pain of being burned alive, to own or enter a wine-shop, so great was the prestige the class had to maintain.

A study of the contract-literature of the period seems to make it clear that just as an ordinary well-to-do citizen could have a chief wife and many inferior ones as well as concubines, so also the god would have his chief wife (*entu*), his many inferior ones (*naṭitu*) and his concubines (*zikru*).

This latter class of consecrated women known as *zikru* or *zermashitu* came immediately after the two varieties of priestesses already mentioned. They, too, were well-to-do and held in respect. The *zikru* or "vowed" woman is not mentioned in religious literature, nor is *zermashitu* (seed-purifying). Both of these temple harlots could marry and bear children. The *zikru* appears to be slightly superior to the *zermashitu* owing to the fact that in the laws relating to the inheritance of property it is stated that if the father of a *zikru* died and nothing was left her in his will she was to inherit equally with her brothers, but if she was a *zermashitu* or a *kadishtu* (to be discussed shortly) she received only one-third of a brother's share.

The *kadishtu*, although classed with the *zermashitu* as regards the inheriting of property, clearly occupied a subordinate position. Her name means "sacred woman" and is the same as the Biblical *kēdēshāh* (Deut. xxiii, 18). There is no record of her marriage, and her speciality, outside her temple duties, was suckling the children of Babylonian ladies, for which service she received payment, together with a clay tablet recording the contract. Several examples of such tablets can be seen in the British Museum.¹

Apart from the various temple women already mentioned there were others who were more especially connected with the worship of Ishtar. In the time of Hammurabi the centre of this cult was at Erech, although she had a shrine in the temple of Marduk in

¹ See D. G. Lyon, "The Consecrated Women of the Hammurabi Code," in *Studies in the History of Religions, presented to C. H. Toy*, New York, 1912, pp. 341-360. Both Lyon and Johns (*Amer. Journ. Sem. Lang.*, vol. xix, 1902, pp. 96-107) tried to show that the temple women were chaste. This view has, however, been proved untenable by G. A. Barton (art. "Hierodouloi," *Hastings' Ency. Rel. Eth.*, vol. vi, p. 672 *et seq.*) and D. D. Luckenbill ("The Temple Women of the Code of Hammurabi," in *Amer. Journ. Sem. Lang.*, vol. xxxiv, 1917, pp. 1-12).

I am indebted to the late Professor R. Campbell Thompson for drawing my atten-

Babylon, where, under the name of Sarpanit,¹ she appears in later texts as the wife of Marduk. It is undoubtedly Sarpanit to whom Herodotus refers in his well-known account of the enforced temporary prostitution of every Babylonian woman (i, 199).

The correct interpretation of this account, together with that in Strabo, xvi, i, 20, and Justin, xviii, 5, has led to much disagreement among scholars. For an interesting study on the whole question reference should be made to E. Sidney Hartland's article "Concerning the Rite at the Temple of Mylitta" in *Anthropological Essays presented to E. B. Tylor*, Oxford, 1907, pp. 189-202. He sees in it a puberty rite, the maiden not being admitted to the status and privileges of adult life until she had been ceremonially deflowered. Another provocative passage of Herodotus is that in i, 181,² where he is discussing the sacred enclosure of Zeus Belus—perhaps the temple of Bel Nebo in Borsippa, on the right bank of the river. After describing the eight-stage tower, he tells us that in the last section is a great shrine containing a couch with a golden table near by. "But no image has been set in the shrine," he concludes,³ "nor does any human creature lie therein for the night, except one native woman, chosen from all women by the God, as say the Chaldaeans, who are priests of this God." With this we can compare a passage in the Epistle of Jeremy, appended to the Apocryphal Book of Baruch, which reads (verses 10, 11): "and sometimes also the priests convey from their gods gold and silver, and bestow it upon themselves; and will even give thereof to the harlots on the roof." This is surely the correct translation of ἐν τῷ τοῦ στέγους πόρναις, as it was only in later Greek that στέγος meant a brothel. On this subject see R. H. Charles, *The Apocrypha and Pseudepigraphia of the Old Testament*, vol. i, 1913, p. 601, and also verse 43 in connection with Herodotus, i, 199.

In order to understand the cult of the great mother-goddess throughout Western Asia it is necessary to say a few words on the origin of Ishtar. Recent evidence seems to show that Ishtar was not of Semitic Babylonian or even of Sumerian creation, but was a primitive Semitic divinity personifying the force of nature which showed itself in the giving and taking of life. The various functions

tion to the above papers, and to his own excellent chapter on "The Golden Age of Hammurabi" in the *Cambridge Ancient History*, vol. i, 1923, pp. 494-551, which has been of the greatest help in this Essay.

¹ Or Zarpanit, which in Sumerian meant "silver-shining," but was popularly interpreted by the Semites as Zar-banit, "seed-producing."

² See W. W. How and J. Wells, *Commentary on Herodotus*, reprinted 1936, vol. i, pp. 140-142; and cf. A. B. Cook, *Zeus*, vol. i, Cambridge, 1914, pp. 756, 757.

³ Translated by A. D. Godley, Loeb Classical Library, vol. i, p. 227.

of Sumerian local goddesses became by absorption merely fresh attributes of Ishtar, the original name sometimes remaining.

Thus we find different cities sacred to different goddesses which are all certain aspects of Ishtar, the great mother-goddess. It follows, therefore, that the characteristics of Ishtar were numerous, for besides being connected with creation of animal and vegetable life and the goddess of sexual love, marriage and maternity, she was also the storm and war goddess and the destroyer of life. It is interesting to compare similar attributes in the male-female (Ardha-nārīśvara) form of Śiva, who was both a creator and a destroyer.

In Erech Ishtar was known as Innini, Innanna or Nanā, and as many hymns originally addressed to Innini are appropriated by Ishtar, she bears, among others, the titles of "Queen of Eanna," "Queen of the land of Erech."¹ Her cult extended to all cities of importance in Babylonia and Assyria, and it is in her capacity as goddess of sexual love that she concerns us here.

Her character is clearly represented in numerous hymns, where she is described as "the languid-eyed," "goddess of desire," "goddess of sighing," and refers to herself as "a loving courtesan" and "temple-harlot." In one hymn she says: "I turn the male to the female, I turn the female to the male, I am she who adorneth the male for the female, I am she who adorneth the female for the male."² In art she is depicted as naked with her sexual features emphasised, or as lifting her robe to disclose her charms.³ Several statues represent her as offering her breasts; some have been found outside Babylonia—e.g. in Northern Syria and Carchemish.⁴

The names given to the licentious ministrants at the Ishtar temple at Erech were *kizrēti* (harlot), *shamkhūti* (joy-maiden), and *kharimāti* (devoted one). If they differed from the *zermashitu* and *kadishtu* it is impossible to say exactly what the difference was. They are thus described in the *Legend of Girra*:

"Of Erech, home of Anu and of Ishtar,
The town of harlots, strumpets and hetææ,
Whose (hire) men pay Ishtar, and they yield their hand."

We will now pass on to the Epic of Gilgamesh, where further data can be obtained.

¹ T. G. Pinches, "The Goddess Ištar in Assyro-Babylonian Literature," *Proc. Soc. Bibl. Arch.*, vol. xxxi, p. 60.

² *Op. cit.*, vol. xxxi, pp. 22, 34.

³ W. H. Ward, *The Seal Cylinders of Western Asia*, Washington, 1910, pp. 161 *et seq.*, 296, 380, 387.

⁴ D. G. Hogarth, *Ann. Arch. Anth.*, Liverpool, vol. ii, 1909, p. 170, fig. 1.

(2) The Epic of Gilgamesh is one of the most important literary products of Babylonia, and sheds considerable light on the cult of Ishtar. It consists of a number of myths of different ages—some dating back to 2000 B.C. or even earlier—which have all been gathered round the name of Gilgamesh, an early Sumerian ruler of about 4500 B.C.

The Epic is known to us chiefly from a collection of twelve sets of fragments found in the library of Assur-bani-pal, King of Assyria (668-626 B.C.). In the first tablet the goddess Aruru creates a kind of "wild man of the woods," by name Engidu,¹ to act as a rival to Gilgamesh, whose power and tyranny had begun to be a burden to the people. In order to get Engidu away from his desert home and his beasts, a *shamkhāti* from Ishtar's temple is taken to him. "This woman, when they approached Engidu, opened wide her garments, exposing her charms, yielded herself to his embrace, and for six days and seven nights gratified his desire, until he was won from his wild life."² In the second tablet the harlot takes him back to Erech, where she clothes and generally looks after him.

He finally meets Gilgamesh, and the next three tablets relate their friendship, quarrels and adventures. The sixth tablet is especially interesting, for here we get a reference to the Ishtar-Tammuz myth which is so inseparable from the great mother-goddess.

After overcoming an enemy named Khumbaba the two friends return to Erech in triumph. Ishtar asks Gilgamesh to be her husband and promises him all manner of riches and power. He refuses, reminding her of the numerous lovers she has had in the past and what ill luck befell them. In particular he refers to Tammuz, the lover of her youth, whose death she bewails every year. This is, of course, the youthful solar God of the Springtime, who was wooed by the Goddess of Fertility, Ishtar. Each year that Tammuz died Ishtar went to Hades (Sheol) in search of him. The myth has been detailed by many scholars and does not in itself concern us here.³

The effects of Ishtar's descent to Sheol in search of her youthful lover have, however, direct bearing upon our inquiry.

As soon as Ishtar had gone on her annual journey to the underworld, copulation in men and animals ceased. Consequently some

¹ Engidu is now considered a more correct reading than Eabani.

² P. Jensen, *Assyrisch-Babylonische Mythen u. Epen*, Keilen. Bib. vol. vi, 1900, p. 127.

³ See Frazer's *Golden Bough*, *Adonis*, *Attis and Osiris*, and the numerous articles in *Hastings' Ency. Rel. Eth.*, under such headings as "Babylonians and Assyrians," "Heroes and Hero Gods," "Tammuz," "Ishtar," etc.

remedy had to be sought in order to circumvent such a disastrous state of affairs. Thus arose the necessity for women to play their part as goddesses of sexual love and fertility; and to fill this office the "sacred prostitute" was created.

This applies only to the Ishtar cult and not to those cases where priestesses were found in temples dedicated to other deities.

We have seen that in the case of Marduk the god was credited with all human attributes and passions.

To return to Gilgamesh, we find Ishtar very wroth at having her offers of love refused. She sent a bull to kill him, but he destroyed it. Thereupon Ishtar gathered together all her temple women and harlots, and made great outcry and lamentation.¹

The remaining tablets, containing, among other incidents, the story of the Deluge, do not concern us.

We have seen that at this early period sacred prostitution was fully established and entered into the literature and mythology of the country. Under the male deity the temple harlot plays the part of concubine, while under the female deity she was a kind of "understudy," always ready to symbolise by her action the purpose of the great mother-goddess.

Without going further into the cult of Ishtar it will serve our purpose better to move slowly westwards, noting the spread of the worship of a goddess of love and fertility which clearly resembled that of Ishtar. We must not necessarily conclude that whenever we find a mother-goddess it is merely Ishtar transplanted to new soil and given a new name. It seems to be more probable, anyhow in several cases, that local female deities acquired fresh attributes from Ishtar which occasionally became the most prominent features of the cult.

Egypt

Evidence of sacred prostitution in Ancient Egypt is not conclusive although the existence of such an institution can easily be read into many Theban inscriptions.² In general, however, such a practice as was carried on in Syria, as we shall shortly see, does not seem to fit in with Egyptian practice in historic times. The institution of "God's Wife," which existed, for instance, at Medinet Habu,³ was certainly not connected in any way with sacred prostitution, but was directly related to the royal succession and later to the

¹ P. Jensen, *op. cit.*, vol. vi, p. 86 *et seq.*

² See, for example, J. H. Breasted, *Ancient Records of Egypt*, Chicago, 1906, vol. iv, p. 75, No. 128, p. 237, No. 521; also vol. ii, p. 80, Nos. 196-198.

³ Oriental Institute Communications, No. 7, *Medinet Habu Studies*, 1928-1929, V. Hölscher and J. A. Wilson, pp. 4, 5.

administrative organisation of Thebes. If, at this time, there had been anything like sacred prostitution in Egypt, it would be connected with Min, the ithyphallic god—but there is no evidence whatever on this point. Then again, the well-known harim scenes on the so-called Fortified Gate at Medinet Habu have been repeatedly taken as proof of the existence of sacred prostitution. "... their occurrence in a temple," says George A. Barton,¹ "would seem to indicate that it was no ordinary harim." The architectural description of the Fortified Gate has been published by V. Hölscher in *Excavations at Ancient Thebes*, 1930-1, University of Chicago Press, 1932. Here, on pp. 16 and 17, we can see two of the reliefs of the harim scene, which give us a good idea of their character.² There is nothing whatever even to hint that the ladies are anything else than what they are represented—just ladies of the harim.

As far as I can determine, there is no proof of sacred prostitution in Egypt until Ptolomaic times, and even that is not absolutely certain. I refer to an interesting group of Demotic Papyri from the temple of Sobek, the crocodile God, from Tebynis in the Fayum, and now in the British Museum. There are thirty-seven documents containing about fifty self-dedications of men and women to the God, offering a life of service to the temple in return for certain favours, in the nature of protections against mishaps, from the God. The dates covered fall within the period 195 B.C.-137 B.C. It is the contracts of the youths that are of particular interest for their wording seems to prove that their mothers were temple prostitutes and that they are henceforth bound to the service of the Temple for ever. As the father's name is unknown this is especially stated in the document, thus a petitioner is described as the "youth born in the temple-precincts, Imuthes, son of I know not his name by . . .," and then the mother's name is added. This is no exceptional case, for out of the fifty dedications only seven mention a father's name, all the rest particularly stating that it is unknown but in each case adding that of the mother.

In an article on the subject,³ the late Sir Herbert Thompson states that it may be supposed that the offspring of these temple prostitutes would belong *ipso facto* to the temple; the male children becoming part of the large body of tillers of the temple lands,

¹ "Hierodouloi (Semitic and Egyptian)" *Hastings' Ency. Rel. Eth.*, vol. vi, p. 675.

² Dr Harold H. Nelson tells me that the folio volume on the Fortified Gate, with photographs and drawings of every carving and inscription, will not be published for at least another eight years.

³ "Self-Dedications," *Actes du V^e Congrès International De Papyrologie*, Fondation Égyptologique Reine Elisabeth, Bruxelles, 1938, pp. 497-504.

herdsmen, etc., attached to the temple: and the female children as singers and subordinate attendants of the priests and priestesses, and finally as prostitutes themselves.

Syria, Phœnicia, Canaan, etc.

In Syria the great mother-goddess was known by the name of Attar or Athar, while at the sacred city of Hierapolis (the modern Membij) in the Lebanon she was called Atar-gatis, a word compounded out of 'Atar and 'Ate, two well-known Syrian deities. The full etymology of these names has been discussed by L. B. Paton,¹ who gives a large number of useful references.

Our information on the worship at Hierapolis is mainly derived from Lucian's *De Dea Syria*, which is considered one of his earliest works, probably written about A.D. 150. Recent researches in Asia Minor and Northern Syria, largely numismatic, show that at the height of the Hittite domination in the fourteenth century B.C. the chief religious cult was very similar to that described by Lucian. There were, however, certain differences. The Hittites worshipped a mated pair, a bull God and a lion goddess, while in later days it was the mother-goddess who became prominent, representing fertility, and (in Phœnicia) the goddess who presided over human birth. Religion in the East adapted itself to changing conditions and the immediate needs of the community.

Thus in Syria the climate and temperament of the people tended to develop the sensuous aspect of the goddess. As the cult became more popular, the rites and festivals became more orgiastic in character. The phallic nature of some of the rites at Hierapolis is described by Lucian (28), where he speaks of two huge phalli, thirty fathoms high, which stood at the door of the temple. Twice every year a man (probably one of the castrated *Galli*) climbed to the summit from the inside, where he was supposed to hold converse with the gods to ensure the prosperity and fertility of the land.

Speaking of the temple at Byblos, Lucian states that after the termination of the mourning for the loss of Adonis (*cf.* the Tammuz myth) the men shave their heads and the women who refuse to submit to a similar treatment have to prostitute themselves for a whole day in the temple. The proceeds of their hire paid for a sacrifice to the mother-goddess. The fact that the women were only allowed to be hired by strangers forms a curious relic of the system of exogamy.

¹ Hastings' *Ency. Rel. Eth.*, vol. ii, p. 164 *et seq.*, art. "Atargatis."

Evidence seems to make it practically certain that there was a permanent, besides a temporary, system of religious prostitution at the temples, and Eusebius tells us that matrons as well as maids served the goddess in this manner. Lucian shows that the system of enforced temporary prostitution had been modified, and that a modest woman might substitute a portion of her hair instead of her person. This fact is interesting as showing the belief in the hair possessing a large and important percentage of the owner's personality. Readers will remember the care with which the savage hides or destroys his hair, nail-clippings, etc., lest an enemy get possession of them and work him harm through their means.

By this passage in Lucian we see that at Byblos (Geba) the sacrifice of chastity was looked upon as the most personal, and therefore most important, offering a woman could make. If she did not give this, then the next best thing—her hair—would be accepted. No such substitution, however, appears to have been allowed in former days—i.e. before Lucian's time.

The name given to the great mother-goddess in Phœnicia, Canaan, Paphos, Cyprus, etc., was Ashtart, Ashtoreth or Astarte. Her attributes closely resemble those of Ishtar, for we find her represented as a goddess of sexual love, maternity, fertility and war. Both the Greeks and Phœnicians identified her with Aphrodite, thus showing evidence of her sexual character. As is only natural, the Phœnicians carried this worship into their colonies, and so we read in Herodotus (i, 199), Clement of Alexandria (*Protrept*, ii), Justin (xviii, 5, 4) and Athenæus (xii, 2) of sacred prostitution closely resembling that in Syria. Special mention is made of male prostitutes at the temple of Kition in Cyprus. They are the same as the *kādhēsh* of Deut. xxiii, 18, 19.

Phœnician inscriptions give evidence of a temple of Ashtart at Eryx in Sicily, while along the coast of North Africa the Semitic mother-goddess became very popular under the names of Ashtart and Tanith.

St Augustine (*De Civ. Dei*, ii, 4) gives some account of the worship which, when stripped of its oratorical vagueness, points to a system of temporary *hierodouloi*, very similar to that described by Lucian.

In Arabia the mother-goddess was Al-Lāt or Al-'Uzzā, whose worship was accompanied by the temporary practice of sacred prostitution. It would be superfluous to magnify examples.

To sum up our evidence from Western Asia, there appear to be several reasons to which the institution of sacred prostitution owes its origin:

(1) The male deity needed concubines like any mortal, thus women imitated at the temples their divine duties.

(2) The female deity, being a goddess of fertility, had under her special care the fruitfulness of vegetation as well as of the animal world. Thus she endeavours to hasten on the return of spring. It is only natural that at her temples women should assist in this great work of procreation, chiefly by imitating the functions necessary to procreate. When the goddess was absent in search of spring, the whole duties of the cult would fall on her mortal votaries.

(3) Sacrifices of as important and personal nature as possible would be acceptable to such a goddess, and the hopes of prosperity in the land would be increased.

When human passions enter so largely into a ritual, and when the worshippers and ministrants of the goddess are of an excitable and highly temperamental nature, and finally when one takes into account such factors as climate and environment, it is not surprising that at times the religious side of the ritual would play but a minor part. This happened in India and also in Western Asia, and evidence shows the same thing to have occurred both in ancient Central America and Western Africa.

West Africa

Before comparing the above with our Indian data, reference might suitably be made to the sacred men and women in West Africa.

Among the Ewe-speaking peoples of the Slave Coast and the Tshi-speaking peoples of the Gold Coast is to be found a system of sacred prostitution very similar to that which we have already considered. The subject was mentioned by Burton¹ and has since been fully discussed by Ellis,² and as Frazer has quoted so largely from him,³ it will not be necessary to give any detailed description here.

Two quotations will be sufficient:

"Young people of either sex, dedicated or affiliated to a god, are termed *kosio*, from *kono*, 'unfruitful,' because a child dedicated to a god passes into his service and is practically lost to his parents, and *si*, 'to run away.' As the females become the 'wives' of the god to whom they are dedicated, the termination *si* in *vôdu-si* has been

¹ *A Mission to Gelela*, vol. ii, p. 155.

² A. B. Ellis, *The Ewe-speaking Peoples of the Slave Coast of West Africa*, London, 1890, p. 140 et seq.; and *The Tshi-speaking Peoples of the Gold Coast of West Africa*, London, 1887, pp. 120-138.

³ *Golden Bough, Adonis, Attis and Osiris*, vol. i, pp. 65-70.

translated 'wife' by some Europeans; but it is never used in the general acceptance of that term, being entirely restricted to persons consecrated to the gods. The chief business of the female *kosi* is prostitution, and in every town there is at least one institution in which the best-looking girls, between ten and twelve years of age, are received. Here they remain for three years, learning the chants and dances peculiar to the worship of the gods, and prostituting themselves to the priests and inmates of the male seminaries; and at the termination of their novitiate they become public prostitutes. This condition, however, is not regarded as one for reproach; they are considered to be married to the god, and their excesses are supposed to be caused and directed by him. Properly speaking, their libertinage should be confined to the male worshippers at the temple of the god, but practically it is indiscriminate. Children who are born from such unions belong to the god."

Just as in India, these women are not allowed to marry a mortal husband. On page 148 of the same work Ellis says:

"The female *kosio* of Dañh-gbi, or Dañh-sio, that is, the wives, priestesses, and temple prostitutes of Dañh-gbi, the python-god, have their own organisation. Generally they live together in a group of houses or huts inclosed by a fence, and in these inclosures the novices undergo their three years of initiation. Most new members are obtained by the affiliation of young girls; but any woman whatever, married or single, slave or free, by publicly simulating possession, and uttering the conventional cries recognised as indicative of possession by the god, can at once join the body, and be admitted to the habitations of the order. The person of a woman who was joined in this manner is inviolable, and during the period of her novitiate she is forbidden, if single, to enter the house of her parents, and, if married, that of her husband. This inviolability, while it gives women opportunities of gratifying an illicit passion, at the same time serves occasionally to save the persecuted slave, or neglected wife, from the ill treatment of the lord and master; for she has only to go through the conventional form of possession and an asylum is assured."

The reader will, I think, notice a closer relationship to the customs of West Africa in India than in Western Asia, but we must remember that we have much more evidence on such customs in India and Africa than in Babylonia, Syria and Phœnicia. In Western Asia we have no account of the initiation and duties taught to the new votary, so we cannot make sufficiently close comparisons.

There are undoubtedly instances of the past existence of somewhat

similar institutions to those we have been considering in other parts of the world—such as Peru, Mexico, Borneo, Japan, etc. The evidence has been collected, and references given, by John Main in "his" *Religious Chastity*, New York, 1913, pp. 136-181. A full bibliography can be formed by those who have sufficient interest and patience from pp. 730, 731 of the index to Roger Goodland's *Bibliography of Sex Rites and Customs*, London, 1931.

Now that we have considered our subject in countries other than India we feel in a better position to theorise as to the origin of the institution of the *dēva-dāsī*.

The basis on which all such systems rest seems to be the natural desire to ensure fertility in both the animal and vegetable kingdoms. Environment, changing sentiment, temperament and religious feeling account for the particular channel into which such a system, touching the human passions so closely, has run.

Different conditions may produce quite different schools of thought in exactly the same place. Old customs may be followed by modern people with little idea of why they follow them.

In India the system of caste, the status of women, *suttee*, *brāddha* and numerous other customs have all left their mark on such an institution as that of the *dēva-dāsī*.

More than this it is impossible to say. Much research still remains to be done on this highly important anthropological problem.

THE ROMANCE OF
BETEL-CHEWING

THE ROMANCE OF BETEL-CHEWING

As far as I can discover, there is no comprehensive work on the custom popularly known as betel-chewing,¹ but merely a host of references or short accounts in the works of travellers and government officials from about the beginning of the fifteenth century to date. Yet here we have a custom which enters into the daily life of well over a hundred millions² of the human race!

To the Indian, the Malay and the Indonesian it is not only his constant companion throughout life, but is there to welcome him into the world, to guard him in childhood, to see him safely married and to accompany him into the next world. What other object in existence can boast of such devoted service to man?

In the present Essay, therefore, I shall attempt to gather together what data I can, with the object of ascertaining, as clearly as possible, the extent of the custom, its exact nature, the numerous ceremonies in which betel plays a part, and the effects it has on its addicts.

Etymological Evidence

Before surveying the area covered by the custom, it will be as well to get some idea as to the numerous words used in its connection. In order to chew betel in the most widely prescribed form, three distinct things are necessary:

- (1) The seed, popularly called the nut, of the *Areca catechu*, or Areca-nut Palm. The expressions "betel-nut" and "betel-nut palm" are both incorrect.
- (2) The leaf of the *Piper betle*, Linn.,³ commonly known by the vernacular *pān* and *tāmbuli*.

¹ Except L. Lewin's monograph *Ueber Areca Catechu, Chavica Betle und das Betelhauen*, Stuttgart, 1889; and Dr W. Krenger's pamphlet "Betel," issued as No. 84, Basel, February 1942 of the *Ciba Zeitschrift*, one of the house journals of the Basel Society of Chemical Industry.

² Lewin gives the figure as high as two hundred millions. The *Ency. Brit.* (11th edition) attributes the custom to one-tenth of the human race.

³ Not *Piper Betel*, as so often misquoted. Linnaeus used the Latin "Piper" and the Portuguese "Betle" in conjunction. The Malaysian names—*sireh*, *siri*, *sirih*—are quite independent of Sanskrit and the languages derived from it. This would seem to point to a separate development of betel-chewing in Malaysia. See I. H. Burkill, *Dict. of Econ. Prod. of the Malay Peninsula*, vol. ii, 1935, under *Piper betle*, p. 1738.

- (3) A small portion of lime, *chunām*, Hind. *chūnā* (Sans., *sudhā, chūrṇa*), often made from pounded shells.

If a small piece of the "nut," together with a pinch of the lime, is wrapped round by the leaf it forms a "chew"—known in modern India as *pān-supārī*. As we shall see later, all other forms of the "chew" are merely different "improvements," varying with local custom, available ingredients, or the wealth of the person concerned.

In Sanskrit the usual word to denote betel is *tāmbūla*, but if the leaf is particularly mentioned the word *nāgavallī* is employed. This is the case in Somadeva, who uses the former word in all cases except one (*The Ocean of Story*, vol. viii, p. 4), where *nāgavallī* means "leaves of the betel," and, two or three lines lower, *tāmbūla* is the "chew" which the young Brāhman puts in his mouth. The usual Sanskrit words for the "nut"—*pūga-phalam* and *guvāka*—do not occur in the *Ocean* at all. It is, however, from the former of these words that most of the vernacular names have been derived. Thus the Tamil is *pākku*; the Telugu is *pōka-vakka*, or simply *vakka*; the Singhalese is *puvak* or *puvakka*; the Gujarati is *phophal*; which leads to the Persian and Baluchistān *pōpal*, and the Arabic *faufal*, *fōfal* and *foufal*.

We are still a long way from the word *areca*. This, I believe, we can trace to the Canarese *aḍake*, or *aḍike*, and the Malayālam *aḍakka*, *aḍekka*.

We have already seen that the modern term for the "chew" is *pān-supārī*—*pān* being the leaf, and *supārī* the areca-nut. In nearly all vernaculars—Hindustani, Bengali, Gujarati, Marathi, etc.—the words *supārī*, *supyārī*, *sopārī*, *hopārī* refer to the "nut," and are nearly always used in conjunction with *pān* to indicate the two chief ingredients used in conjunction.

Turning to the leaf of *Piper betle*, we find that the Sanskrit *tāmbūla* and *nāgavallī* both appear in the vernaculars. The more usual term, however, is *pān*, from which the Anglo-Indian *pawn* is derived, meaning a leaf.

The Malayālam *veṭṭila* (i.e. *veru + ila* = "simple leaf") is also used. Hence in Hindustani we find *pān* and *tāmbuli*; in Bengali, *pān*; in Marathi, *viḍe-chā pān*; in Gujarati, *pān*, *nāgur-vel*; in Deccani, *pān*; in Tamil, *veṭṭilai*. Then follows the Arabic *tanbōl* and the Persian *tambōl*, *tambūl*. The Portuguese favoured the derivatives of *veṭṭila*, which became *betre* and *betle*. From this the English *betel* gradually became the recognised form.¹

¹ In the sixteenth century the English word was spelt *betola*, *bettle* and *bettele*; in the seventeenth century numerous forms are found—e.g. *betole*, *betell*, *bethel*, *betre*, *bettaile*, *bettle* and *betel*; in the eighteenth and nineteenth centuries *betle*, *bettle*, *betelle*.

It remains but to say a few words about *tāmbūla*. The root-word is *būla*, with *tam* as a prefix. It has been shown by Przyluski that *būla* corresponds to what he calls the Austro-Asiatic (*i.e.* non-Indo-Aryan) *bālu*, and signifies "something that is rolled"; hence all Austro-Asiatic languages use such words as *balu*, *mluv*, *bōlōu*, *mēlu*, *mlu*, *blu*, *plu* to mean betel. Some have a prefix, such as *la-mlu*, *ja-blu*, etc. In modern times it is only the direct Sanskrit derivatives that keep the prefix. For further details see Przyluski's paper as cited below.¹ The occasional substitution of the "r" for the "l" in *tambul* is discussed later when dealing with Marco Polo (p. 215).

Garcia da Orta

One of the earliest and most important descriptions of betel-chewing, and one in which words connected with the custom are discussed, is undoubtedly that given by the famous Spanish botanist, in Portuguese employment, Garcia da Orta (1563).

In the twenty-second colloquy of his work² he deals with "faufel," and *betel* were the usual forms. Thus the now accepted *betel* did not become the only recognised form till early in the twentieth century.

¹ "Emprunts Anaryens en Indo-Aryen. Les noms du bétel," *Bull. de la Soc. de Linguistique de Paris*, vol. xxiv, 3rd fasc. (No. 75), 1924, pp. 255-258.

² Only about a dozen copies of this very rare book are known to exist. They are listed in King Manuel's *Early Portuguese Books*, vol. ii, London, 1932, No. 100, pp. 644-659. His own copy was the duplicate copy from the British Museum which the Trustees had exchanged for the rare 1st edition (1560) of Antonio Tenreiro's *Itinerario* (see King Manuel, *op. cit.*, vol. ii, p. 574). It is curious to note that he appears to have been quite unaware of the fine, and highly interesting, copy of the *Coloquios dos simples* at the Cambridge University Library (Adv. d. 3. 21). It contains MS. notes and an index by Charles de l'Escluse, Lécluse, or Clusius, who made a Latin résumé of Garcia da Orta's work under the title of *Aromatum, et Simplicium Aliquot Medicamentorum apud Indos Nascentium Historia*, Antverpiæ, 1567 (other editions: 1574, 1579, 1593 and 1605). We shall return to Clusius later. The title-page of da Orta's work is as follows:

¶ Coloquios dos simples, e / drogas he coufas medicinaes da India, e / afsi dalgũas frutas achadas nella onde se / tratam algũas coufas tocantes a medicina, / practica, e outras coufas boas, pera saber / cõpostos pello Doutor garçia dorta: fifico / del Rey nosso fenhõr, vistos pello mayto / Reuerendo fenhõr, ho licenciado / Alexos diaz: falcam defenbar- / gadõr de casa da supricaçã / inquifidor nestas / partes. /

¶ Com priuilegio do Conde visõ Rey. / Impresso em Goa, por Ioannes / de endem as X. dias de / Abril de 1563. annos.

Being the third work ever printed in India (the first being a catechism by St Xavier, 1557, and the second Pereira's *Compendio espiritual*, 1561) there are many typographical errors, and the pagination is hopeless. The order of the different parts of the preliminaries varies in different copies, due to which way the gatherings have been folded. The pages of the text are numbered on the recto only. Ignoring the incorrect numbers as printed, and counting the recto pages correctly, the collation of the Cambridge copy is:

pp. [XIV] + leaves 1-257 + [1].

Signatures: A-B⁸; C¹⁰; D-Z⁸; As-Ii⁸.

while further remarks on betel occur at the end as a kind of post-script. As most readers are aware, it first appeared in the form of a dialogue, which has thus been described by Count Ficalho, in his *Garcia da Orta e o seu Tempo*, Lisboa, 1886:

"The two interlocutors are the two characters united in Garcia da Orta, the two sides of his spirit placed in front one of the other. Dr Ruano, the man of the schools, the former student of Salamanca, erudite, ready with quotations, with Dioscorides and Pliny at his finger-ends. Dr Orta, the traveller and observer, who, in the face of all the quotations, says tranquilly, 'I have seen it.' It is enough for us to note to which of these two entities Orta attaches his own name for evidence as to which of the two he prefers. From this situation, admirably conceived and maintained with much talent, the most interesting controversies result, which bring out, in the clearest light, the spirit of the work."

The following extract is taken from the translation made by Sir Clements Markham in 1913, p. 192 *et seq.*:

"*Ruano*. We speak in Portugal of what is called 'nuts of India.' You tell me that the *betre* is much used by everybody here. We use it very little. Speaking the truth with you, I have never seen it, for we put in its place the vermilion sandal.

"*Orta*. Here it is a common thing to mix the food with the *betre*, and in countries where they have no *betre* they also use it for chewing with *cravo*.¹ What you say about using vermilion sandal

The fourteen pages (seven leaves) of the preliminaries are as follows:

Title-page [i]; blank verso [ii]; Do licenciado, dimas bosque, . . . [iii]-[v]; blank verso [vi]; Do autor . . . ao . . . afora [sic] de fofa [vii]; Ao Conde do Redondo . . . Luis de Camoës [viii]-[x]; [Privilege dated Goa, Nov. 5th 1562] [xi]; Ao muyto illustre senhor Martin afora de fofa . . . [xii]-[xiv]. The only page with a signature is p. [xiii], marked ¶ iij. In the Manuel copy four of the pages are folded the other way, changing the order of part of the prelims. The title of the "Coloquio 22" is "Do faufel, e dos figos da India interlocutores Ruanos, Orta," the recto pages of which are numbered: 101, 90, 101, 92 and 103. In the Cambridge copy Clusius has altered these to 91-95.

The signatures are: M, Mij, Mijj, Mijj, and the unmarked return of Mijj. The section on betel at the end of the work has its recto pages numbered: 210, 211, 210, 210, 212 (three times running) and 217. These have been altered in the Cambridge copy by Clusius to 250-257. The signatures are: H, H ij, H iij, H iiij and four returns. For a translation of the Ode of Camoës recommending Orta to the Viceroy, Count of Redondo (pp. [viii]-[x]), see R. F. Burton, *Camoës. The Lyrics*, Pt. II, London, 1884, pp. 389-391. My extracts are taken from the English translation: *Colloquies on the Simples & Drugs of India*, London, 1913, by Sir Clements Markham, from the two-volume edition edited by Count Ficalho in 1891, 1895. Markham's translation is not absolutely reliable, and comparison with the text is advised. For a comprehensive article on Orta see that in the *Grande Enciclopédia Portuguesa e Brasileira*, vol. xix [1945-1946], s.v. It transpires that Orta was, in fact, a Spanish Jew!

¹ I.e. cloves, the unopened flower-buds of the clove tree, *Eugenia caryophyllata*. Although Orta devotes another Colloquy (No. 25, Markham, pp. 213-221) to cloves, he makes no reference to their use in betel-chewing, but merely says that both

in its place does not appear right, for in its place they have a medicine which is often falsified, and they give a vermilion stick for it; for as the vermilion sandal wants the smell, and is not in Timor whence the other comes, as I will tell you in speaking of it, there is difficulty in knowing one from the other. This ARECA is more valuable and is less perishable. The reason it is not sent to Portugal is that the apothecaries do not ask for it, for neither they nor the physicians are sufficiently curious to trouble about it. I will now tell you the names it has in the countries where it grows. Among the Arabs it is FAUFEL. Avicenna calls it corruptly FILFEL. It has the same name in Dofar and Xael, Arabian lands. The FAUFEL is very good. In Malabar they call it PAC, and the word for it among the Naires, who are the knights, is ARECA, whence the Portuguese have taken the name, being the land first known to us, and where it abounds. In Guzerat and the Deccan they call it ÇUPARI, but they have very little, and only on the skirts of the sea. There is a better supply at Chaul because of the trade with Ormuz, and still better at Mombaim, land and island, where the King our Lord has made me a grant, a long lease (*emfatiota*). In all that land of Baçaim they are very good, and they are taken thence to the Deccan; and also to Cochin they take a small kind called CHACANI, which are very hard after they are dried. In Malacca there are not so many, and they are called PINAM. In Ceylon they are in greater quantity, and they are sent to parts of the Deccan—namely to Golconda and Bisnaga,—also to Ormuz, Cambaya, and the Maldivé Islands. The name in Ceylon is POAZ.

"Ruano. Serapio says that this *areca* is wanting in Arabia.

"Orta. That is true to a great extent, for Arabia is a vast region, and there is *areca* only at Xael and Dofar seaports. For this tree loves the sea and will not thrive at a distance from it. Where it will grow they do not fail to plant it, for the Moors and Gentios do not let a day pass without eating it. The Moors and Moalis (who are those that follow the law against Mafamede¹) keep a feast or fast of ten days, when they say that the sons of Ali, son-in-law of Mafamede, were besieged in a fortress and died. During the ten days that they were besieged, they sleep on the ground, and do not partake of *betre*. In these days they chew

Indian and Portuguese women chew cloves to make the mouth smell sweet. It seems that it was the Chinese who first discovered and used the spice. For a full, and very interesting, account of cloves see H. N. Ridley, *Spices*, 1912, pp. 155-196. See also Yule and Cordier, *Cathay and the Way Thither*, vol. iv, 1916, pp. 102, 103 (note).

¹ Muhammed. They did not follow any law against Muhammed, but were of the Shiah sect. [Markham.]

cardamom and *areca*, which is much used to chew, as it clears the stomach and the brain.

"*Ruano*. Now tell me how the *betre* is used, how it is administered, whether to help or to rectify.

"*Orta*. The *betre* is warm, and the *areca* is cold and temperate. The lime they use with the *betre* is much warmer. They do not use our lime from stone, but a lime made from oyster shells which is not so strong. With the *areca* they mix the medicines, you see, because they are cold and dry, and much drier when not dried in the sun. Then they add the *cate*, which is a medicine I have mentioned before; because with the *cate* it is a good medicine to open the gums, fortify the teeth, and compose the stomach, as well as an emetic, and a cure for diarrhœa. The tree from which it is collected is straight and very spongy, and the leaves like those of our palm-trees. Its fruit is like that of the nutmeg, but not so large, and very hard inside, with veins white and vermillion. It is the size of the small round nuts with which the boys play. It is not exactly round, for it has a band round it, though this is not the case with every kind of *catechu*, for I must not deceive you. This fruit is covered with a very woolly husk, yellow outside, so that it is very like the fruit of the date-palm when it is ripe and before it becomes dry. When this *areca* is green it is stupefying and intoxicating, for those who eat it feel tipsy, and they eat it to deaden any great pain they have.

"*Ruano*. How do these Indians eat it, and how do they prepare the medicine?

"*Orta*. It is usual to cut the *areca* into small pieces with some large scissors they have for the purpose, and then they chew them, jointly with the *cate*. Presently they take the leaves of the *betre*, first pulling out the veins with their thumb-nails, which for this are cut to a fine point, and they do this that it may be more tender, and then they chew it all together. They spit out the first, after the first chewing, and then take more *betre* leaf and begin another chewing, expectorating what looks like blood. In this way the head and stomach are cleared, and the gums and teeth strengthened. They are always chewing this *betre*, and the women worse than the men. The lords make small pills of the *areca*, mixing it with *cate*, camphor,¹ powder of *linaloes*,² and some amber, and this is made

¹ Here Markham has omitted a comma, which make all the difference to the meaning. The original 1563 Portuguese edition reads: ". . . e cõ ellas misturã cate, e cáfora, e podelinaloes, e algũ abre . . ." The words translated as "small pills" are "pirollas pequenas." These undoubtedly correspond, says Mr Ridley in a letter to me on the subject, to the round flat discs which the Malays make of chewing-gambier, etc.

² Lign-aloes, Agallochum, "Eaglewood," or Calambac (Portuguese), the fragrant

for the *areca* of the lords. Serapio says that in the taste with the warmth there is some bitterness. I tried this and found it with scarcely any taste. Serapio did not know this *areca* and could not ascertain the taste.

"*Ruano*. Silvatico says that he has seen it, and that it was mixed with the cinnamon of Calicut.

"*Orta*. It may be that the Moors of Calicut take it to the Strait, and that it may come mixed with cinnamon, but it was not the cinnamon of Ceylon. That of Calicut is much more black, and is called *checani*. That of Ceylon is whiter, and once seen is easily known."

This is all Garcia has to tell us about betel-chewing in the twenty-second colloquy. But before looking at "The Last Colloquy," in which we shall get a little more information, it is necessary to consider one or two points in the above passage. Garcia frequently refers to plants and drugs being hot and dry, cold and moist, in the first, second or third degrees. We have seen that he says "*betre* is warm, and the *areca* is cold and temperate. The lime . . . is much warmer." So also, as we shall see later (p. 211), Idrisi describes betel as hot in the first degree and dry in the third.

Sir George Birdwood furnished Markham with the following interesting note on this point:

"Da Orta's repeated qualification of drugs refers to the theory of the constitution of the human body and of its diseases and their treatment held in Europe from the earliest Greek and Roman period down to the 17th and 18th centuries, and to the present day throughout native Asia. The constituents of all things were fire, air, water, and earth; fire was hot and dry, air hot and moist, water cold and moist, and earth cold and dry; and of the bodily humours 'composed' thereof, blood was regarded as hot and moist, phlegm as cold and moist, red bile as hot and dry, and black bile as cold and dry. The excess of these humours, as the cause of diseases, had to be treated by drugs of their opposite qualities. In India, at least, this in practice means that a drug is either hot or cold, and

diseased wood of *Aquilaria agallocha*, Roxb. (Thymelæaceæ), of Assam, Bhutan and Burma. [Markham.] The *podalinaloes* of Gracia is the powdered resinous wood. Like ambergris, it must have been used only by the rich. Garcia devotes Colloquy No. 13 to "Linaloes" (Markham, pp. 251-263). See further George Watt, *Dict. of the Economic Products of India*, vol. i, Calcutta, 1889, pp. 279-281; and especially I. H. Burkill, *Dict. Econ. Prod. of the Malay Peninsula*, under "Aquilaria," vol. i, pp. 197-205. See also the important note to Ibn Batûna's account "On the Indian Aloes-wood" in Yule and Cordier's *Cathay and the Way Thither*, vol. iv, 1916, pp. 100, 101.

that it is given either to promote or repress aphrodisia. Chaucer, in the *Canterbury Tales*, writes of the Doctor of Physic:

“He knew the cause of everich maladye,
Were it of hoot, or cold, or moiste, or drye,
And where engendred, and of what humours.
He was a verrey parfait practisour!”

We have already briefly considered the origin of *faufal*, *fōfal* and *foufal*, but the mention of *cate* and *catechu* is apt to be muddling, and calls for some explanation.

Cate is catechu, or cutch, extracted by boiling from the *Acacia catechu*, Willd., known as the Cutch-tree or Khair-tree. Orta devotes the 31st Colloquy to it (Markham, pp. 264-271), but fails to understand its true nature. It was first mentioned by Duarte Barbosa (1516) where it is called *cacho* (see M. L. Dames' edition for the Hakluyt Society, vol. i, p. 155, vol. ii, p. 173, with the notes on both pages). In Malay it is called *Kachu*, in Canarese *Kāchu* and in Tamil *Kāsu*. Its chief importance is as a tanning substance, while only the purest cutch, often distinguished as “kath,” is used for chewing with betel. It is the palest preparations, containing the most catechin, which are best for forming part of a “chew.” Others, stronger in catechu-tannic acid are best for dyeing. The tannin is obtained by boiling the chopped-up heart-wood of the tree until the extract is concentrated enough to solidify. It has been suggested that this method of preparing cutch was adopted in Java to the preparation of gambier, which is a much better catechu obtained from the *Uncaria gambir*, and largely used in betel-chewing (see pp. 261, 264, 266, 268). Cutch and gambier have always been closely connected, and owing to the mistaken notions both as to their nature and origin, became known in Europe as *terra japonica* (see OED under “catechu” for interesting reference to this). There is still another source of catechu, and this is obtained from the seeds of the *Areca catechu*, the so-called areca-nuts. They are scraped and boiled in several waters (details vary with localities) until a thick brown substance is produced which is allowed to dry in the sun. This substance is called *kossa*, and is used chiefly for flavour and colour inferior nuts. For further details see F. Flippance, *Gardens Bull., Straits Sett.*, vol. ii, No. 8, June 1920, p. 296; and especially I. H. Burkill, *Dict. of Econ. Prod. of the Malay Peninsula*, 1935, under *Acacia Catechu* and *Areca Catechu*, from which much of the above information has been taken. When dealing with Southern India we shall be able to compare the account of the

boiling of the *Acacia catechu* chips to obtain a cutch called *rasa* used, like *kossa*, for the flavouring and colouring areca-nuts.

Finally, a word must be said on camphor which, so Orta informs us, is one of the ingredients added to the "chew" by the Lords. In his "Last Colloquy," as we shall shortly see, he calls it "camphor of Borneo,"¹ and repeats that important people add it to the "chew." He also devotes the 12th Colloquy (Markham, pp. 86-98) to it. Many early writers refer to its use in chewing, e.g. Suśruta, Chau Ju-Kua, Marco Polo, 'Abdu-r Razzāq, Linschoten and Abū-l-Fazl 'Allāmī, all of whom we shall meet later on in this Essay. In all cases the rarity and value of the camphor is either stated or implied. Somadeva mentions it several times in *The Ocean of Story*, and we shall consider later its mention in connection with the "five fruits."

There has always been a cloud of mystery and romance round the history of camphor, and many strange, and often grim, stories are told about it. Mysterious Lands of Camphor and Camphor Islands appear in Eastern legend. Thus when Somadeva wants to introduce a mysterious city, he says (*Ocean*, vol. iii, p. 260): "There is on the other side of the sea a city named Karpūrasambhava (i.e. 'Camphor-produced'); in it there is a king rightly named Karpūraka; he has a daughter, a lovely maiden, named Karpūrikā . . ." It is so difficult to find that the hero has to have recourse to a magic chariot, and when finally he reaches the city and marries the princess, the King gives him the two most precious things—gold and camphor.

In searching for the Islands of Wak, Hasan of Bassorah (Burton, *Nights*, vol. viii, p. 81) calls upon the Lord of the Land of Camphor (see Chauvin, *Bib. des Ouv. Arabes*, vii, p. 111ⁿ²), and Arabian writers speak of the strange white city of al-Barraqa, in which cries and songs were heard but no inhabitants seen. Sailors who landed there for water found it clear and sweet with an odour of camphor, but the houses receded as fast as approached and finally faded from view. See G. Ferrand, *Relations de Voyages et Textes Géographiques Arabes* . . ., Paris, 1913, vol. i, pp. 145, 157, and vol. ii, pp. 570-573. It will be remembered that our old friend Sindbad the Sailor in his second voyage comes to an island (Sumatra) full of huge camphor-trees, whereupon he describes the primitive way of extracting the camphor in some detail (see Burton, *Nights*, vol. vi, p. 21). The rarity and mystery of camphor in the hands of the

¹ I.e. Kapur barus, so named, from Barus on the north-west coast of Sumatra, to distinguish it from the laurel-camphors. See W. Marsden, *History of Sumatra*, London, 1811, p. 367.

story-teller is equalled, if not surpassed, in actual fact. I would refer readers, first of all, to William H. Schoff's article "Camphor" in the *Journ. Amer. Orient. Soc.*, vol. xlii, New York, 1922, pp. 355-370. Here he tells us that the camphor tree of Sumatra and Borneo (*Dryobalanops camphora*), one of the mightiest trees in the world, was regarded by Sumatran man as an earthly copy of the heavenly Tree of Fate. The destiny of every man was written on its leaves, and anybody possessing camphor crystals had power to unravel "the master-knot of human fate." The camphor customs of the Bataks, a tribe of the hill country of northern Sumatra, are discussed—with useful references. The natives believe that the yield is greater when supernatural activity, such as earthquakes and volcanic eruptions, is in evidence. The sacrifice of rice, buffaloes and human beings before the tree is supposed to result in large finds of crystals. Magic enters very largely into the search for camphor. The camphor spirit is summoned by flute-playing and appears to the tribe in dreams pointing out the tree. The object of the expedition is so secret that an artificial language is spoken in order to deceive the guardian spirits. In his most interesting article on *Dryobalanops aromatica* in vol. i of the *Dict. of the Econ. Prod. of the Malay Peninsula*, I. H. Burkill, pp. 865, 866, refers in some detail to this curious camphor language, several word-lists of which have been published. Schoff's and Burkill's¹ articles should be read throughout as they are both packed with interesting information.² See also Yule and Cordier's notes (in vol. iv, pp. 98-100 of *Cathay and the Way Thither*) to the fantastic account given by Ibn Baṭūta. As to betel-chewing, the use of camphor would seem to be entirely restricted to the rich and possibly only used to impress foreigners with the great wealth such a use implied. The cooling properties of camphor would doubtless be considered an off-set to the dry biting flavour of the nut, yet if more than the merest pinch were used the flavour of the other ingredients would be entirely eclipsed. It may also have been used in the ceremonial "chew," handed out to important visitors at a Durbar as a sign of *congé*. Such chews were usually wrapped up in gold leaf and may well have contained aromatic additions, such as cloves, ambergris, or camphor. This, of course, refers only to former times when camphor was precious and the tree ignored as timber. To-day the exact opposite is the case, and the camphor yield of the *Dryobalanops aromatica* is far less important than its timber.

¹ See also his article on *Cinnamomum camphora* on pp. 546-548.

² Another interesting account of camphor collecting is given by W. H. Furness, *Home-Life of Borneo Head-Hunters*, Philadelphia, 1902, pp. 167-169 and Plates 68-70.

We can now consider Orta's "Last Colloquy" (Markham, pp. 473-485) which is appended to Colloquy No. 58, as a kind of *Addenda et Corrigenda* to the whole. Most of it is taken up with betel, but much of what has been already said is repeated. Perhaps this is partly why the Latin versions differ so much from the original edition. I notice that the Portuguese reprint of 1872, edited by F. A. de Varnhagen, puts the two betel sections together.

After a few general remarks Ruano asks if they mix anything else with the "chew" besides what has already been mentioned. Garcia replies: "They mix CATE with it and important persons add camphor of Borneo, some LINALOES, and ALMISQUERE, or AMBRE." Here we have a new ingredient—*almisquere*, also written *almiscre*, *almisere* and *almisque*, in which we recognise the modern Portuguese *almiscar*, "musk." Marco Polo describes the method of obtaining it from the Moschus deer. See Yule's note in his *Marco Polo*, vol. i, p. 279. Ruano then remarks: "I should not think that they throw camphor in, for it makes men impotent." But Orta is emphatic that camphor is used, but in small quantities only, and in this way does no harm. After some repetition Orta continues:

"Chiefly when men go to have an interview with some person of quality, they approach chewing it in their mouths, so as to give out a pleasant scent. Among these people it is so detested to smell bad or musty that common people put their hands before their mouths so as not to give out an unpleasant smell when in presence of a person in authority. Also a woman having to treat of love never seeks her man without first chewing a little. Everyone chews it after meals, for they hold that the two things should be done alternately. Many Portuguese say that when they eat fish they presently alternate it with betel. Many say that habitual chewers smell musty or bad if they do not chew, owing to indigestion of food in the stomach. When they chew this goes off. Those who have lost father or mother do not chew for several days, nor when there are fasts."

Orta soon returns to the etymology of "betre":

"Orta. The name in Malabar is BETRE, and in the Deccan, Guzerat and Canara, PAM. The Malays call it CIRI.

"Ruano. Why is the Malabar name adopted rather than the others? It would be more reasonable to call it *Folium Indum*,¹ or we might call it PAM, as it is called in Goa.

¹ This is the *malobathrum* of Pliny XII, lix, to be identified with various species of *Cinnamomum*, of which the chief are *C. Tamala* (the *Cassia lignea*) and *C. zeylanicum*.

"Orta. We call it betel because Malabar was the first part of India known to the Portuguese, and I remember in Portugal that they did not say they came to India, but to Calicut. This was because Calicut was the place whence all the drugs and spices were taken up the Strait of Mecca. It was a very rich place, and now, in revenge for what we did in Calicut, all that business is lost. Although the King of Calicut is emperor, he has less power than he of Cochin, because we helped him at first. This is why all the names you see that are not Portuguese are Malayalim. For instance, BETRE and CHUNA, which is lime; MAYNATO, washerman; PATAMAR, a runner; and many others. As for calling it 'Folium Indum,' as you suggest, it is not so called in any language; besides, the 'Folium Indum' is quite different. Avicenna gives chapters for one and the other separately."

After speaking of the confusion between *Folium Indum*, to which he devotes Colloquy No. 23 "Leaf of India," Garcia adds: "I only know that Avicenna calls the *betre* TEMBUL, which appears to be rather a corrupt form, because every one calls it TAMBUL and not TEMBUL." He concludes by thus describing "the shape of the leaf and the seed":

"The shape of the leaf, as you see, is more compressed and narrow towards the point than the orange leaf, and when it is ripe it is nearly yellow. Some women like it best when it is not so ripe, because it excites and then settles well in the mouth. In Maluco this *betre* has seeds like the tail of a newt, and they eat them, finding them good to the taste. This seed was brought to Malacca, where they eat it and find it very good. They plant it and have a place for it to climb over. Some people, to secure more profit, do the same with pepper and with *areca*, making very graceful arbours of the climbing plants. It should be well cared for, kept very clean and well irrigated."

Garcia da Orta thus not only gives us interesting etymological and botanical details, but mentions several other ingredients used in a "chew." Before discussing the "five fruits" as mentioned by Somadeva in *The Ocean of Story* (vols. vii, p. 74 and viiii, p. 4) I would say a word about the texts of Garcia da Orta, as the question has an important bearing on the spices or condiments used in betel-chewing.

As we have seen, the first edition of the work appeared at Goa in 1563. It was reprinted by F. A. de Varnhagen, Lisbon, 1872.

(true cinnamon). For details see George Watt, *op. cit.*, vol. ii, pp. 319-326. *Hobson-Jobson* under "Malabrathrum", and I. H. Burkill, *op. cit.*, vol. i, pp. 543-546, for the history of the genus *Cinnamomum*, and p. 556 for the above-mentioned varieties.

Clusius, the Latinised form of Jules-Charles de L'Escluse or L'écluse (1526-1609), made a Latin *résumé* of it in 1567, and on it the Italian translation of Briganti (Venice 1576, 1582, 1589, etc.) and the subsequent French translation of Antoine Colin published at Lyon in 1619, were founded.

It is of interest to note that Clusius gives us the first known illustration of the areca-nut and its husk. This appears on p. 119 of the 1567 edition (p. 102 of that of 1574, and p. 100 of 1593). In his *Aliquot notæ in Garcie [da Orta] Aromatum Historiam*, Antwerp, 1582,¹ p. 8 with text on p. 7, we find interesting drawings of the areca palm and the *Piper betle*. The first published drawing of the *Piper betle* leaf, however, appears in Ramusio, *Delle Navigazioni et Viaggi*, Venetia, 1553.² All the above are reproduced in "Betel," *Ciba Zeitschrift*, pp. 2924, 2925, where they may be conveniently studied. The 1567 *résumé* of Clusius, however, was very different from that of Garcia da Orta. Now, in his notes on betel in *Marco Polo*, Yule used the Venice 1589 edition of Briganti. Thus in vol. ii, p. 374n⁴, the contents of a "chew" are really those given by Clusius and not by Garcia da Orta. We shall revert to this presently.

The standard edition of Orta's *Coloquios* is that by Count Ficalho,³ 2 vols., 1891, 1895, and it is from the translation of this that I have quoted above. The illustrations added by Markham are taken from Cristóval Acosta's *Tracta do de las drogas . . .*, Burgos, 1578.

We can now return to the two references in Somadeva which speak of the "five fruits" and see to what extent the twenty-second colloquy of Orta can help in identifying them.

The Five Fruits

As already mentioned, Somadeva speaks of "areca-nut,⁴ flavoured

¹ In 1581 Clusius was in London and met Drake and his fellow adventurers. He filled them with questions on the botany of the newly discovered lands and utilised the information in this work of 1582. It should be mentioned that Clusius published three distinct works (*résumés* or notes) on drugs and simples of the East in 1582. For full details see *Biographie Nationale . . . de Belgique*, Tome V, Bruxelles, 1876, cols. 383-404. Here the entry is under "L," but no two works agree, and in library catalogues it is necessary to look also under "C" and "E."

² In the 3rd edition, Venetia 1563 (the one I have used) it appears in vol. i, p. 337 verso. It is nearly full-sized, and both sides of the leaf are shown.

³ Strange to say, I can find neither this work nor his *Garcia do Orta e o seu Tempo* in any of the big libraries except the British Museum, where the *Coloquios* is Ac. 190/26, and the . . . *seu Tempo* 10634, dd. 20. The Bodleian and Cambridge libraries have neither.

⁴ Tawney wrongly calls it betel-nut.

with the five fruits"; and later of "leaves of the betel, together with camphor and the five fruits." Now, although Garcia da Orta mentions several condiments used in a "chew," we are unable to select five which could be called "fruits," even in the widest sense of the word.

The best list we can get is areca-nut, cloves, lign-aloes, ambergris and catechu. Of these only the first could possibly be called a fruit—cloves are only flower-buds. Thus Orta is not much help in the search for our five fruits. Furthermore, lign-aloes seems to have been only rarely used, while ambergris would have been entirely restricted to the rich.

It looks, then, as if we must allow "fruit" to include every kind of spice or "flavour."

Now in the *Vaidyak-sabdāsindhu* (revised by K. N. N. Sen, Calcutta, 1913-1914), a Hindu medical dictionary, under the word "Pañcasugandhikam," which means the "five flavours" used in betel-chewing, we find the following list: (1) *Karpūra*; (2) *Kaṇkāla*; (3) *Lavaṅga*; (4) *Jātiphala*; (5) *Pūga*. We will take each one separately.

(1) *Karpūra* is, of course, camphor, and is mentioned in Somadeva's text quite distinct from the "five fruits." An alternative Sanskrit name is *chandra-bhasma*, a term which refers to its moon-like coolness. The form *karpūra*, and the vernacular *kāpūr*, *kappin*, etc., in all probability have their origin in the name of the Sumatran camphor-tree, *gābū* or *gāmbū*, whence the Indian supplies were derived. For further details see Schoff's article on camphor.¹ As we shall see later, Ramusio's recension of *Marco Polo* mentions "Camphor and other sweet-smelling spices" in connection with betel-chewing. Marsden (in his edition of *Marco Polo*) expressed his opinion that "camphor" might be a wrong translation for "quicklime." How he imagined caustic lime, the residue of calcium oxide, could possibly be used in a "chew" is hard to understand. Probably he was misled by Ramusio's "calcina viva," who also made the same mistake. We shall consider this further when dealing with *Marco Polo*. Yule² quotes Garcia da Orta as saying: "In chewing *betre* . . . they mix areca with it and a little lime. . . . Some add Licio (*i.e.* catechu), but the rich and grandees add some Borneo camphor, and some lign-aloes, musk and ambergris." This is, however, from the Italian edition of 1589, and represents what Clusius said, not Garcia da Orta. Actually it incorporates the remarks of da Orta as made in his 22nd and

¹ *Journ. Amer. Orient. Soc.*, vol. xlii, 1922, pp. 355-370.

² *Marco Polo*, vol. ii, p. 374n⁴.

"Last" colloquy. As we shall shortly see, Linschoten (or rather Paludanus) copies the list almost verbatim.

Yule correctly quotes 'Abdu-r Razzāq (1443) and Abū-l-Fazl (1596) as stating that camphor is an ingredient of *pān-supārī*. But as antedating Polo, he might have mentioned Somadeva, and also the Chinese writer Chau Ju-Kua (1225), for whom see later, p. 211.

(2) *Kankālā* is given by Watt (*op. cit.*, vol. vi, Pt i, p. 256) as the Bombay vernacular of *Piper chaba*, commonly known as Bakek. Ridley (*Spices*, p. 320) says it is especially used as a substitute for betel leaves when travelling in places where the fresh leaves are not procurable. It seems, therefore, that *pān* would not be needed in a "chew" that already included *kankālā*. It should not be confused with *kankola*, the Marathi for *Piper cubeba*, or cubebs.

(3) *Lavaṅga* is the *cravo* of Garcia da Orta—i.e. cloves: *Caryophyllus aromaticus*, Linn; *Eugenia aromatica*, Kuntze. See Watt, *op. cit.*, vol. ii, p. 205, who says "... they are also chewed in *pān*," and Burkill, *op. cit.* vol. i, pp. 961-964.

(4) *Ītīphala* is the nutmeg,¹ and (5) *Pūga* is, of course, the arecanut (*cf.* the Sanskrit *pūga-phalam*).

As a comparison with the above list it is interesting to cite another set of five "fruits" sent me by a native student of Indian sociology:

(1) *Cutch*=extract of catechu—Hind., *kat, kath*; Sans., *khadira*. (2) *Chūnā*=lime—Sans., *sudhā, chūrṇa*, etc. (3) *Supārī*=the arecanut. (4) *Lavaṅga*=cloves. (5) *Ilāchī*=cardamom, *Elettaria cardamomum*—Sans., *elā, chandrabālā*, etc. See Burkill, *op. cit.*, vol. i, pp. 910-915.

This is, I think, as far as we shall get in identifying the five "fruits"!

But why *five*? May not the number be merely conventional, because it is a "lucky number"? Surely Hindu and Buddhist literature, both secular and religious, justifies such a contention. *Five* is continually occurring without any apparent reason.²

Thus, I do not see why we need assume that the betel-chew *de*

¹ For a history of the nutmeg tree, *Myristica fragrans*, see Burkill, *op. cit.*, vol. ii, pp. 1524-1530.

² There are *five* nectars (milk, curds, *ghī*, honey and sugar); *five* leaves of trees (mango, *pīpāl*, *pīpālō*, *jambu* and *uhumbārā*); *five* jewels (ruby, sapphire, pearl, emerald and topaz), and *five* beauties of woman (hair, flesh, bone, skin and youth). So also are there *five* trees of paradise, *five* arrows of Kāma, *five* products of the cow, *five* great sacrifices, *five* sacred flowers, *five* emblems of royalty. Somadeva (vol. v, p. 121, and vol. vi, p. 157) speaks of flowers of "five colours" and "five hues." See also W. E. Geil, *The Sacred 5 of China*, London, 1926 and note 1 on p. 160 of the present work.

luxu must of necessity¹ contain five "fruits," which are so hard to identify. From the list of ingredients we have obtained from Garcia da Orta, and any additional ones we may find in the works of other early writers, it is easy to select five, or even more, "flavours" which would satisfy the palate of the most inveterate epicure of betel-chewing. We are entitled, therefore, to regard the one recognised form of a "chew" as consisting simply of a portion of an areca-nut wrapped in a betel leaf, and flavoured with a pinch of shell-lime.

In places where these ingredients were obtainable, we must regard all added "flavours" as restricted to the houses of the rich—to be produced chiefly as a special honour to a distinguished guest. The addition of cocaine has even been recorded.

The Area of the Custom

The geographical area covered by the custom of betel-chewing may be roughly taken as lying between long. 60° and 170° east; and lat. 40° north and 15° south. Outside this area the custom occurs only where the existence of an Asiatic colony has warranted the importation of the necessary ingredients. In his pamphlet "Betel" (*Ciba Zeitschrift*, No. 84, p. 2922) Krenger gives a map with the "betel" area shaded, as also does M. Gowda, Harvard Univ. *Botan. Mus. Leaflets*, vol. xiv, 1951, pl. xcvi.

The area in question includes the whole of the Indian Empire, Southern Tibet, Southern China, Siam, Indo-China, Malaya, all the East Indian Archipelago, Micronesia, New Guinea and the remainder of Melanesia as far as the tiny volcanic island of Tikopia. It is just about here that one can observe the drinking of *kava*² taking the place of betel-chewing. In both Polynesia and Australia *pān-supārī* can be regarded as unknown. Although areca-nuts have been exported to Fiji, and possibly to other islands, betel-chewing rarely occurs in *kava*-drinking areas. It has also been noted in Zanzibar, Pemba³ and Madagascar.

The question that at once presents itself is—where did the custom originate? It is impossible to say. Etymological evidence seems

¹ Yet cf. the "five brothers" of the Sumatran section (p. 265).

² A narcotic, but non-intoxicant beverage, prepared from the macerated leaves or roots of the *Piper methysticum*. It is called *ava* in Samoa and *yangona* in Fiji. See further I. H. Burkill, *A Dictionary of the Economic Products of the Malay Peninsula*, vol. i, p. 1745.

³ R. E. Burton, *Journ. Roy. Geog. Soc.*, vol. xxix, 1859, p. 34, note 7; R. O. Williams, *Useful and Ornamental Plants in Zanzibar and Pemba*, Zanzibar, 1949, under "Areca catechu" and "Piper betle." The thin slices of the nut, together with the other ingredients, are folded in a Betel Pepper leaf and fastened with a clove. For a detailed list of all betel-chewing countries see L. Lewin, *Phantastica*, London, 1931, p. 232.

to favour an Austro-Asiatic, rather than an Indo-Aryan home. Thus we should look for its origin in the Philippines, Celebes, Borneo, Java or Sumatra.¹

Botanical evidence is very non-committal and uncertain, owing largely to the length of time the *Areca catechu* and *Piper betle* have been cultivated in the East. The former has been described as a native of Cambodia and Indonesia, and as being cultivated throughout tropical India. The latter is specified in Watt (*op. cit.*, vol. vi, Pt. i, p. 248) as "probably a native of Java." The evidence for such statements seems to be distinctly weak. The problem is increased by the fact that it is often hard to determine whether a certain tree or shrub is really "native" or whether it is the result of seeds planted, or accidentally left, by natives who have long since departed from the region in question, leaving no trace of their former presence.

Thus, in the Philippines, there is a variety of *Areca catechu* known as *silvatica* as well as several other varieties, which has led botanists to think that the wild plant originated here. "In support of this opinion," says Beccari,² "I would observe that in no other part of Southern and Eastern Asia or Malaya is any species of *Areca* to be found which in any way approaches *Areca catechu* in specific characters, whereas in the Philippines an entire group of species exists closely related to it."

But later in the paper, Mr Merrill, who discovered the plants in question, is quoted as saying: "At the place where found, the plants, few in number, were growing in a forested ravine along a small stream at a place where an old and apparently much-travelled native trail crossed the stream. I strongly suspect that the trees that I found in this place originated from seeds accidentally left there by natives."

There appears to be no satisfactory evidence on the question. All we can say is, that if the custom did not originate on the coasts of Southern India, it was imported from the East Indian Archipelago at a very early date.³

Appliances of Betel-Chewing

The two chief objects used in connection with betel-chewing are the areca-nut cutter and the lime-box, to which is attached a spatula, or small spoon, for applying the lime. There is also the

¹ D. Prain, *Man*, vol. xvii, 1917, p. 110, would give it a Papuan origin with a gradual spread westwards to Malaya proper and then on to India.

² "Palms of the Philippine Is," *Philippine Journ. Sci.*, vol. xiv, 1919, p. 301. See also, W. N. Sands, *Malayan Agricultural Journal*, Kuala Lumpur, vol. xiv, July 1926, p. 202.

³ See further, I. H. Burkill, *op. cit.*, vol. i, pp. 223, 224.

brass box used for storing areca-nuts, and various trays and bowls for holding the leaves and passing round the "chew," when entertaining a guest. Then there is the mortar used by the toothless for grinding the nut into a kind of paste.

Although they are rarely used to-day, there is the elaborately embroidered betel-bag (for which see below), and the bowls, or rather, vases for expectorating, used in the houses of the rich. As can well be imagined, such a list of articles used in betel-chewing makes a distinct call upon the artistic genius of the particular country concerned, and accordingly our museums contain numerous specimens of cutters, lime-boxes, etc., which are objects of great beauty and interest.

The best collection in London is to be seen at the (much too little known) Indian section of the Victoria and Albert Museum. The specimens are (or were¹) all to be found in "Room 8—metal-work." Case 5 contains several examples of brass "*sireh*"-boxes from Sumatra. Some have a design of swastikas carved on their sides. Case 13 has a very curious specimen of a nineteenth-century comb and areca-nut cutter combined—from Tanjore. The portion forming the cutter represents a man and a diminutive woman. It is of brass, and decorated with incised ornament. In the same case is a pestle and a mortar of brass, cast and turned. Cases 14 and 17 contain a collection of Singhalese cutters and lime-boxes. The cutters vary in size from about 4½ to 11½ inches in length. They are mostly of steel, often inlaid with silver, and partially encrusted with brass. One is carved in the shape of a dragon, and another terminates in the head of a bird. A horse's head is also a favourite finial.

The cases for *chunām* (*chūnā*, *chūrṇa*, *sudhā*, etc.) represent, in shape and average size, an old English watch-case. They are usually of brass and copper, inlaid with silver and enriched with floral and other designs. They all have a chain of brass or copper, varying from four inches to a foot in length, to which is attached a spatula. The spatula is usually about the size of an English salt-spoon, the head of which is flat and averages half an inch in breadth and a quarter of an inch in depth. One specimen, however (in Case 15), has a head larger than a five-shilling piece.

Another good collection of cutters will be found in Wall Cases 25 and 27. Some of these are inlaid with coloured glass, and have

¹ The upstairs galleries are in a process of re-decorating and re-arrangement. Although considerable damage has been done to many exhibits all the betel-chewing appliances are (1951) safe. It will be a considerable time before all the rooms are open to the public.

handles of ivory, bone or pearl. One specimen is of gilt metal set with green and red glass, while another is of steel, with double joints containing knives. Some are carved in the shape of animals—one is a grotesque horse, another a peacock.

Excellent illustrations of smaller specimens, both of the cutter or slicer (*giraya*) and the lime-box (*killōṭaya*), will be found on Plate XLVI, with descriptions on pages 336 and 337, of Coomaraswamy's *Medieval Sinhalese Art*, Essex House Press, Broad Campden, Gloucestershire, 1907-1908. The chief interest in this work, however, from our point of view, is the author's excellent description of the betel-bag (pp. 238-239). This article has now almost entirely given place to the box, but is of high antiquity, and has been found represented in very early inscriptions (see later, p. 209). Owing to the fact that Coomaraswamy's work was limited to 425 copies, and is consequently exceedingly rare, the following description of the betel-bag is given in full:

"The betel-bags (Plates XXX-XXXIII) vary in size from small ones carried in the waist belt, to very large ones, four feet or more in length. The latter were carried by a servant in processions or on journeys, slung over the shoulder. Noblemen were never without an attendant carrying their betel-bags (pp. 33-34) and lime-box; less important personages carried their own. The large bags are exactly the same in construction as the small ones—a bag of oval shape made of blue cloth lined with undyed cotton cloth, which opens nearly half way down the whole length at the sides; the inner part is separated into two divisions. The inner division, again consisting of a double piece of cloth, is also used as a pocket, called *hora payiya*, 'hidden pocket'; it has a very small opening at the upper end, through which spices, money and other valuables are put. Larger things were carried in the two outer pockets. The handle is made of embroidered cloth, or of a band of plaited cord, and is finished off at the end with a beautifully and ingeniously worked, and very hard, ball (*vēgeḍi bōrale*) and tassel (*pohottuva*). The outside of the bag is embroidered on both sides in red and white cotton with conventional designs, sometimes very elaborately. Bags of later make are often done in red cloth, probably because the blue hand-made cloth could no longer be obtained; some of these are equally good, the tradition both in design and stitches being for some time well maintained. Few or no good bags are now made, partly owing to the lack of proper materials. One of the most perfect small bags I have seen was of red hand-made cloth embroidered entirely with silk, the use of which is very exceptional. I have referred to the plaited cord of which the

handles are sometimes made; for this, cotton cord of two colours is plaited into a thick stout flat braid which is very handsome and durable. It may be mentioned that similar plaited cord strings, but round, of two or three colours are made by priests for ola book strings (*pot lanu*).¹

"The embroidery of bags consists generally of a centre design, floral or otherwise, framed by three or more borders parallel to the edge of the bag. Of these borders the innermost is always *palā-peti*,² the largest *liya-vela*,³ the others a variety of *havaḍiya*⁴ or *gal bindu*⁵ pattern. A limited amount of coloured silk is sometimes used; the small bag of Plate XXX, No. 1, is exceptional in having embroidery entirely in silk. It may be noted that silk is frequently mentioned in the *Mahāvamsa*, but never with any suggestion of its being an indigenous product. The edges of bags are either bound with woven braid, which was made in a great variety of designs, or stitched with the peculiar 'centipede' binding stitch.⁶

"Less common than the oval bags are the square ones. They are made from a square piece of material, the four corners of which are drawn together for the attachment of the handle, consisting of four cords instead of the two of oval bags."

Turning to Malaya we find the betel-boxes exhibit beautiful specimens of the gold- and silversmiths' art. Every Malay house has a betel-box or betel-tray fitted with the requisites for chewing. The more humble article is made of wood or brass. It is generally about eight inches in diameter, shaped like the frustrum of a pyramid reversed, uncovered and fitted with several brass or silver boxes, one without a cover to hold accessories such as cardamoms and cloves, and three covered for the essentials—catechu, lime and tobacco. Finally, there is a small case, open at each end, to hold the betel leaves (though this appears to be rare), a metal spatula for spreading the lime on them, and a curiously shaped scissors for cutting the dried areca-nut into small pieces. A complete set in old Malay silverwork is a much-prized possession.

In Malayan fairy stories the beauty and value of the betel sets is

¹ *Ola*—i.e. the leaf of *Corypha umbraculifera*, used for MSS.

² Lotus-petal border. See *Coomaraswamy*, pp. 96, 97.

³ Vine-creeper. See *ibid.*, pp. 98-100.

⁴ Chain. See p. 109.

⁵ Gem-dot. See p. 108.

⁶ *Pattēya*, "centipede," or *mudum meṣma* (backbone stitch), appears to be peculiar to Singhalese embroidery. It is an elaborated herring-bone. Two needles are used in conjunction. For a detailed description of the work see *Coomaraswamy*, *op. cit.*, p. 241.

naturally exaggerated, and we read of boxes of solid gold studded with jewels (Overbeck, *Malay. Roy. As. Soc.*, vol. iii, 1925, pp. 22, 28).

It is, however, not only in fairy stories that such valuable betel boxes figure. For instance, Sebastien Manrique (1629-1643) in an interview with the King at Poragri, near Arakan, was handed betel in a magnificent golden betel-carrier (*Betelero*) studded with diamonds, rubies and emeralds. "He then took off it a small box of gold ornamented with sapphires and rubies, filled with aromatic Betel, and presented it to me with his own hand. This I accepted with all the courtesies and obeisances required by their customs. This little box weighed ninety rupees, while the rubies and sapphires were valued at over sixty rupees." (Hakluyt Society edition, 1927, vol. i, pp. 156, 157.)

As a reference to R. J. Wilkinson's *Malay-English Dictionary* (Mytilene, 1932) will show, there are several varieties of boxes used when the Malayan wants *makan sireh*, "to eat leaf," i.e. to chew betel. The usual names given to the ordinary box or basket for holding the requisites are *békas sireh*, *békas pinang*, *témpat sireh*, or *pésirehan*. The *chérana* is a metal pedestal bowl, deep and sometimes lotus-shaped. In North Malay it is often of niello, and in Sumatra of brass. The *chérana bidok* is an oval shallow bowl with no pedestal. Then there is the *puan*. This is a caddy-shaped large bowl. Sir Richard Winstedt draws my attention to the two gold specimens in the Perak regalia (*Journ. Malayan Branch Roy. As. Soc.*, vol. xii, Pt. i, Singapore, 1934, p. 163), one of which is known as the *puan naga taru* "box of the weeping dragon," and the other as *puan bujur*, "the oval box." My old friend W. W. Skeat describes the boat-shaped variety of *puan* (*Journ. Malayan Branch Roy. As. Soc.*, vol. xxii, Pt. i, 1949, pp. 180, 181). The *sireh*-box known as the *tepak* has a tray at the top holding various little containers—the *chémbul* for tobacco and gambier, the *pébua* for the nuts, and the *pékapur* for the lime. The leaf itself is carried in the box below the tray, the usual name for this part being *langkap*. In the sixteenth century the servants of East Indians of importance are represented in the well-known illustrations of de Bry as carrying lime-containers, and oblong boxes with bundles of betel-leaves protruding. These are reproduced in *Ciba Zeitschrift*, No. 84, outside cover and p. 2942.

Many illustrations of bowls and boxes to hold areca-nuts, lime-boxes, and betel-leaf holders will be found in Ling Roth's book on Malay silverwork.¹

¹ H. Ling Roth, *Oriental Silversmithwork, Malay and Chinese*, London, 1910. See figs. 3, 4, 5, 30-34, 38-47, 50-53 and 57-62.

The betel-leaf holder is a flat tapering hexagonal vessel, with a vandyked upper rim. It is made out of one piece of silver soldered together at the back down to the middle. Another piece of silver is soldered on to form the base (see Fig. 57 *et seq.* in Roth's work).

In his work on the natives of Sarawak and Borneo,¹ Roth quotes a passage describing the betel-basket worn by the Land Dyak: "On the right side the Land Dyak suspends a small basket, often very prettily plaited, to which is attached a knife in a bamboo sheath, the latter sometimes tastefully carved and coloured. The basket, knife, and fittings are called the *tunkin*, the basket itself is the *tambuk* and holds the *siri* leaf and is made to contain two round little cases for lime and tobacco called *dekan*, and a piece of the inner bark of the *bayu* tree, while the knife in its sheath hanging on the outside of the *tunkin* is called the *sinda*."

Farther East, among the Micronesians and Melanesians, the spatulæ are almost always of wood, often with elaborately carved handles. The lime-boxes are for the most part made from gourds. Several good examples can be seen in the ethnographical galleries at the British Museum. In the 1925 edition of the *Handbook to the Ethnographical Collections* will be found several illustrations of betel-chewing accessories. Thus on page 22 are specimens of lime spatulæ from the Anchorite Islands, off the north coast of New Guinea. The ornament is derived from the tail of a lizard. Several other examples from the south-eastern portion of the New Guinea Archipelago will be found on p. 121. The handle of one is rudely carved in the shape of a human figure, while another is a small grotesque crocodile. The end of all these spatulæ, which is dipped into the lime gourd, is several inches in length, thus differing considerably in appearance from the very much smaller and differently shaped end of the Indian and Singhalese spatulæ. The reason, of course, is due to the different shape and dimension of the lime-boxes used in the two localities.

On p. 72 of the *Handbook* are illustrations of the complete apparatus for betel-chewing from Ceylon, with the exception of the betel-bag described above.

Having thus acquainted ourselves with the ingredients that form a "chew," some etymological evidence, the extent of the custom, and the appliances used in its observance, we can proceed to the

¹ *The Natives of Sarawak and British North Borneo*, vol. ii, 1896, p. 39. Roth quotes extensively from previous writers on Borneo, giving their references to betel as used at birth, marriage and death ceremonies. For these see vol. i, pp. 51, 86, 100, 111, 114, 131, 137, 143, 202, 260, 272, 359 and 394.

actual accounts found either in Sanskrit literature, or given by early travellers to India and Indonesia.

Betel-Chewing in India prior to A.D. 1800

As already intimated, it would be little more than pure guesswork to attempt to give a date at which betel-chewing started in India. We find references to it both in the *Jātakas*¹ and in several other Pali works,² as well as in the Jain scriptures.³ The "Bearer of the Betel-bag" was an important functionary in royal courts, and is often mentioned on inscriptions.⁴

The mention of betel-chewing in the prose text of some *Jātakas* may lead one to assign a date as early as about 200 B.C., but as Professor Jarl Charpentier reminded me, although the *Jātakas* contain old material we have no proof that it goes back beyond the fourth or fifth century A.D. Until further evidence is discovered it seems probable that the upper classes of Hindu society did not in general take to betel-chewing before the first centuries A.D. Dr Kern⁵ observed that betel-chewing must have been introduced into India roughly between the period of the two Hindu physicians Caraka and Suśruta. The date of Caraka is uncertain, but as he is said to have been at the court of Kaniska, the Indo-Scythian King of North India and Afghānistān, we can probably give his date soon after A.D. 78. As Suśruta is now dated not later than the first century A.D. we can conclude that this century covers both men.⁶ This confirms Charpentier's remarks. Dr Kern states further that no mention of betel occurs in the older parts of such Buddhistic canonical books as the *Mahāvagga* or *Chullavagga*; nor does it occur in the *Mahābhārata* or *Rāmāyaṇa*. Furthermore, J. S. Speyer⁷ points out that *tambūla* as a Pali word is quoted by Childers from the *Mahāvamsa* (fifth century). Betel is mentioned in the *Avadāna Mālās*, but not in the earlier *Avadāna Śataka*.

We can conclude, therefore, that although betel was definitely known and described in Sanskrit medical works of the first century

¹ *Mahāśīlāva-Jātaka*, No. 51, Cambridge Edition, vol. i, p. 132; and *Andabhūta-Jātaka*, No. 62, *ibid.*, vol. i, p. 152.

² See, for example, Buddhaghosa's *Visuddhi-magga*, 314, edit. C. A. F. Rhys Davids (Pali Text Soc.) 2 vols., 1920, 1921; and *Dhammapadam* (Burlingame's translation, Harvard Orient. Series, vol. xxx, p. 49).

³ E.g. *Aupapātikā Sūtra*, sect. 38* in Leumann's edition, p. 50.

⁴ *Epigraphia Indica*, vol. xi, p. 329, etc.

⁵ *Bijdrage tot de verklaring van eenige woorden in Pali-geschriften voorkomende* . . . (Letterk. Verhandelingen, K. Akad. van Wetenschap, DL.17), Amsterdam, 1886, p. 6.

⁶ See further, R. Müller, *Journ. Roy. Asi. Soc.*, 1932, p. 814.

⁷ "Studies about the Kathāsaritsāgara," *Ver. der Kon. Akad. v. Wetenschap, te Amsterdam*, Afdel. Letter. Nieuw. Reeks. Deel VIII, No. 5, Amsterdam, 1908, pp. 49, 50.

A.D.—and presumably used at that time—it does not appear in Buddhist or Hindu religious or secular writings until about the fourth century A.D.

In the *Hitopadeśa* betel is mentioned in Book iii, fab. ix, and in the same Book, fab. xii, we are told that it possesses thirteen qualities hardly to be found in the regions of heaven. It is described as pungent, bitter, spicy, sweet, expelling wind, removing phlegm, killing worms and subduing bad smells. It also beautifies the mouth, removes impurities and induces to love. We find it mentioned by Suśruta in a section on digestion after a meal (ch. xlv) where he says¹ that the intelligent eater should partake of some fruit of an astringent, pungent or bitter taste, or chew a betel leaf prepared with broken areca-nut, camphor, nutmeg, clove, etc.

We now turn to the accounts of early travellers to India.

Hiuan-tsang (629-645)

The first foreign mention of the use of betel in India is probably that in the *Life of Hiuan-tsang*² (7th century A.D.), where it is related that each day the Chinese pilgrim received from King Bālāditya "120 portions of *tāmbūla*,³ 20 areca-nuts, 20 nutmegs, one ounce of camphor and a tenth of a bushel of *Kong-ta-jen-mi* (rice offered to the Great)." As Pelliot says, the king's daily gift, with the exception of the rice, all consisted of ingredients of a "chew." But as the use of betel appears to have been forbidden to the priesthood, we may conclude that Hiuan-tsang distributed it among the laity, having merely accepted it as the usual gift to visitors.

Ibn al-Baitār, or 'Abd Allāh ibn Aḥmad (1225)

The Arabian physician Ibn al-Baitār, or 'Abd Allāh ibn Aḥmad, in his treatise on drugs, written about A.D. 1225, says as follows⁴:

¹ Bhishagratna's translation, vol. i, p. 562.

² Every work of reference seems to spell the name differently. Among variants may be mentioned: Hiuen-Tsang, Hiwen T'sang, Hiouen Thsang, Hsuan Tsang, Yuan Chwang and Yuan Tsang.

³ In the text this is *tān-pou-lo* (**tām-b'uo-lā*) which can only be *tāmbūla*, although unrecognised as such by either Julien or Beal. See Paul Pelliot, *T'oung Pao*, vol. xxviii, 1931, pp. 439, 440.

⁴ See J. von Sontheimer, *Grosse Zusammenstellung über die Kräfte der bekannten einfachen Heil- und Nahrungsmittel von Abu Mohammed Abdallah Ben Ahmed aus Malaga bekannt unter den Namen Ebn Baithar*, Stuttgart, 1840-1842, vol. i, pp. 200, 201. I am indebted to Mr W. H. Schoff for drawing my attention to 'Abd Allāh ibn Aḥmad. Pelliot refers me to the (better) French translation *Traité des Simples par Ibn El-Baithar*, by L. Leclerc, in *Notices et Extraits* . . . vols. xxiii, xxv and xxvi (Pt. i in each case), Paris, 1877, 1881 and 1883. For the passages quoted see vol. xxiii, pp. 300-301, No. 397 "Tambol, Bétel."

"Betel is seldom brought to us from India now, because the leaves once dried go into dust for lack of moisture. Such as comes to Yemen and elsewhere can be preserved if cut on the branch and then kept in honey. It is an error to think that betel is this leaf which is now found among us which has the form and odour of the laurel which is known at Basra by spice merchants as *kamāri* leaf, and which comes from the country of that name, Elkamer, as I have been told. There are physicians in our time who say that this leaf is the leaf of the malabathrum, and who use it as such, but that is an error."

He also quotes from several earlier Arab writers, among whom is Idrīsī (the Sherīf), who thus describes the custom:

"Tambil (betel) is hot in the first degree and dry in the third. It dries the humidities of the stomach and fortifies a weak liver. The leaf eaten or taken with water perfumes the breath, drives care away, raises the intelligence. The Indians use it instead of wine after their meals, which brightens their minds and drives away their cares. This is the manner of taking: If one wishes to do it, one takes a leaf, and at the same time half a dram of lime [in other versions a dram, or a quarter of a dram are given]. If lime is not taken, it does not taste good, and the mind is not excited. Whoever uses it becomes joyful, he has a perfumed breath, perfect sleep by reason of its aromaticity, the pleasure which it brings, and its moderate odour. Betel replaces wine among the Indians, by whom it is widely used."

Chau Ju-Kua (1225¹)

The *Chu-fan-chi* is a work on the Chinese and Arab trade in the twelfth and thirteenth centuries by Chau Ju-Kua, a descendant of the Emperor Tai-tsung. After mentioning the "areca-nut" in Annam, and "areca-nut wine" of the east coast of Sumatra, he describes Lambri in the north-west of the island. Speaking of the king of Ceylon he says²: "All day he chews a paste of areca-nut and pearl ashes. . . .³ Two attendants are always present holding

¹ The date given by Hirth and Rockhill is *circa* 1250, but see *T'oung Pao*, 1912, p. 449.

² Translated by Hirth and Rockhill, St Petersburg, 1911, pp. 72, 73. For the other references see pp. 47, 60, 77, 78, 96, 155 and 160. For an interesting note on Lambri see Yule and Cordier, *Book of Ser Marco Polo*, vol. ii, 1903, pp. 300, 301.

³ Pelliot, *T'oung Pao*, vol. xxviii, p. 441, says that the punctuation of the translation is wrong. He would translate as: "All day (or every day) he chews the areca-nut."

a golden dish to receive the remains of the areca-nut (paste) chewed by the king. The king's attendants pay a monthly fee of one *i*¹ of gold into the government treasury for the privilege of getting the areca-nut (paste) remains, for it contains 'plum flower,' camphor, and all kinds of precious substances."

He also includes areca-nuts as one of the products of the Coromandel Coast, Java, Borneo and the Philippines. We shall return to him when speaking of betel in China (see pp. 274, 275).

Marco Polo (1271-1295)

In quoting from Marco Polo's *Description of the World*, commonly, though quite erroneously, called his *Travels*, it is necessary to intimate from what text a particular quotation is made. In this way the value of the passage in question can be ascertained, according as to whether it comes from a basic or otherwise important text on the one hand, or from an unreliable and bad text, such as the Venetian version, known as *VB*, on the other hand. There is no need to go into the complicated history of the numerous Polian texts. I have already given several accounts of them elsewhere,² and I will confine myself here to a brief description of those in which references to betel-chewing occur. The custom is referred to twice, once in describing the country of Lar, i.e. Gujarāt and the northern Konkan, and much more fully in the section on the City of Cail, a forgotten part in the Tinnevelly District of the Madras Presidency. The best MS. of Polo's book that has come down to us is that in the Bib. Nat. at Paris (Fr. 1116), known as *F*.³ It does not represent, however, a direct copy of the Genoese original as "written up" by Polo's fellow-prisoner Rustichello of Pisa, but is a later version, still in the original curious Franco-Italian language, written in Italy in the first half of the fourteenth century. In his

They burn pearls to make lime . . . Then follow a reference to the precious stones which ornament the palace in this "Isle of Jewels"—Ceylon. Pelliot suggests that the lime of burnt pearls is mentioned in connection with the fabulous palace. The lime used in the "chew" would, with much greater probability, be of burnt oyster shells, as mentioned by Varthema, Barbosa and Fryer (see later).

¹ An *i* weighed 20 taels, and seems to have been used only for weighing gold.

² Review of L. F. Benedetto's *Marco Polo: Il Milione*, in the *Asiatic Review*, October 1928, pp. 657-667, January 1929, pp. 49-56 (see pp. 50-52 for the Ramusio version and its sources), and April 1929, pp. 327-330; my edition of the Elizabethan translation of John Frampton published by the Argonaut Press, 1929, pp. xviii-xxx; and my review of Moule and Pelliot's composite translation in the *Times Literary Supplement*, 4th February, 1939.

³ Printed by the Société de Géographie as *Tome I of Recueil de Voyages et de Mémoires*, Paris, 1824; by L. F. Benedetto, *Marco Polo: Il Milione*, Florence 1928; and, with clearly indicated additional and variant readings from all other important texts, by A. C. Moule and Paul Pelliot, *Description of the World*, London, vol. i, 1938.

masterly treatment of the manuscripts Benedetto divides them into two main groups A and B, both ultimately derived from the lost original. Group A is represented by *F*, mentioned above, together with its three brother MSS. known as *F*^{1, 2, 3} which survive only in their translations into Court French, Tuscan and Venetian respectively. Group B is represented by the lost MSS. known only by Ramusio's printed text,¹ and by the recently discovered Zelada MS. in the Chapter Library (Biblioteca del Cabildo) of the Cathedral of Toledo, known as *Z*.² This B group is of the utmost value in completing and correcting the texts of the A group, as its MSS. are based on a lost text earlier than *F*. In this connection it must be realised that the great popularity of the book and its numerous MSS. have resulted in the destruction of the form in which it left its author's hands, so that in any attempted restoration of the probable original, group B is a *sine qua non* of such a task. Having thus briefly outlined the main features of the Polian texts, we can proceed to the two betel-chewing references. The first is very brief and reads, according to the *F* text,³ as follows:

"And they have their teeth very good because of a herb which they use to eat, which makes them digest very well and is very wholesome to man's body."

The corrupt *VB* MS. adds "beautiful and" before "good," while *Z* rather surprisingly has "at their meals," which seems to be the only possible translation of "in ferculis suis." The sense implied may simply be that the betel is put on the table for use the moment the meal is over. If it could be translated "from their own dishes" any confusion would disappear, but I doubt if this is tenable. With the continual creation of saliva during the process of chewing and the accompanying oral motion it would be quite impossible to eat at the same time. Moreover, as the *F* text clearly says, it was beneficial to digestion, and so would be used *after* the meal. We have already seen that in his "Last Colloquy" Garcia da Orta says, "Every one chews it after meals, for they hold that the two things should be done alternately." Idrisi says it is used "instead of wine after their meals," and as we shall see later, Linschoten tells us that the betel is not used for food "but after their meale tides, in

¹ *Navigazioni et Viaggi*, vol. ii, Venice, 1559.

² Transcribed by A. C. Moule, printed 1935, and published as vol. ii of Moule and Pelliot, *op. cit.*, London, 1938.

³ Moule and Pelliot, *op. cit.*, vol. i, p. 403. The corresponding references in other texts and translations are: Marsden: Book iii, ch. xxii; Pauthier: Book iii, ch. clxxii; Yule: Book iii, ch. xx; and Benedetto: ch. clxxviii.

the morning and all day long . . ." The second reference—to betel-chewing in Cail—is found only in the lost text (or texts) used by Ramusio¹ and in the Z text.² The difference between the two is trifling, and in the following passage any words peculiar to Ramusio are printed in italics.

Although all the sources of Ramusio have not yet been ascertained, his principal base was one of the Latin versions of Pipino, from the Venetian Recension. To this must be added three other MSS., V., L. and VB.,³ and another one "*di maraviglioso antichità*" which must have been even fuller than the newly-discovered Z. According to Moule and Pelliot's translation (p. 413) we read:⁴

"Moreover you may know that *all* these people of *this city* and *also* all of the *whole of* Indie have a custom like this, namely that from a habit and pleasure they almost always carry in the mouth a certain leaf called *tambur*. And they go chewing this leaf and spit out the spittle which is formed. And nobles and magnates and kings especially do this. They have those *said* leaves made up with camphor and other *sweet-smelling* spices; and so they go continually chewing them, and also *quick* lime mixed together. And *I was told that* this keeps them very healthy. And if moreover anyone does an injury to anyone and wishes to scorn him & to insult him, when he meets him on the road he takes that chew from the mouth and throws it in his face and says, Thou art not worth this, namely what he throws. But he regarding it as a great injury and insult immediately *runs and* complains to the king how such an one has scorned and made nothing of him, and asks him to give him leave for revenge; namely that if the aggressor has scorned him and his people he will ask leave *and says* that he wishes to try his own person and people with the person of him who did the injury and with his people, and to show whether he is worth [that] or not. But if he has scorned his own person only, he will ask leave for man to man."

Then follows an account of the ensuing fight between man and man, or people and people—no further reference being made to betel.

It will be noticed in the above passage that the form *tambur* is given. This is according to Z. but Ramusio gives the more usual

¹ Ramusio III, ch. xxiv; Marsden, pp. 674, 675; and Wright's edition (Bohn's lib. 1854), pp. 408-410.

² Moule and Pelliot, *op. cit.*, vol. i, p. 413, and vol. ii, p. lxxxvii.

³ For details see Moule and Pelliot, *op. cit.*, vol. ii, pp. 515, 516.

⁴ I have already quoted the latter portion of this passage, from Yule's abbreviated version, in the Essay on "Poison-Damsels." See p. 33.

form *tembul*. This -r termination is also found in a contemporary account of Vasco da Gama's first voyage (1497-1499). The anonymous author of this *Roteiro*¹ thus describes a royal audience at Calicut: "In his left hand the king held a very large golden cup [spittoon], having a capacity of half an almude [8 pints]. At its mouth this cup was two palmas [16 inches] wide, and apparently it was massive. Into this cup the king threw the husks of a certain herb which is chewed by the people of this country because of its soothing effects, and which they call *atambor*." Professor Moule kindly draws my attention to the fact that there appears to have been a tendency in Italy to confuse the final *l* and *r*, for apart from finding "tambur" and "atambor" alongside with "tembul," "tambul," "tambil," etc., we also get in the *F* text of Marco Polo (Moule and Pelliot, I, 230) the form "tosceor" with "tos-caol" in Ramusio, meaning a "watchman." A notable example is in *VB*, where for "visible & invisible" we read *visibel et invesisber*, and cf. also Garcia da Orta's "betre" for "betel." Pelliot was unwilling to believe that Polo, who knew Persian, could have written so bad a form as *tambur*, and was unable to guess how Ramusio got the correct form *tembul* unless he copied it from some more correct lost MS. of Polo. But he was surely acquainted with Avicenna who used the "l" termination (Book ii, ch. dccix, fol. 158a, of the 1507 edition), and he was bound to have read Varthema (1510) who also used the "l." Another point from the *Z* passage needing comment is the fact that whereas it gives correctly "lime" (*calcem*) as part of the "chew," Ramusio calls it quicklime (*calcina viva*) thus making nonsense of the whole thing. I have already (p. 200) mentioned Marsden's mistaken use of the word. Translators of Marco Polo seem reluctant to correct the mistake, for not only does Charignon speak of "chaux vivre" in his edition (iii, 210), but in the English translation of Benedetto's *Il Milione*, edited by Sir E. Denison Ross for the Broadway Travellers series (1931, p. 325), the Ramusio form is still retained. As we shall see later when dealing with Sumatra (p. 263) the Parmentiers, who visited the island in 1529 are careful to say that the betel leaf is used with "chaux esteinte," slaked lime. A very mild lime was always used for chewing and whenever possible pounded mussel- or oyster-shells were used. Garcia da Orta says (see p. 192): "They do not use our lime from stone, but a lime made from oyster shells which is not strong." Quick lime would burn right through the tongue and jaw! Passing over Ibn Baṭūṭa (see pp. 227, 299) as having little to tell us, we come to:

¹ Edited by E. G. Ravenstein for the Hakluyt Society, 1st Ser., No. 99, 1898, p. 56.

'*Abdu-r Razzāq* (1443)

In his valuable account of the Court of Vijayanagar, 'Abdu-r Razzāq, ambassador of Shah Rukh, relates how he received betel and camphor each time he visited the king. In his description of betel he lays special stress on its aphrodisiacal properties.

I quote from the French translation of Quatremère (Englished by R. H. Major), *India in the Fifteenth Century*, Hakluyt Society, 1857, p. 32.:

"The betel is a leaf like that of the orange, but longer. In Hindoostan, the greater part of the country of the Arabs, and the kingdom of Ormuz, an extreme fondness prevails for this leaf, which, in fact, deserves its reputation. The manner of eating is as follows. They bruise a portion of *faufel* (areca), otherwise called *sipari*, and put it in the mouth. Moistening a leaf of the betel, together with a grain of chalk, they rub the one upon the other, roll them together, and then place them in the mouth. They thus take as many as four leaves at a time, and chew them. Sometimes they add camphor to it, and sometimes they spit out the saliva, which becomes of a red colour.

"This substance gives a colour to and brightens the countenance, causes an intoxication similar to that produced by wine, appeases hunger, and excites appetite in those who are satiated; it removes the disagreeable smell from the mouth, and strengthens the teeth. It is impossible to express how strengthening it is, and how much it excites to pleasure. It is probable that the properties of this plant may account for the numerous harem of women that the king of this country maintains. If report speaks truly, the number of the *khatoun* [princesses] and concubines amounts to seven hundred."

Ludovico di Varthema (1505)

With the publication in 1928 of the Argonaut Press edition of the *Itinerary of Ludovico di Varthema of Bologna*, for which I was fortunate enough to get Sir Richard Temple to write a most interesting and important "Discourse," Varthema has at last been exonerated from charges of misrepresentation and downright lying which had been brought against him since 1550 almost to the present day. The first man to make these charges was none other than our old friend Garcia da Orta. It was not, apparently, a case of malice, but due to the fact that Orta relied on a Spanish translation of Varthema's travels which mis-translated several of his

statements. For details I must refer readers to Sir Richard Temple's "Discourse," pp. xx-xxiii, as mentioned above.

Varthema refers to betel twice. In the first instance it is to recount the tale of Mahmūd Shāh, King of Gujarāt, and the poisoned spittle. This I have already (pp. 31-33) given in the "Poison-Damsels" Essay.

In the second instance¹ we have a short account of the custom which confirms the views of 'Abdu-r Razzāq to a considerable extent:

"As an act of devotion, the king does not sleep with a woman or eat betel for a whole year. This betel resembles the leaves of the sour orange, and they are constantly eating it. It is the same to them that confections are to us, and they eat more for sensuality than for any other purpose. When they eat the said leaves, they eat with them a certain fruit which is called *coffolo* [*faufel*], and the tree of the said *coffolo* is called *Arecha*, and is formed like the stem of the date-tree, and produces its fruit in the same manner. And they also eat with the said leaves a certain lime made from oyster shells, which they call *Cionama*."²

Duarte Barbosa (1513)

Writing on the west coast of India, near Goa, Barbosa, the Portuguese official, says³:

"This *betel* we call 'the Indian leaf'⁴; it is as broad as the leaf of the plantain herb, and like it in shape. It grows on an ivy-like tree, and also climbs over other trees which are enveloped in it. These yield no fruit, but only a very aromatic leaf, which throughout India is habitually chewed by both men and women, night and day, in public places and roads by day, and in bed by night, so that their chewing thereof has no pause. This leaf is mixed with a small fruit (seed) called *areca*, and before eating it they cover it with moistened lime (made from mussel- and cockle-shells), and having wrapped up these two things with the betel leaf, they chew it, swallowing the juice only. It makes the mouth red and the teeth black. They consider it good for drying and preserving the belly and the brain. It subdues flatulence and takes away thirst,

¹ Hakluyt Society edition, 1863, p. 144; Argonaut Press edition, 1928, pp. 58, 59.

² *I.e.* *Chunām*, lime. See *Hobson-Jobson*, t.v.

³ See Dames' edition for the Hakluyt Society, vol. i, pp. 168-169.

⁴ Here Barbosa makes the same mistake as Tomé Pires, to which Dames should have drawn attention.

so that they take no drink with it. From hence onward, on the way to India, there is a great store thereof, and it is one of the chief sources of revenue to the Indian kings. By the Moors, Arabs and Persians this *betel* is called *tambul*."

Tomé Pires (1512-1515)

After tireless and unremitting search for the lost codex containing the *Suma Oriental* of Tomé Pires and the *Book* of Francisco Rodrigues, Dr Armando Cortesão discovered it in 1937 in the Bibliothèque de la Chambre des Députés, Paris. It was subsequently translated into English, and published, together with the original Portuguese text, by the Hakluyt Society.¹ This almost completely unknown work throws new light on the first official European Embassy to China and its leader, Tomé Pires, the extraordinary man who (so the editor tells us in the Foreword), after being apothecary to the unfortunate Prince Afonso, son of King John II, went to India in 1511 as "factor of the drugs," lived for two and a half years in newly-conquered Malacca, where he wrote most of the *Suma Oriental*, and then was sent as ambassador to China, where he died after some twenty years of varied and painful experiences. He gives no detailed description of betel-chewing, but refers to its use in the Deccan (pp. 52, 53), Goa (pp. 57-59), Malabar (p. 82), Ceylon (p. 86), Siam (p. 103), Champa (p. 114), the Moluccas (p. 219) and Malacca (p. 266). In speaking of the betel at Goa, and again when describing Bachian (Pacham) island in the Moluccas, Pires wrongly identifies *folio indo* with betel. As we have already seen (p. 198) Garcia da Orta deals with the confusion between the two in his "Last Colloquy." Pires speaks of the clove trees of Bachian, and says that the inhabitants dry the branches of the trees with the leaves on and export them to Venice by way of Alexandria, and that for quite twenty years he had been using them in Portugal instead of the *folio Indio*. Linschoten (*Voyage to the East Indies*, Hakluyt Society, vol. ii, pp. 130, 131) says that the leaves of the "Folium Indum" are like orange leaves, are of a dark green colour and have a sweet smell like cloves. The Indians, he says, use them to impart a sweet breath and to keep "their apparell, cloathes and Linnen . . . from wormes." Pires

¹ *The Suma Oriental of Tomé Pires. An account of the East, from the Red Sea to Japan, written in Malacca and India in 1512-1515, and the Book of Francisco Rodrigues rutter of a voyage in the Red Sea, nautical rules, almanack and maps, written and drawn in the East before 1515.* Translated from the Portuguese MS. . . and edited by Armando Cortesão, 2 vols. Hakluyt Society, 2nd Ser., Nos. LXXXIX, XC, London, 1944. The enumeration is continuous through the two volumes.

adds that the clove leaves are used because dried betel has no flavour. If, then, the clove leaves were actually used as a substitute for the *folium indum* it is quite contrary to the findings of Garcia da Orta (see the end of his 23rd Colloquy—Markham's translation, p. 207).

In a letter dated Cochin, 27th January, 1516, sent to King Manuel, Tomé Pires gives a list of drugs together with a short description. His notes on betel (p. 516) are as follows:

"*Folio Indo* is betel. The best here is from the Kingdom of Goa. From Chaul to Cambodia, and in all the islands, even beyond the Moluccas, it is found in abundance. When green, it is substantial, along with *avelana India*[e] or areca and lime. Dry, it is good for nothing, for its virtue is so subtle that, when dry, it has neither flavour nor taste. The men of these parts can sustain themselves on betel three or four days without eating anything else. It greatly helps digestion, comforts the brain, strengthens the teeth, so that men here who eat it usually have all their teeth, without any missing, even at eighty years of age. Those who eat it have good breath, and if they do not eat it one day their breath is unbearable. It is a form of nourishment in these parts."

John Huyghen van Linschoten (1583-1589)

Passing over the brief references given by Cæsar Frederick¹ (1563-1581) and Pedro Teixeira² (1586-1615) we come to the most important of all the early accounts—namely, that by Linschoten. It contains several interesting interpolations printed in italics, the work of the learned Bernard ten Broecke (whose name was latinised as Paludanus), a contemporary of Linschoten.

So interesting and informative is the account that I give it below in full, according to the translation in the edition printed for the Hakluyt Society, edited by Burnell and Tiele³:

"The leaves called Bettele or Bettre, which is very common in India, and dayly eaten by the Indians, doe grow in all places of India, where the Portingals have discovered, not within the countrie but only on the sea coast, unlesse it bee some small quantitie. It will not growe in cold places, as China, nor in over hot places, as

¹ Hakluyt's *Voyages*, MacLehose's edition, Glasgow, 1904, vol. v, p. 391.

² W. F. Sinclair's translation, Hakluyt Society, 1902, pp. 199-200.

³ *The Voyage of John Huyghen van Linschoten to the East Indies*. From the Old English translation of 1598, London, 1885, vol. ii, p. 62 et seq.

Mosambique and Sofala, and because it is so much used, I have particularly set it downe in this place, although it is already spoken of in many other places. You must understand that this Bettele is a leafe somewhat greater and longer out than Orange leaves, and is planted by sticks, whereupon it climeth like Ivie or pepper, and so like unto pepper, that a farre off growing each by other, they can hardlie bee descerned. It hath no other fruite but the leaves only, it is much dressed and looked unto, for that it is the dayly breade of India. The leaves being gathered doe continue long without withering, alwaies shewing fresh and greene, and are sold by the dozen, and there is not any woman or man in all India, but that every day eateth a dozen or two of the same leaves or more: not that they use them for foode, but after their meale tides, in the morning and all day long, as likewise by night,¹ and [as they goe abroad] in the streetes, wheresoever they be you shal see them with some of these leaves in their handes, which continually they are chawing. These leaves are not used to bee eaten² alone, but because of their bitternesse they are eaten³ with a certaine kinde of fruit which the Malabares and Portingales call Arecca, the Gusurates and Decanijns, Suparii, and the Arabians Fauffel. This fruite groweth on trees like the Palme trees that beare the Nut Cocus in India, but they are somewhat thinner, with the leaves somewhat longer and smaller. The fruit is much like the fruit that groweth on Cipresse trees, or like a Nutmeg, though some [of them are] on the one side flat, & on the other [side] thicker,⁴ some being somewhat greater and very hard. They cut them in the middle with a knife, and so chaw them with Bettele, they are within ful of veines, white, and [somewhat] reddish. There is a kinde of Arecca called Cechaniin,⁵ which are lesse, blacker, and very hard, yet are likewise used with Bettele, and have no taste, but onlie of [the] wood, and yet it moysteneth the mouth, and coloureth it both red and blacke, whereby it seemeth that the lips and the teeth are painted with blacke blood, which happeneth when the Arecca is not well dried. There is another sort which in the eating of chawing [beeing swallowed downe] maketh men light in the heade, as if they had drunke wine all the day long, but that is sonne past. They use yet another mixture which they eate withall, that is to say, a cake or role⁶ made of a certaine wood or tree called Kaate, and then they annoint the Bettele leaves with the chalke made of burnt oyster shelles, which can doe no hurt in their bodies, by reason of

¹ Orig. Dutch: (add) "in the house."

² Orig. Dutch: "used."

³ Orig. Dutch: "chewed."

⁴ Orig. Dutch: "high."

⁵ Orig. Dutch: "Checanijn."

⁶ Orig. Dutch: "little ball."

the small quantitie of it, all this being chewed together, and the Juice swallowed downe into their bodies, for all the rest they spit forth, they say it is very good for the maw, and against a stinking breath, [a soveraigne medicine] for the teeth, and fastning of gummes, and [very good]¹ against the Schorbucke,² and it is most true that in India verie few men are found with stinking breathes or tooth aches, or troubled with the Scorbuch or any such diseases, and although they be never so old, they alwaies have their teeth whole and sound, but their mouthes and teeth are still as if they were painted with black blood as I said before, and never leave spitting reddish spittle like blood. The Portingale women have the like custome of eating these Bettele leaves, so that if they were but one day without eating their Bettele, they perswade themselves they could not live: Yea, they set it in the night times by their Beddes heades, and when they cannot sleepe, they doe nothing els but chaw Bettele and spit it out againe. In the day time where-soever they doe sit, goe, or stand, they are continually chawing thereof, like Oxen or Kine chawing their cud: for the [whole] exercise of [many Portingale]³ women, is onely all the day long to wash⁴ themselves, and then fal to the chawing of their Bettele. There are some Portingales that by the common custome of their wives eating of Bettele, doe likewise use it. When the Indian women⁵ go to visit one an other, the Bettele goeth with them, and the greatest pleasure or entertainment they can shew one to the other, is presently to present them with some Bettele, Arecca, and chalke in a wooden dish, which they keepe onely for that purpose. This Beetele is to be sold in every corner, and streete, and shoppe⁶ [of the towne], as also in every high way for travellers and passengers, and is ready prepared, that is to say, so many Bettele leaves, one Arecca & some chalke, and many times some Cate for such as desire to have it, which the[y] commonly keepe in their houses, or beare in their hands in a wooden painted dish, and so eate in this sort, first a peece of Arecca, and Cate, which they chaw, after that a leafe of Bettele, and with the naile of their thumbe, which they purposely weare sharpe and long, not round as wee doe, they pull the veines [or stringes] out of the leafe, and so smeare it with chalke, and rowling it together, they thrust it in their mouthes and chaw it. The first sap thereof they spit forth: and say that thereby they

¹ Orig. Dutch: "remedy."

² Schorbucke (Dutch, "scheurbuyck") is scurvy.

³ Orig. Dutch: "the."

⁴ Orig. Dutch: (add) "and bathe."

⁵ Orig. Dutch: "when the women or Indians."

⁶ Orig. Dutch: "on all corners of the streets and shops."

purge the head and the maw of all evill, and flegmaticke humors,¹ and their spittle being as fowle as blacke blood, which colour proceedeth from the Arecca; the rest of the Iuice they swallow downe.

"The Indians goe continually² in the streetes and waies with Bettele and the other mixtures in their handes chawing, specially when they go to speake with any man, or come before a great Lord, thereby to retaine a good smell, and to keepe their breathes sweet, and if they should not have it [in that sort] with them whensoever they [meete or] speake with any man of account, it were a great shame for them.

"The women likewise when they accompany secretly with their husbands, doe first eat a little Bettele, which (they think) maketh them apter to the game. All the Indians eate it after their meales, saying that otherwise their meate wold upbraide them [and rise in their stomakes], and that such as have used to eate it, and leave it, doe [presently] get a stincking breath. They doe at certaine times forbear the eating of Bettele, [as] when any of their neerest friends die, and also on certain fasting daies, as likewise some Arabians and the followers of Ali, Mahomets brother in lawe, doe upon their fasting daies. In Malabar, this leafe is called Bettele, in Decam Gusrate, and Canam,³ it is called Pam,⁴ in Malaion,⁵ Siri,⁶ by Auicenna, Tambul,⁷ but better by others Tambul. Auicenna sayeth, that Bettele strengtheneth the maw, and fastneth the flesh of the Gummes, for which purpose the Indians doe use it, but where he affirmeth those leaves to be cold in the first degree, and drying in the second, it is not so, for either his Booke is false printed,⁸ for hee was deceived [therein], for those leaves are hotte and drie in the end of the second degree, as Garcius ab Horto himself hath found out, likewise the taste and smell thereof doe affirme it to be so. This Bettele is like a Citron leafe, but [somewhat] longer, sharpe at the ende, having certain veines that runne along the leafe. The ripest are holden to bee the best, and are of colour yellow[ish], although some women chuse the unripe, because they are pleasanter⁹ in the chawing. The leaves doe wither by much handling. The Bettele in Malacca, beareth a fruit like the tayle of an Efte, which because it tasteth well, is eaten: it is planted like a

¹ Orig. Dutch: "all evil humours and flegmaticke" (as substantive).

² Orig. Dutch: "commonly."

³ Read: "Canara" or "Cuncam."

⁴ I.e. Hindustāni, "pān," properly "leaf" (Sanskrit, "parṇa").

⁵ Orig. Dutch: "Malaijen" (the country of the Malays).

⁶ I.e. Siri.

⁷ Orig. Dutch: "Tambul."

⁸ Orig. Dutch: "translated."

⁹ Orig. Dutch: "they give more sound."

Vine upon stickes, as Hoppes¹ with us. Some for their greater benefit Plant it among Pepper, and among Arecca, and thereof doe make a pleasant Gallerie. This Bettele must be carefully looked unto, and often watered. He that desireth to know more hereof, let him reade the worthie commentaries of learned Clusius, uppon the Chapter of Garcius touching Bettele.²

"The Noblemen and Kings, wheresoever they goe, stand or sit, have alwaies a servant by them, with a Silver kettie [in their hand] full of Bettele and their mixtures, and [when they will eat] give them a leafe ready prepared. And when any Ambassadour cometh to speake with the King, although the King can understand them well, yet it is their manner (to maintaine their estates) that the Ambassadour speaketh unto them by an interpreter, [that standeth there] in presence, which done, he answereth againe by the same interpreter. In the meane time, the King lyeth on a bed, or else sitteth on the ground, uppon a Carpet, and his servant standeth by, readie with the Bettele which he continually chaweth, and spitteth out the Iuyce, and the remainder thereof, into a Silver Basin; standing by him, or else holden by some one of his slaves or [his] wives, & this is a great honour to the Ambassadour, specially if he profereth him of the same Bettele that he himselfe doth eate. To conclude, it is their common use to eate it, which because it is their dayly exercise, and that they consume so much,³ I have made ye longer discourse, the better to understand it, although somewhat hath beene said thereof in other places. The Kings & Lords of India use pilles made of Arecca, Cate and Camphora, with beaten Lignum aloes,⁴ and a little Amber, which they eate altogether with Bettele and Chalke, in steede of Arecca.

"Some mixe Bettele with Licium, some and those of the richer & mightier sort with Campher, others with Lignum aloes, Muske and Amber Grijs, and beeing so prepared, is pleasant of taste and maketh a sweet breath. There are some that chaw Arecca either with Cardamomum, or with Cloves. Within the lande farre from the Sea, those leaves are solde verie deare. It is said that the King of Decan Mizamoxa⁵ spendeth yearely thereof, to the valew of above thirtie thousand Milreyes. This is their banquetting stuffe, and is given them by travellers,⁶ and the Kings give it to their Subiects. To the rich [they give thereof being] mixed with their owne hands, and to others

¹ Orig. Dutch: "Clif" (ivy).

² Annot. D. Paludani.

³ Orig. Dutch: "love it so much."

⁴ Orig. Dutch: "crushed Linaloes" (which is the Portuguese name for L. aloes).

⁵ Orig. Dutch: "Nisamoxa" = Nizām Shāh, residing in Ahmadnagar.

⁶ Orig. Dutch: "this they make a present of to travellers."

[they send it] by their servants. When they send any man of Ambassage or otherwise¹; there are certaine Silke Purses full of prepared Bettele delivered unto him, and no man may depart before it be delivered him, for it is a [signe or] token of his passe port."

Abū-l-Fazl 'Allāmī (1596-1605)

Abū-l-Fazl, the learned minister of Akbar, gives us interesting details about the various kinds of betel leaves. He first refers to the areca-nut palm, which he describes as graceful and slender like the cypress. "The wind often bends it, so that its crown touches the ground; but it rises up again. There are various kinds. The fruit when eaten raw, tastes somewhat like an almond, but gets hard when ripe. They eat it with betel leaves."

After describing various fruits he proceeds to the betel leaf²:

"The *Betel* leaf is, properly speaking, a vegetable, but *connoisseurs* call it an excellent fruit. Mir Khusrāu of Dihli in one of his verses says: 'It is an excellent fruit like the flower of a garden, the finest fruit of Hindūstān.' The eating of the leaf renders the breath agreeable, and repasts odorous. It strengthens the gums, and makes the hungry satisfied and the satisfied hungry. I shall describe some of the various kinds: 1. The leaf called *Bilahrī* is white and shining, and does not make the tongue harsh and hard. It tastes best of all kinds. After it has been taken away from the creeper, it turns white, with some care, after a month, or even after twenty days, when greater efforts are made. 2. The *Kākēr* leaf is white with spots, and full, and has hard veins. When much of it is eaten, the tongue gets hard. 3. The *Jaiswār* leaf does not get white, and is profitably sold mixed with other kinds. 4. The *Kapūrī* leaf is yellowish, hard, and full of veins, but has a good taste and smell. 5. The *Kapūrkānt* leaf is yellowish green, and pungent like pepper; it smells like camphor. You could not eat more than ten leaves. It is to be had at Banāras; but even there it does not thrive in every soil. 6. The *Banglah* leaf is broad, full, hard, plushy, hot and pungent.

"The cultivation is as follows: In the month of *Chait* (March-April), about New-Year's time, they take a part of a creeper four or five fingers long with *Karhanj* leaves on it and put it below the ground. From fifteen to twenty days after, according as leaves and knots form, a new creeper will appear from a knot, and as soon

¹ Orig. Dutch: "when anybody will travel."

² *Ain I Akbari* by Abū-l-Fazl 'Allāmī, translated from the Original Persian, H. Blochmann, Calcutta, 1873, vol. i, pp. 72-73.

as another knot forms, a leaf will grow up. The creepers and new leaves form for seven months, when the plant ceases to grow. No creeper has more than thirty leaves. As the plant grows, they prop it with canes, and cover it, on the top and the sides, with wood and straw, so as to rear it up in the shade. The plant requires continually to be watered, except during the rains. Sometimes they put milk, sesame oil and its seeds pressed out, about the plant. There are seven kinds of leaves, known under nine names: 1. The *Karhanj* leaf, which they separate for seedlings, and call *Pēri*. The new leaf is called *Gadautah*. 2. The *Nauti* leaf. 3. The *Bahuti* leaf. 4. The *Chhiw* leaf. 5. The *Adhinidā* leaf. 6. The *Agahmiyah* or *Lēwār* leaf. 7. The *Karhanj* leaf itself. With the exception of the *Gadautah*, the leaves are taken away from the creeper when a month old. The last kind of leaf is eaten by some; others keep it for seedlings: they consider it very excellent, but *connoisseurs* prefer the *Pēri*.

"A bundle of 11,000 leaves was formerly called *Lahāsah*, which name is now given to a bundle of 14,000. Bundles of 200 are called *Dhōli*; a *lahāsah* is made up of *dhōlis*. In winter they turn and arrange the leaves after four or five days; in summer every day. From five to twenty-five leaves, and sometimes more, are placed above each other, and adorned in various ways. They also put some betel-nut and *kat'h* on one leaf, and some chalk paste on another, and roll them up: this is called a *bērah*. Some put camphor and musk into it, and tie both leaves with a silk thread. Others put single leaves on plates, and use them thus. They are also prepared as a dish."

François Pyrard of Laval (1602-1607)

The above dates denote the period spent by Pyrard in the Maldives after the wreck of the *Corbin* there on 2nd July, 1602. The Maldives consist of between 2000 and 13,000 islands (the actual number seems uncertain), of which only about 175 are inhabited. They extend from lat. 7° 6' N. to lat. 0° 42' S., and from long. 72° 33' to long. 73° 44' E. The most northerly atoll is some 350 miles from Cape Comorin, and Malé atoll about 400 miles from the nearest port of Ceylon. The isolation of the group will, therefore, be appreciated. Its chief industries are cocoanuts, tortoise-shell, cowries and ambergris. Betel-chewing is universal, and Pyrard refers to the custom several times in his narrative.¹

¹ *The Voyage of François Pyrard of Laval to the East Indies, the Maldives, the Moluccas and Brazil*. Translated from the 3rd French edition of 1619 and edited

"They are," he says (vol. i, p. 174), "very particular in cleaning their teeth, and are further of opinion that the red colour of the betel and areca, which they are continually chewing is good for them; so that they all have red teeth by reason of the betel-chewing, and they deem it a beauty. They carry betel always on them in the folds of their waist, and it would be a dishonour to a man found wanting it; it is the custom, when they meet one another on the road, each to give of his own." Pyrard found betel-chewing a preventative of toothache and a strengthener of the gums. His general account (vol. ii, pp. 362, 363) is as follows:

"Betel is a plant set at the foot of other trees, which it clasps like as does pepper or ivy: the leaf is about as big as that of rib-wort (*plantain*), but harder and thicker, and full of little nerves or filaments. There is great store of it in the East Indies, and chiefly at the Maldiv islands, for there they cultivate it with extreme care. The Indians make great use of it, everybody chewing this leaf almost perpetually: they mingle it with a little lime (in default of oyster or other sea shell), which they call *onny*, [Maldiv *uni*, Sin. *hunu*, the *chunām* of India] and a fruit they call *arequa*, in order to temper its bitterness. It is this which causes the red colour produced in the chewing. They say they use it for their health, and that they could not otherwise live, for that this leaf is hot, and aids digestion; wherefore they chew it at all hours, having some of it in their mouths at all times, except when they sleep. Moreover, it is of good taste and pleasant odour, and perfumes the breath; in such wise, that a man would not kiss a woman unless her mouth savoured of betel, nor would a woman a man. In truth, its odour is pleasant and agreeable; and, furthermore, it provokes and incites the passions of love. And though it is thus hot, nevertheless it is refreshing to the mouth, quenches the thirst, and saves them from continually drinking, whereto the great heat would otherwise compel them. Having sucked the juice, they spit out the remnant. I made use of it while I was among them, and found it salutary. It dries the brain and the evil humours of the body. Also it preserves the teeth so well, that I never knew one that used it who had toothache, or had lost a single tooth; it makes the teeth as red as coral, indeed, but that they deem a beauty. They think so much of it, that were one to enter a house without being offered some betel, he

for the Hakluyt Society by Albert Gray. Two volumes in three: vol. i, 1st Ser., No. 76, 1887, vol. ii, Pt. i, No. 77, 1888, and Vol. ii, Pt. ii, No. 80, 1890. See vol. i, pp. 71, 149, 174, 183, 223, 209-301; and vol. ii, pp. 113, 141, with the general account on pp. 362, 363.

would take it for an affront and a disgrace; and so, when friends meet by the way, out of politeness and in token of good will, they offer one another betel. In a word, at all feasts, banquets, and rejoicings, it is the first and chiefest item of all good cheer, as good wine is with us."

According to a modern account of the island,¹ there has been little or no change in the conditions and customs of the people since Pyrard's time. Attention should be drawn to Appendix A, "Early Notices of the Maldives," in vol. ii, pp. 423-492, of the Hakluyt edition of Pyrard. It includes a long extract from the account of Ibn Baṭūṭa in which he refers to betel-chewing several times.²

We can pass over the brief accounts given by other travellers of the first half of the seventeenth century, as giving us no new information. I refer to such men as Sir Thomas Roe³ (1615-1617); Edward Terry⁴ (1616-1619); Pietro della Valle⁵ (1623) and Jón Ólafsson, the Icclander⁶ (1623).

We can pause, however, for a moment with Peter Mundy.

Peter Mundy (1628-1634)

In Relation VI he speaks of "feilds of Paan or Beetle," but in Relation VIII (1632) he speaks of "Bettlenutt," thus confounding the names of the two ingredients, a mistake which has been faithfully copied ever since. As we shall see very shortly, Fryer made matters worse by calling the betel-leaf "Arach" and the areca-seeds "Bettle." Under the heading "Paan what it is,"⁷ Mundy writes as follows⁸:

"Wee also sawe some feilds of Paan, which is a kinde of leafe much used to bee eaten in this Countre, thus: First they take a kinde of Nutt called Saparoz [*supāri*], and comonly with us Bettle-nutt, which, broken to peeces, they infold in one of the said leaves, and soe put it into their mouthes. Then take they of the said leaves, and puttinge a little slaked lyme on them, they also put into

¹ T. W. Hockly, *The Two Thousand Isles*, 1935, Foreword.

² See, for example, pp. 442, 453, 458, 465 and 467.

³ See W. Foster's edition for the Hakluyt Society, 1899, vol. i, pp. 19-20; and vol. ii, p. 453ⁿ.

⁴ W. Foster, *Early Travels in India*, 1921, p. 300.

⁵ See Grey's edition for the Hakluyt Society, 1892, vol. i, pp. 36-37.

⁶ See Phillpotts', Temple and Anstey's edition for the Hakluyt Society, vol. ii, 1932, p. 115.

⁷ In the Harl. MS. 2286 Mundy has added "and the use of it."

⁸ See Temple's edition for the Hakluyt Society, vol. ii, pp. 96-97.

their mouthes, and after them other, untill their mouthes are reasonably filled, which they goe champinge, swalloweing downe the Juice till it be drie; then they spitt it out. It is accompted a grace to eat it up and downe the Streets and [is] used by great men. There is noe vesitt, banquet, etts, without it, with which they passe away the tyme, as with Tobaccoc in England; but this is very wholesome, sweete in smell, and stronge in Taste. To Strangers it is most comonly given att partinge, soe that when they send for Paane, it is a signe of dispeedinge, or that it is tyme to be gon."

In Relation XXII Mundy gives an interesting description of "A Pepper gardein," and correctly explains how the black pepper vine, *Piper nigrum*, is planted at the foot of the areca-palm.¹ He gives a sketch of the pepper garden,² and after explaining how the pepper plant grows upon the "truncke of the Betele nutt tree," describes his drawing of the areca-palm itself as follows:

"... an Arrecca or betelnutt tree, with the Fruite growing outt aloft in the trunck or stemme. The nutt is selffe, when it is ripe in the huske, is of an orange coullour, much bigger then a great Wallnutt. The kernell (which is only estimated) is a little bigger then a Nuttmegg, the inside greyish with white veynes. This is thatt thatt is eaten with Paan and is used in Most of the easterne parts of the World. The paan leafe is like the pepper leafe and groweth uppe somwhatt after thatt manner, requiring a support."

Bernier (1656-1668)

François Bernier mentions³ the method by which poison can be conveyed in a betel "chew." A young nobleman, by name Nazerkan, was suspected by Shāhjahān of an illicit love affair with his favourite daughter, the Begum-Saheb (Jahānāra). "As a mark of distinguished favour the King presented the *betel*, in the presence of the whole court, to the unsuspecting youth, which he was obliged immediately to masticate, agreeably to the custom of the country. . . . Little did the unhappy lover imagine that he had received poison from the hand of the smiling Monarch, but indulging in dreams of future bliss, he withdrew from the palace, and ascended his *paleky*. Such, however, was the activity of the poison, that he died before he could reach home."

¹ Even Sir Richard Temple speaks of the "betel palm"!

² Temple, *op. cit.*, vol. iii, Plate No. 9 facing p. 79, and text p. 80.

³ See Constable's 1891, or Smith's revised Oxford edition of 1914, pp. 13, 14.

Bernier also speaks (p. 283) of the *pikedans*, i.e. *pīkdān*, or *pīgdān*, a spittoon, "of porcelain or silver . . . very necessary in connection with betel-chewing."

Diversion on the Palankeen

The mention of the *paleky* invites a brief diversion on so interesting a word—together with its relations—which I may be excused for introducing here before we continue our betel-chewing accounts. *Paleky* is one of the numerous forms of the word to which the Portuguese added a nasal termination, and by producing *palanquin* gave rise to our *palankeen* or *palanquin*. Whichever English spelling is adopted, the pronunciation should always be *palankeen*. The form *palanquin* is actually French and Spanish, the Italian being *palanchino*. All these words are based on the Sanskrit *paranka*, *palyanka*—a couch, or bed, from *pari* "round" and *aṅka* "a hook." The Hindī form became *pālākī* or *pālki* (hence the "paleky" of our text), the Pāli *pallānko*, and the Malay and Javanese *palangki*.¹ The word, in whatever form, clearly refers to some form of a bed or couch which is suspended from the ground by some (usually human) means. In their important article under "Palankeen," Yule and Burnell (*Hobson-Jobson*, 1903, p. 659) give its definition as "a box-litter for travelling in, with a pole projecting before and behind, which is borne on the shoulders of 4 or 6 men—4 always in Bengal, 6 sometimes in the Telugu country." The OED gives a little more detail, and writes: "a covered litter or conveyance, usually for one person, used in India and other Eastern countries, consisting of a large box with wooden shutters like Venetian blinds, carried by four or six (rarely two) men by means of poles projecting before and behind." Both these definitions give the impression of a closed-up vehicle, whereas, in actual fact, as can be seen by contemporary drawings of early travellers, the *palankeen* could be a very open affair with no sign of wooden shutters. It is necessary, however, not to confuse the *palankeen* with other vehicles of somewhat similar form, e.g. the *tack-ravan*, *chaudol*, *muncheel*, *dhooley*, *dandy* and *kharkhariya*.

The *tack-ravan* (*takht-ravān*, Persian: "travelling-throne") is, as the name suggests, used only by royalty. It is described thus by Bernier, *op. cit.*, p. 370: "This *tact* is a species of magnificent

¹ Cf. *naleky*, Hind. *nālki*, a nearly obsolete form apparently still used in Western Bihār. See G. Grierson, *Bihār Peasant Life* (2nd edition, Patna, 1926, pp. 45, 46), who also gives local names for various types of litter. See further, *Hobson-Jobson* under "Nalkee." For a photograph of a lacquered *nālki* see *Loan Exhibition of Antiquities, Coronation Durbar*, 1911. Delhi Museum of Archaeology, Plate XIV (b). It is the *naukhēen* of Williamson, see later p. 236-237.

tabernacle, with painted and gilt pillars and glass windows, that are kept shut when the weather is bad. The four poles of this litter are covered either with scarlet or brocade, and decorated with deep fringes of silk and gold. At the end of each pole are stationed two strong and handsomely dressed men, who are relieved by eight other men constantly in attendance." Sir Richard Burton gives a fine coloured illustration of "The Takhtrawan or Grandee's litter" in his *Pilgrimage to El-Medinah and Meccah*, vol. i, 1855, facing p. 305. Here it is borne by two camels. Compare with this the plate facing p. 169 of James Morier's *A Second Journey through Persia, Armenia and Asia Minor*, 1818. In this case the *takht-ravān* held the Ambassador's son and nurse. "It consists," says Morier (p. 113), "of a cage of latticework, covered over with cloth, borne by two mules, one before, the other behind; and conducted by two men, one of whom rides on a third mule in front, and the other generally walks by the side."

Before returning to Bernier, we may mention briefly the other varieties of litter in use among Syrians and Arabs. The most common kind of camel-litter, used largely by pilgrims to Mecca, is the *musaffah* or *haml* (*hemtl*) *musafah*. It has been well described by Lane (*Manners and Customs of the Modern Egyptians*, 5th edition, 1860, p. 436), who writes, "It resembles a small, square tent, and is chiefly composed of two long chests, each of which has a high back: these are placed on the camel in the same manner as a pair of panniers, one on each side; and the high backs, which are placed outwards, together with a small pole resting on the camel's pack-saddle, support the covering which forms what may be called the tent. This conveyance accommodates two persons. It is generally open at the front, and may also be opened at the back." The Syrian form, known as a *shugduf*, is a much heavier article, consisting of two solid wooden cots about four feet in length, slung along the camel's sides and covered over with cloth, in the shape of a tent (Burton, *Pilgrimage*, vol. ii, p. 225n). Then there is the *shibriyah*. This is composed of a small square platform, the foundation of which is formed by two *sahhārah*s, or square chests, one on each side of the camel. An arched covering encases the platform, which accommodates only a single person. Finally, mention should be made of the travelling litters in use among the *badawin* in Kuwait and Sau'di Arabia. They have been described in detail by H. R. P. Dickson,¹ and are really nothing more than covered-in saddles, used exclusively by women and children. The *maksar*

¹ *The Arab of the Desert*, 1949, pp. 96-103, with numerous detailed sketches. See especially the three coloured plates at the end of the volume.

consists of an elaborate basket framework, usually covered over when in use by a bright orange, red or other coloured woollen shawl, while the woman sits on the camel's back in a comfortable sort of cot. The *maksar* is made of pomegranate wood, as this can be bent into the necessary hoop shapes. The *dhalla*, and its smaller variety the *chitab*, is a great winged affair, somewhat resembling an aeroplane, covered with gazelle skins, gaily decorated with coloured curtains and trappings. Other types, such as the square-framed *ginn*, the *atf*, the *ghabith*, etc., are peculiar to different tribes, and are all described by Dickson (p. 103). We now return to Bernier. He continues (p. 370): "at other times he is carried by an elephant in a *mikdember*, or in a *hauze* [Arabic *haudaj*, from which *howdah* is derived], which is by far the most striking and splendid style of travelling, as nothing can surpass the richness and magnificence of the harness and trappings. The *mikdember*¹ is a small house, or square wooden tower, gilt and painted; and the *hauze*, an oval chair with a canopy on pillars, also superbly decorated with colours and gold."

Finally, Bernier mentions the *chaudols*: "The Princesses and great ladies of the *Seraglio* have also different modes of travelling. Some prefer *tchaoudoules*, which are borne on men's shoulders, and are not unlike the *tact-ravans*. They are gilt and painted and covered with magnificent silk nets of many colours, enriched with embroidery, fringes, and beautiful tassels." The *chaudol*, *chaudoli*, *chandol*, *chandoli*, *chaundoli*, etc., is described by Sir Richard Temple (*Travels of Peter Mundy*, vol. ii, Asia, 1914, p. 190n⁴) as a sedan with two poles. Mundy says here: "Wee also mett a Chowndoollee carried betwene two Eliphants in manner of a litter. . . . The 4 sides were covered with Cusse [*khas-khas*,² the roots of] a certaine hard, sweete smelling grasse, woven on Canes and to shew on the outside, just like our thatch in England, makeing fast therein a little earth and barley, soe that throwing water on the outside, it cawseth the Inside to bee verie Coole by the strieking of the Ayre thereon; and also in few dayes cawseth the barley to spring out, pleasaunt to see to."³ In the interesting folding Plate facing

¹ The *mikdember*, or *meg'h dambar*, seems to have been very similar to the *'amāri* or *'ambāri*, to be mentioned later. Bernier makes it clear (pp. 69, 83) that the "embury" could be securely closed and at times used to confine factious people. On p. 407 he refers to "a long line of elephants, upon which sat the ladies in their *mikdembers* and *embarys*"—both clearly being an elaborate kind of closed *howdah*. See further, *Hobson-Jobson* under "Ambaree." The editors, however, do not give *mikdember*.

² See *Hobson-Jobson* under "Cuscuss."

³ The frames, filled with grass, were called "tatties," see *Hobson-Jobson* under "Tatty," and later in this account p. 237.

p. 192 of Mundy we see how the different kinds of litters vary. The *chaudol* (L in the plate) is an enormous affair, borne by two elephants, with three windows each side and two at each end, obviously holding several people. Temple's "sedan with two poles" seems a most inadequate description. The *tchaudoules* of Bernier were clearly much smaller than those in Mundy's sketch. Next he shows (K in the Plate) five examples of "Ambarrees," i.e. 'ambāri, or a canopied *howdah*; then the "Palanqueenes" (two examples marked G), and lastly about half a dozen sketches of the little "Dowlees," i.e. *doli* (marked F).

It is quite clear from this Plate that Mundy was anxious to distinguish clearly between the various types of litter used in his day (1628-1634). Although he shows the *palankeens* covered, yet in the next folding Plate, facing p. 195, where a much larger sketch is given, it is entirely open, and described as "A Palanqueene carried on a great bamboo or Cane, cawsed artificially to growe Crooked in that manner, worth 2 or 300 rupees a peece for their lightnesse and gentle bendinge." A similar *palankeen* is illustrated and described by Thomas Bowrey (*Countries round the Bay of Bengal* 1669-79, edited by Sir R. C. Temple, Hakluyt Society, 1905, p. 87) as "beinge a longe Square Frame about 6 foot in length, and 3 or 3-1/2 foot broad, very neatly inlaid with Ivory and Turtle Shell of Excellent Workman Ship plated with Silver . . . with a large Bamboo, of about 15 or 16 foot longe, crooked in the middle for the convenience of sittinge Upright,¹ or may ly downe and Sleep in it, with a Scarlet or broadcloth coveringe (called a Pingaree) Stretched out Square. This is carried by 4 men at once . . ." Bowrey seems quite correct in calling this an (uncovered) "Palanchino," although Temple thinks it should be described as a *manchāl*. Some interesting examples of the richly inlaid *palankeens*, as well as the open variety, can be seen in the galleries (when open again) of the Indian section of the Victoria and Albert Museum at South Kensington.

The *muncheel* or *manjeel* (see *Hobson-Jobson*, s.v.), also written *munsheel* and *munchil*, from the Malayālam *manjil*, *manjāl*, *mañchil*, *mañchāl* and Sanskrit *mañcha*, is the name given to a kind of hammock-litter used on the south-west coast of India. It is thus

¹ For another account of the bending of the growing bamboo to form the curved pole see John Fryer, *New Account of East India*, W. Crooke, Hakluyt, Soc., 1912, vol. i, p. 97, and the references given in the note. For a fine coloured drawing of this type of *palankeen* see F. B. Solvyns, *Les Hindous*, vol. iii, Paris 1811, Pt. viii, Plate No. 2. Here, however, it is described as a "Choupaul," a very different thing from the *chaudol* already discussed. In his next Plate Solvyns depicts what he calls a "J'Halledar," which is merely a more richly decorated "Choupaul."

not so elaborate as a *palankeen*, but more so than the *dandy*, to be described shortly. It is shaded by a cover, which in some cases is held up by a frame of bent canes. Duarte Barbosa is certainly describing the *muncheel* when he writes (Dames' edition, vol. ii, p. 24):

"... and the King comes forth in his litter borne by two men, which is lined with silken cushions. And the litter is of silk, and is slung on a bamboo pole covered with precious stones; it is as thick as the arm of a fat man, and they carry him with certain turns and steps to which they are trained from their birth. These two men raise the bamboo on their shoulders from which the aforesaid litter hangs."

In a note on the passage J. A. Thorne says that "the *manjal*-bearers hum and grunt in a curious antiphonic manner; the weight of the pole is considerable, and the short jog-trot paces of the bearers are no doubt the result of training."

In the old Kingdom of Pegu early travellers give the name *deling*, *delingo* or *delingeg* to a hammock-litter, which appears to be merely the local name for the Malayalam *manjil*, *mañchul*, etc. Thus in 1585 Gasparo Balbi (*Viaggio dell' Indie Orientali*, Venetia, 1590, f. 99b) writes: "This Delingo is a strong cotton cloth doubled, . . . as big as an ordinary rug, and having an iron at each end to attach it by, so that in the middle it hangs like a pouch or purse. These irons are attached to a very thick cane, and this is borne by four men. . . . When you go on a journey, a cushion is put at the head of this Delingo, and you get in, and lay your head on the cushion. . . ."

A year or two later Ralph Fitch¹ describes his entry into Pegu by "Delingeges, which are a kind of Coches made of cords & cloth quilted, & caried vpon a stang [wooden pole] betweene 3. or 4. men . . ." Yule (*Hobson-Jobson*, s.v. "Deling") says that the word is unknown to Burmese scholars, and is perhaps a Persian word. In a reprint of Fitch's travels (*First Englishmen in India*, 1930, p. 204) J. Courtenay Locke suggests its derivation from the Persian *dalang* or *dilang* "something suspended," or *dalangan* "suspended." C. O. Blagden, however, would derive all forms of the word from the Talaing *dalin* "to carry upon a pole between two persons."²

¹ J. Horton Ryley, *Ralph Fitch*, 1899, p. 156.

² See further, *Indian Antiquary*, vol. xlv, 1916, p. 155.

The *dhooley*, *doolie* or *doli*, which was illustrated by Mundy, is a word taken from *dolnā*, "to swing" (cf. *chaudoli* above). It is described by Yule in *Hobson-Jobson* as a cot or frame, suspended by the four corners from a bamboo pole, and is carried by two or four men. It is a cheaper and lighter form of *palankeen* used largely by the poorer classes, and as any army ambulance. The *dandy*, from *danri*, "a pole," consists of a strong cloth slung like a hammock to a bamboo pole, chiefly used in the Himālayas. It is described by della Valle (*Travels in India*, edited by E. Gray, 1892, vol. i, p. 183) as a *Rete* "being nothing else but a net of cords ty'd at the head and feet to, and hanging from, a great Indian cane; in which Net, which is of the length of a man, and so wide that opening in the middle (for the two ends are ty'd fast to the cane) 'tis capable of one person . . . These Nets are different from the *Palanchini* and the *Andor*; for in these from the Cane hang, not nets, but litters like little beds . . ." In "*Andor*" we recognise the *doolie* or *doli* discussed above (but see "*Andor*" in *Hobson-Jobson*). For an interesting description of the *andor* given by Castanheda when telling of the meeting of Vasco da Gama with the Kotwal of Calicut, as well as a further description by Corrêa, see *Voyage of Pedro Álvares Cabral to Brazil and India* (translated by W. B. Greenlee, Hakluyt Society, 1938, p. 80n¹). In his article on the "Kahār, Bhoi" caste, R. V. Russell (*Tribes and Castes of the Central Provinces*, vol. iii, 1916, pp. 292-294) says that rich women use a superior kind of litter with a domed roof supported on eight pillars with side-boards like Venetian blinds. It was called *Kharkhariya* in imitation of the rattling of the blinds when in motion.¹ He considers it perhaps the progenitor of the modern Calcutta *ghari*, or four-wheeler, just as the body of the hansom-cab was modelled on the old sedan-chair. Cf. "*Palkee-Garry*" in *Hobson-Jobson*.

Finally, mention should be made of the *serion* or *serriion* as written by Ralph Fitch (1587-1588), and given later by Fray Sebastien Manrique (1629-1637) in such forms as *cerion*, *cirion*, *cirian* and *sirian*. The word seems to have been peculiar to Pegu and Arakan, and is used to denote a kind of chair-litter which both the above-mentioned travellers found some difficulty in describing. Apparently it could be opened or closed, for Fitch, in speaking of the King of Pegu says² that he rides "oftentimes vpon an elephant with a fine castle vpon him very fairly gilded with gold, and sometimes vpon a great frame like an horslitter, which hath a little house

¹ See Hamilton's description later p. 236.

² J. Horton Ryley, *Ralph Fitch*, 1899, p. 162; J. Courtenay Locke, *First Englishmen in India*, 1930, pp. 126, 127.

upon it covered over head, but open on the sides, which is all gilded with golde, & set with many rubies and sapphires, whereof he hath infinite store in his country, and is caried vpon sixteene or eighteene mens shoulders. This coach in their language is called Serrion." A few pages later he again describes it as like a horse-litter, but when speaking of the Cantonese he says¹ that when the King rides abroad "he is caried vpon a great chaire or serrion gilded very faire, wherein there is made a little house with a latise to looke out at; so that he may see them, but they may not looke vp at him . . ." Manrique tells us how he received "two Ceriones" from the Governor of Peroem [Perawk] "similar to our hand-barrows, but very much better made . . . being carried on the shoulders of four retainers." (Hakluyt Soc. edit. vol. i, 1927, p. 113 and note 1.)

Mr G. O. Blagden derives serrion from the Talaing *sareñ*, pronounced *saréan* or *sarian*, a swinging cradle, homonym and perhaps the origin of Syriam, near Rangoon, also written *sareñ*.²

In concluding this Diversion a few general references may be added.³ I would especially mention the magnificent work of F. Baltazard Solvyns,⁴ *Les Hindous ou Description de leurs Mœurs, Coutumes et Cérémonies*, 4 vols., Atlas folio, Paris 1808-1812. Apart from the Plates already mentioned (the "Choupaul" and "J'Halledar") see also vol. iii, Pt. viii, Plate IV "Mohafa," which is described as an entirely closed-in litter for rich females who use it to go to Festivals and visits to relations; vol. iii, Pt. ix, Plate III the "Mejanah" which is "built of iron and covered with leather" and used by "those Hindoos only who adhere to the customs of their ancestors"; vol. iii, Pt. viii, Plate V the "Dooly," or *doli*; vol. iii, Pt. ix, Plate IV the "Long Palanquin" adapted for Europeans; and finally, the "Boutcha," which closely resembles the English sedan chair. In order to identify some of these types I would quote a passage from a MS of Francis (Buchanan) Hamilton as printed in Montgomery Martin's *Eastern India*, vol. iii, p. 119.

¹ Ryley, *op. cit.*, p. 180; Locke, *op. cit.*, p. 140.

² See further, R. F. St. A. St. John, *Journ. Roy. As. Soc.*, 1894, pp. 150, 151; *Indian Antiquary*, vol. xlv, 1916, p. 155; and Ch. Duroiselle, *Report Arch. Sup. Arch. Surv. Burma*, Rangoon, 1917, pp. 30, 31. For Syriam see *Hobson-Jobson*, s.v.

³ In a work by Abdul Aziz, *The Imperial Treasury of the Indian Mughuls*, Lahore 1942, mention is made of a publication by the same author: *Horie and Elephant trappings and other conveyances used by the Indian Mughuls*. This was to include a description of all Indian litters, but I cannot discover if it has yet appeared.

⁴ There appear to have been two issues, one with 288 Plates (i.e. 4 volumes of 12 parts of 6 plates each) and another with 292 plates, and a fuller title-page stating that the text is in English and French. The work was based on Solvyns's earlier *Collection of 250 Etchings . . . of the Hindoos*, Fol. Calcutta 1796-1799, with an accompanying *Catalogue of 1799*. A selection of 60 coloured engravings was published in 1804 as *The Costume of Indostan*.

After stating that palankeens are considered by the natives to be of four kinds, he continues:

"The most fashionable is by them called Kharkhariya, and at Calcutta is the kind now [1807-1814] in most general use. It is an oblong couch covered above by a low roof, and its sides shut by Venetian blinds, from the noise of which, in travelling, the name is said to be derived; but in this district ["Puraniya," Purnea] the sides are often open or merely covered by a curtain. In the latter case the proper name at Calcutta was Meyana, [Solvyns' "Mejanah"] but there this kind has now almost entirely gone into disuse, and the name by Europeans has in general been transferred to the Kharkhariya. The poles, by which this palanquin is carried, are fastened to the two ends. The second kind of palanquin is that from which this name [*i.e.* "Palanquin"] is derived, and is called Palki [this is the "naulkeen" of Williamson which we shall come across shortly]. It is a couch suspended under a long bamboo, by the extremities of which it is carried. The bamboo forms an arch over the couch, and upon this arch is suspended a tilt [awning] made of cloth, which serves to screen the passenger from the sun and rain. This is a more showy but less convenient equipage than the former, and is now very rarely seen in Calcutta, but here [Purnea] some people still retain it. The third kind is called Chaupala, that is four square, and is a kind of square box open at the sides. A bamboo, by which it is carried, passes through it, near its roof, and the passenger sits on his heels leaning his head sometimes against one side of the bamboo, and sometimes against the other. This is a very miserable conveyance, used by the middling rank of native men; but has been improved, by Europeans, into the Doli for conveying the sick, by lengthening it so as to admit the passenger to lie at length. The fourth kind is the Mahapa [Solvyns' "Mohafa"], used for carrying women. It is of the same shape as the Chaupala, but the bamboo, by which it is carried, passes over the top, so that in dirty roads the poor creature within is miserably dragged, and she is completely screened from view by curtains which surround her conveyance."

Finally, we can compare extracts from the description of the various types of *palankeen* given by Captain Thomas Williamson in his *East India Vade-Mecum*, vol. i, 1810, pp. 313-325. He discusses in turn the *naulkeen*, *dooly*, *fly-palanquin*, *mahannah*, *boçhah*, and *taum-jaung*, giving details not only of their construction and ornamentation, but also of their weight, balance, and mobility and of the gradual merging of one type into another. The *naulkeen* or *naulkee* is described as a huge affair, a kind of portable throne chiefly

used by royalty. It is, in fact, what we have already called by the Persian name, *tack-ravan*. Yule (*Hobson-Jobson* "Nalkee") suggests that the word, Hindi *nālki*, may possibly be a factitious imitation of *pālki*. Williamson then traces the development of the "dooly" into what he calls a "*fly-palanquin*." This was brought about by the introduction of the arched bamboo, the change of "the simple parallelogram to an oblongated hexagon," the addition of fringes and brass ornaments, and a rich canopy made to take off in bad weather and put into a bag of wax-cloth, to be carried on one of the bearer's shoulders. The use of the word "fly" is interesting. It first appeared early in the eighteenth century with the meaning, as here, of a quick-travelling vehicle—used to impress the belief, usually quite unfounded—of its great speed. The word was also applied in India to the roof portion and also to the door flap of a tent. The first meaning is obviously the one employed by Williamson. It appears that the life of the *fly-palanquin* was short lived as it was soon "entirely banished" by the Mahannah. In this word we see Solvyns' "Mejanah" and Hamilton's "Meyana" (see further *Hobson-Jobson* under "Meeana, Myanna"). From Williamson's description the *mahannah* was a very heavy vehicle, built rather for comfort than for speed:

"The *mahannah* resembles an immense chest, standing on four feet, raising it nearly a foot from the ground. About two-fifths of each side is open, serving for a door; the residue being usually closed up, either with very thin pannels, or with canvas, leather, &c. The doors are sometimes made to close, by means of two Venetian frames, that, when brought from their recesses, meet in the centre, but at other times run back, on small metal wheels, in grooves behind the panels respectively."

The roof is pannelled and covered with white canvas. The poles are rivetted to iron ribs screwed by means of diverging claws to the body of the vehicle and further steadied by iron stays. The body is about six feet long and about thirty inches wide. Above the doors are brass knobs for curtains and studs to affix the *checks* or *tatties* of kuss-kuss grass for watering when long journeys are made. The *boçhah* (the "Boutcha" of Solvyns) is described as "being a compound of our sedan chair with the body of a chariot," and much more manageable than the *mahannah*. The *taum-jaung*, "support for the feet" is simply an arm-chair with a low back, at the sides of which two poles are fixed. The name was soon turned into *tom-johns*, and is closely related to the *Jompon* of Upper India. For further details see *Hobson-Jobson* under "Tonjon" and "Jompon," which latter has a debatable etymological history. This concludes

the notes on every variety of *palankeen* of which I can find any record.

We can now return to our accounts of betel-chewing.

Niccolao Manucci (1653-1708)

The account of the effects of betel-chewing on a Westerner, who was entirely unacquainted with the custom, is given by the Venetian traveller, Manucci,¹ who visited Sūrāt in 1653.

"But among other things I was much surprised to see that almost everybody was spitting something red as blood. I imagined it must be due to some complaint of the country, or that their teeth had become broken. I asked an English lady what was the matter, and whether it was the practice in this country for the inhabitants to have their teeth extracted. When she understood my question, she answered that it was not any disease, but [due to] a certain aromatic leaf called in the language of the country *pān*, or in Portuguese, *betele*. She ordered some leaves to be brought, ate some herself, and gave me some to eat. Having taken them, my head swam to such an extent that I feared I was dying. It caused me to fall down; I lost my colour, and endured agonies; but she poured into my mouth a little salt, and brought me to my senses. The lady assured me that everyone who ate it for the first time felt the same effects.

"Betel, or *pān*, is a leaf similar to the ivy leaf, but the betel leaf is longer; it is very medicinal and eaten by everybody in India. They chew it along with 'arrecas' (*areca*), which physicians call *Avelans Indicas* (Indian filberts), and a little *catto* (*kath* or *kattha*), which is the dried juice of a certain plant that grows in India. Smearing the betel leaf with a little of the *kath*, they chew them together, which makes the lips scarlet and gives a pleasant scent. It happens with the eaters of *betel*, as to those accustomed to take tobacco, that they are unable to refrain from taking it many times a day. Thus the women of India, whose principal business is to tell stories and eat *betel*, are unable to remain many minutes without having it in their mouths. It is an exceedingly common practice in India to offer *betel* leaf by way of politeness, chiefly among the great men, who, when anyone pays them a visit, offer *betel* at the time of leaving as a mark of good will, and of the estimation in which they hold the person who is visiting them. It would be a great piece of rudeness to refuse it."

¹ Irvine's translation, vol. i, p. 62.

Fryer (1672-1681)

We now come to John Fryer, who gives us the following curious account of the areca-palm¹:

"It rises out of the Ground to twelve or fourteen Feet heighth, the Body of it green and slender, jointed like a Cane, the Boughs flaggy and spreading, under whose Arms it brings forth from its pregnant Womb (which bursts when her Month is come) a Cluster of Green Nuts, like Walnuts in Green Shells, but different in the Fruit; which is hard when dried, and looks like a Nutmeg.

"The Natives chew it with *Chinam* (Lime of calcined Oyster-Shells) and *Arach*, a *Convolvulus* with a Leaf like the largest Ivy, for to preserve their Teeth, and correct an unsavoury Breath. If swallowed, it inebriates as much as Tobacco. Thus mixed, it is the only *Indian* Entertainment, called *Pawn*."

Facing page 110 of Crooke's edition are Fryer's drawings and diagrams of the areca-palm, areca-nuts, mango-trees, etc. He then describes an areca-palm conservatory by comparing it to a cathedral in the following way:

"These Plants set in a Row, make a Grove that might delude the Fanatick Multitude into an Opinion of their being sacred; and were not the Mouth of that Grand Impostor Hermetically sealed up, where Christianity is spread, these would still continue, as it is my Fancy they were of old, and may still be the Laboratories of his Fallacious Oracles: For they, masquing the face of Day, beget a solemn reverence, and melancholy habit in them that resort to them; by representing the more enticing Place of Zeal, a Cathedral, with all its Pillars and Pillasters, Walks and Choirs; and so contrived, that whatever way you turn, you have an even Prospect."

In a note on the passage Crooke says that such places are believed to be semi-sacred, no one in a state of ceremonial impurity being admitted, as the plant is supposed to be most susceptible to spirit influence. (See further, p. 242.)

This concludes the evidence on betel-chewing as afforded by travellers to India up to the end of the seventeenth century.

In the eighteenth and early nineteenth centuries travellers and

¹ *A new Account of East India and Persia*. See Crooke's edition for the Hakluyt Society, vol. i, 1909, pp. 110-111. Other references occur in vol. i, pp. 119, 136, 143, 151. vol. ii, pp. 42, 83, 96.

missionaries to India merely confirm the accounts of previous observers, and we can pass them over as unnecessary to our present inquiry. It was not until government officials began a detailed inquiry among the tribes and castes of all parts of India that it was realised to what a great extent betel leaves and areca-nuts entered into the everyday life of the Hindu. Although we shall obtain a little information from Northern India, we shall find that it becomes more abundant as we travel southwards.

Northern and Central India

The two castes connected with betel in India are Bara'ī (Baraiyā, Bāruī) and Tambolī (Tamolī, Tamdī). Generally speaking, the former grows the plant, while the latter sells the leaves. This distinction, however, does not seem to be always observed. It appears that the Bara'ī hardly ever sells the leaves, while the Tambolī sometimes cultivates the plant.¹ Sherring² denies that the distinction prevails in Benares, and says that there the Tambolī sells areca-nut as well as *pān*, and appears to be more of a wholesale dealer than the Bara'ī. In the Meerut, Agra and Rohilkhand divisions the Bara'īs are replaced by the Tambolīs.

Crooke (*op. cit.*, p. 181) quotes Abū-l-Fazl, and comments on the passage about the leaves of a "chew" being tied with a silk thread.³ He says: "This is very much the modern practice, except that the two leaves are very generally fastened together with a clove. The conservatory in which the *pān* is grown is treated with great reverence by the grower. They do not allow women to enter it, and permit no one to touch the plant or throw the leaves into fire. Very often they are given rent-free holdings by rich landlords to tempt them to settle in their neighbourhoods."

In his article on the "Bāruis" of Bengal, Risley⁴ tells us that on the fourth of Baisākh (April-May) the patroness of betel cultivation is worshipped in some places in Bengal, with offerings of flowers, rice, sweetmeats and sandalwood paste. Along the banks of the Lakhya in Eastern Bengal the Bāruis celebrate, without a Brāhman, the *Navamī Pūjā* in honour of Ushas ('Hōs, Aurora) on the ninth of the waxing moon in Aśvin (September-October). Plantains, sugar, rice and sweetmeats are placed in the centre of the *pān* garden, from which the worshippers retire, but after a little return, and, carrying out the offerings, distribute them among the

¹ Crooke, *Tribes and Castes of the North-Western Provinces and Oudh*, vol. i, p. 177.

² *Hindu Tribes and Castes*, vol. i, p. 330.

³ See p. 225.

⁴ *Tribes and Castes of Bengal*, vol. i, pp. 72-73.

village children. In Bikrampur the deity invoked on the above date is Sungāi, one of the many forms of Bhagavatī. The reason given by the Bāruis for not engaging the services of a Brāhman is the following:

"A Brāhman was the first cultivator of the betel. Through neglect the plant grew so high that he used his sacred thread to fasten up its tendrils, but as it still shot up faster than he could supply thread, its charge was given to a Kāyasth (writers and village accountants). Hence it is that a Brāhman cannot enter a *pān* garden without defilement."¹

At the present day some Bāruis have taken to trade, while others are found in Government service or as members of the learned professions. The bulk of the caste, however, follow their traditional occupation. Betel cultivation is a highly specialised business, demanding considerable knowledge and extreme care to rear so delicate a plant. The *pān* garden (*bārā, bārej*) is regarded as an almost sacred spot. Its greatest length is always north and south, while the entrances must be east and west. The enclosure, generally eight feet high, is supported by *hijul* (Sanskrit, *ijjala*; *Barringtonia acutangula*) trees or areca-palms. The former are cut down periodically, but the palms are allowed to grow, as they cast little shade and add materially to the profits of the garden. The sides are closely matted with reeds, jute stalks, or leaves of the date or Palmyra palm, while *nal* grass is often grown outside to protect the interior from wind and the sun's rays. The top is not so carefully covered in, wisps of grass being merely tied along the trellis-work over the plants. A sloping footpath leads down the centre of the enclosure, towards which the furrows between the plants trend, and serves to drain off rain as it falls, it being essential for the healthy growth of the plant that the ground be kept dry.

The *pān* plant is propagated by cuttings, and the only manures used are *pāk-māṭī*, or decomposed vegetable mould excavated from tanks, and *khali*, the refuse of oil-mills. The plant being a fast-growing one, its shoots are loosely tied with grass to upright poles, while thrice a year it is drawn down and coiled at the root. As a low temperature injures the plant, by discolouring the leaves, special care must be taken during the cold season that the enclosure and its valuable contents are properly sheltered. Against vermin no trouble is required, as caterpillars and insects avoid the plant on

¹ In a note on the passage Crooke (*Religion and Folklore of Northern India*, 1926, p. 263) says that this is obviously an aetiological explanation of the taboo against the Brāhman interfering with it, and he is excluded from the vinery probably because his "sanctity" is supposed to exercise an injurious effect on such a tender plant. Cf. the description given above by Fryer.

account of its pungency. Weeds are carefully eradicated, but certain culinary vegetables, such as pepper, varieties of pumpkins and cucumbers, *palwal* (*Trichosanthes dioeca*) and *baingan* (egg-plant, *Solanum melongena*), are permitted to be grown. *Pān* leaves are plucked throughout the year, but in July and August are most abundant, and therefore cheapest, while a garden, if properly looked after, continues productive from five to ten years. Four *pān* leaves make one *gaṇḍā*, and the *bīra*, or measure by which they are sold, nowadays contains in Eastern Bengal twenty *gaṇḍas*, although formerly it contained twenty-four. In the *Bhātī* country (Bakarganj) thirty-six *gaṇḍas* go to the *bīrā*. *Pān* leaves are never retailed by the Bārui himself, but are sold wholesale to agents (*paikārs*), or directly to the *pān*-sellers.

The varieties of the *Piper betle* are numerous, but it is probable that in different districts distinct names are given to the same species. The *kafūrī* or camphor-scented *pān*, allowed by all natives to be the most delicately flavoured, is grown only at Sunārgaon in Dacca and Mandalghāt in Midnapur for export to Calcutta, where it fetches a fancy price. The next best is the *sāncī*, which often sells for four annas a *bīrā*. This is of a pale green colour, and if kept for a fortnight loses in pungency and gains flavour. The commoner sorts are the *deśī*, *bangalā*, *bhātīāl*, *dhāldogga*, *ghās pān*, grown best in Bakarganj, and a very large-leaved variety called *bubnā*. The usual market-price of the inferior kinds is from one to two pice a *bīrā*.

It has been mentioned that the *bārā* is regarded as almost sacred, and the superstitious practices in vogue resemble those of the silkworm breeder. The Bārui will not enter it until he has bathed and washed his clothes, while the low-caste man employed in digging is required to bathe before he commences work. Animals found inside are driven out, while women ceremonially unclean dare not enter within the gate. A Brāhman never sets foot inside, and old men have a prejudice against entering it. It has, however, been known to be used for assignations. At the present day individuals belonging to the Dhobā, Chaṇḍāl, Kaibartta, Sunārī, and many higher and lower castes, as well as Mohammedans, manage *pān* gardens, but they omit the ceremonies necessary for preserving the *bārā* clean and unpolluted.

In the Central Provinces and Berar the *Barā*'s reside principally in the Amraoti, Buldana, Nagpur, Wardha, Saugor and Jubbulpore districts. The betel-vine is grown principally in the northern districts of Saugor, Damoh and Jubbulpore and in those of Berar and the Nagpur plain. It is noticeable also that the growers and

sellers of the betel-vine numbered only 14,000 in 1911 out of 33,000 actual workers of the Bara'i caste; so that the majority of them are now employed in ordinary agriculture, field labour and other avocations.

Russell¹ describes a curious custom connected with the re-marriage of widows as observed in Betul. The relatives of the widow take the second husband before Māroti's shrine, where he offers a nut and some betel leaf. He is then taken to the mālguzār's house and presents to him R.1.4, a cocoanut and some betel-vine leaf as the price of his assent to the marriage. If there is a Deshmukh [revenue officer] of the village, a cocoanut and betel leaf are given also to him. The nut offered to Māroti represents the deceased husband's spirit, and is subsequently placed on a plank and kicked off by the new bridegroom in token of his usurping the other's place, and finally buried to lay the spirit.

The Bara'is especially venerate the Nāg, or cobra, and observe the festival of Nāg-Panchmī (Cobra's fifth), in connection with which the following story is related. Formerly there was no betel-vine on the earth. But when the five Pāṇḍava brothers celebrated the great horse sacrifice after their victory at Hastināpura they wanted some, and so messengers were sent down below the earth, to the residence of the queen of the serpents, in order to try to obtain it. Bāsuki,² the queen of the serpents, obligingly cut off the top joint of her little finger and gave it to the messengers. This was brought up and sown on the earth, and *pān* creepers grew out of the joint. For this reason the betel-vine has no blossoms or seeds, but the joints of the creepers are cut off and sown, when they sprout afresh; and the betel-vine is called Nāgbel, or the serpent-creeper. On the day of Nāg-Panchmī the Bara'is go to the *bārejā* with flowers, cocoanuts and other offerings, and worship a stone which is placed in it, and which represents the Nāg or cobra. A goat or sheep is sacrificed and they return home, no leaf of the *pān* garden being touched on that day. A cup of milk is also left, in the belief that a cobra will come out of the *pān* garden and drink it. The Bara'is say that members of their caste are never bitten by cobras, though many of these snakes frequent the gardens on account of the moist coolness and shade which they afford.

The preparation of the "chew" for retail sale is the same as that in the North-Western Provinces. *Biḍās* are prepared, consisting of a rolled betel leaf containing areca-nut, catechu and lime, and

¹ Russell, *Tribes and Castes of the Central Provinces*, vol. ii, 1916, p. 195.

² I.e. the serpent-king Vāsuki of ancient Sanskrit literature.

fastened with a clove. Musk and cardamoms are sometimes added. Tobacco should be smoked after eating a *biḍā*, according to the saying: "Service without a patron, a young man without a shield, and betel without tobacco are alike savourless." *Biḍās* are sold at from two to four for a *pice* (farthing). Women of the caste often retail them, and as many are good-looking they secure more custom; they are also said to have an indifferent reputation. Early in the spring, when they open their shops, they burn some incense before the bamboo basket in which the leaves are kept, to propitiate Lakshmī, the Goddess of Wealth.

For notes on the Bara'ī and Tambolī castes in Bombay see Enthoven, *Tribes and Castes of Bombay*, vol. i, pp. 59-65, and vol. iii, pp. 364-369. In the Nizam's dominions they are dealt with by Syed Siraj Ul Hassan in *Castes and Tribes of H.E.H. the Nizam's Dominions*, vol. i, 1920, pp. 28-33 and 596-602. See also G. A. Grierson, *Bihar Peasant Life*, 2nd edition, 1926, pp. 248-249.

Southern India

Owing to the fact that social customs of the Hindus have remained more unchanged in the south than in any other part of India, it is necessary for us to consider the different uses to which betel is put among the various tribes and castes of the peninsula. In order to do this in any comprehensive manner, I have found it necessary to go through all the seven volumes of Mr Thurston's well-known work on the subject.¹ This has naturally taken a considerable amount of patience and pertinacity, but I do not think the time has been wasted; for the evidence derived from the work is of undoubted value, and it would be too much to expect readers to be grateful for a mere reference to a seven-volume work which lacks any sort of index.

It contains some three hundred references to betel—either to the leaf, the "nut" or to the combined *pān-supārī*. Many of these references are redundant, as betel is used at practically every wedding ceremony of all tribes and castes. I shall therefore select from the complete list of references such descriptions of customs and ceremonies as will clearly indicate the important part betel plays in the life of the native of Southern India.

The references from Thurston are taken volume by volume in proper chronological order, the names of the castes occurring alphabetically:

¹ *Castes and Tribes of Southern India*, 7 vols., Madras, 1909.

Vol. i, p. 125. Badhōyi (carpenters and blacksmiths).

"If a case of a serious nature is to be tried, the complainant goes to one of the headmen of the caste, and, presenting him with *fifty areca-nuts*, asks him to convene a council meeting."

Page 163. Baṇṭ (cultivating class in South Canara).

"At a puberty ceremony among some Baṇṭs, the girl sits in the courtyard of her house on five unhusked cocoanuts covered with the bamboo cylinder which is used for storing paddy. Women place four pots filled with water, and containing *betel leaves and areca-nuts*, round the girl, and empty the contents over her head. She is then secluded in an outhouse. The women are entertained with a feast which must include fowl and fish curry. The cocoanuts are given to a washer-woman. On the fourth day the girl is bathed, and received back at the house. Beaten rice and rice-flour mixed with jaggery (crude sugar) are served out to those assembled. The girl is kept *gōsha* (secluded) for a time, and fed up with generous diet."

Page 260. Bonthuk (nomads—priests, drummers, musicians, shepherds, etc.).

"Each settlement has a headman, called Bichādi, and in case of any dispute about his decision, the complainant has to undergo a trial by ordeal. This consists in taking out an *areca-nut* from a pot of boiling cowdung water. The dimensions of the pot, in height and breadth, should not exceed the span of the hand, and the height of the cowdung water in the pot should be that of the middle finger from the base to the tip. If, in removing the nut from the pot, the hand is injured, the guilt of the individual is proved."

Page 276, etc. Brāhman.

"The *areca-nut and betel leaf* enter into every important ceremony in the life of a Brāhman—the *upanayana*¹ (p. 276), his marriage (pp. 279, 280, 290-294), at which he chews betel for the first time, and his death (p. 300). Widows are forbidden to use it (p. 351).

A still clearer idea of the continual and highly important part betel plays in a Brāhman's life will be obtained by referring to

¹ For a note on the *upanayana*, or rite of investiture with the sacred thread, see *The Ocean of Story*, vol. vii, pp. 26-28.

Stevenson's *Rites of the Twice-Born*. Owing to the insufficient index to this work I give the references below."¹

Vol. ii, p. 13. Chāliyan (cotton weavers).

"In the tāli-tying ceremony the girl is conducted to a booth in which are a plank, made of the wood of the *pāla* tree, a lighted lamp, *betel leaves* and *areca-nuts*, and a measure of raw rice, etc. The girl sits on the plank, holding a mimic arrow in her right hand. The Pothuvan, or caste barber, now hands the tāli to a male member of an Urālan's (headman's) family, who ties it on the girl's neck. For his services the Pothuvan receives a *fanam* (coin) and three bundles of *betel leaves*."

Page 110. Dandāsi (watchmen, and thieves).

"Among their marriage ceremonies may be mentioned the following. The headman, or some respected elder of the community, places an *areca-nut* cutter on, or, with some rice and *areca-nut*, between the united hands of the contracting couple, and ties them together with seven turns of a turmeric-dyed thread. He then announces that — the grand-daughter of — and daughter of — is united to — the grandson of — and son of —. The parents of the bride and bridegroom pour turmeric-water from a chank (*Turbinella rapa*) shell or leaf over their united hands. The nut cutter is removed by the bride's brother, and, after striking the bridegroom, he goes away."

Page 117. Dāsari (mendicant caste of Vaishnavas).

"Devotees put *kavalam* (sliced plantain fruits mixed with sugar, jaggery and fried grain or beaten rice) into the mouths of the mendicants, who eat a little and spit the rest out in the hands of the devotees. The same thing is done with *betel leaves*. It is believed that this action will cure all diseases and produce children."

Page 416. Izhava, or Ilava (toddy-drawing castes of Malabar, Cochin and Travancore).

"Among the ceremonies observed at the seventh month of pregnancy is that which determines the sex of the unborn child. The

¹ Birth and babyhood, pp. 5, 6, 9-11, 21; sacred thread, pp. 29, 40, 43; the wedding and its ceremonies, pp. 51, 60, 68, 74, 75, 83, 86, 87, 90, 104, 109; desire for a son, pp. 112, 116, 118, 120; death, pp. 167, 172; daily and monthly ritual; pp. 239, 266, 279, 285, 289, 304, 313, 329, 330, 333, 339; special ceremonies, p. 354; Śiva worship, pp. 385, 392; Vishnu worship, p. 414.

priestess pours a quantity of oil on the navel of the woman from a *betel leaf*, and, from the manner in which it flows down, the sex is determined."

Vol. iii, p. 81. Kallan (a caste of thieves).

"On the sixteenth day after the first menstrual period of a Kallan girl, her maternal uncle brings a sheep or goat, and rice. She is bathed and decorated, and sits on a plank while a vessel of water, coloured rice and a measure filled with paddy, with a style bearing a *betel leaf* stuck on it, are waved before her. Her head, knees and shoulders are touched with cakes, which are then thrown away. A woman, conducting the girl round the plank, pours water from a vessel on to a *betel leaf* held in her hand, so that it falls on the ground at the four cardinal points of the compass, which the girl salutes."

Page 110. Kammālan (Tamil carvers of eyes of images, etc.).

"The method of a local official to resign office is to lay *betel leaf* and *areca-nut* before his superior, and prostrate himself in front of him. On p. 114 we learn that the *pān-supāri* was taken by *dēva-dāsīs* to ratify a promise. On p. 128 is described a curious custom observed in commencing the building of a house. The carpenters open three or four cocoanuts, spilling the juice as little as possible, and put some tips of *betel leaves* into them; and, from the way these float in the liquid, they foretell whether the house will be lucky or unlucky, whether it will stand for a long or short period, and whether another will ever be erected on its site."

Page. 295. Koḍikkāl-vellālan is the occupational name of a sub-caste of Vellālas, and of Labbai Mohammedans, who cultivate the *betel-vine*.

Vol. iv, p. 102 *et seq.* Kudubi (shifter of cultivation).

"Some of the caste are employed in the preparation of cutch, the extract from the *Acacia catechu*, obtained by boiling the chips, used chiefly in Southern India for colouring *areca-nuts*. Before the commencement of operations, the Kudubis select an *Areca catechu* tree, and place a sword, an axe and a cocoanut on the ground near it. They prostrate themselves before the tree, with hands uplifted, burn incense and break cocoanuts. The success of the operation is believed to depend on the good-will of a deity named Siddēdēvaru. Before the Kudubis commence work, they pray to

him, and make a vow that, if they are successful, they will offer a fowl. Failure to produce good balls of catechu is attributed to the wrath of the deity. At the close of the work, if it has prospered, a *kalasam* (brass vessel) is set up and fowls are killed. Sometimes goats are sacrificed, cooked food and meat are placed on leaves round the *kalasam*, and after worshipping, the viands are partaken of.

"Mr Latham, of the Forest Department, thus describes the process:

"The first thing to do is to erect the ovens, known as *wolle*. There are made by a party of men a fortnight or so before the main body come. The ordinary soil of the field is used, and the ovens are built to a height of 18 inches, and placed about 5 yards in front of the huts at irregular distances, one or two to each hut. The oven is an oblong, about 2 feet wide by 3 feet long, with two openings above, about 1 foot in diameter, on which the boilers, common ovoid earthenware pots (*madike*), are placed. The opening for the fire is placed on the windward side, and extends to the far side of the second opening in the top of the oven, the smoke, etc., escaping through the spaces between the boilers and the oven. The earth forms the hearth. To proceed to the details of the working, the guard and the watcher go out the first thing in the morning, and mark trees for the Kudubis to cut, noting the name of the man, the girth and length of the workable stem and branches. The Kudubi then cuts the tree, and chips off the sapwood, a ring about 1 inch wide, with his axe, and brings it into the camp, where a Forester is stationed, who measures the length and girth of the pieces, and takes the weight of wood brought in. The Kudubi then takes it off to his shelter, and proceeds to chip it. In the afternoon he may have to go and get firewood, but generally he can get enough firewood in a day to serve for several days' boiling. So much for the men's work. Mrs Kudubi puts the chips (*chakkai*) into the pot nearest the mouth of the oven, and fills it up with water, putting a large flat wooden spoon on the top, partly to keep the chips down, and, lighting her fire, allows it to boil. As soon as this occurs, the pot is tipped into a wooden trough (*marige*) placed alongside the oven, and the pot with the chips is refilled. This process is repeated six times. The contents of the trough are put into the second pot, which is used purely for evaporating. The contents of this pot are replenished from the trough with a coco-nut bailer (*chippu*) until all the extract obtained from the chips has been evaporated to a nearly solid residue. The contents are then poured into a broken half-pot, and allowed to dry naturally, being stirred at intervals to enable the drying to proceed evenly. The extract

(*rasa*) is of a yellowish-brown colour when stirred, the surface being a rich red-brown. This stirring is done with a one-sided spoon (*satuga*). To make the balls, the woman covers her hands with a little wood-ash to prevent the extract adhering to them, and takes up as much catechu as she can close her hands on, and presses it into shape. These balls are paid for at R.1-2-0 per 100, and are counted before the Forester next morning, and delivered to the contractor. This ends the work done by the Kudubis. When the balls have been counted, they are rolled by special men engaged for the purpose on a board sprinkled with a little wood-ash, and this is repeated daily for three or four days to consolidate them. After this daily rolling the balls are spread out in the receiving shed to dry, in a single layer for the first day or two, and after that they may be in two layers. After the fourth or fifth day's rolling they are put in a pit and covered with wood-ashes, on which a little water is poured, and, on being taken out the next day, are gone over, and all balls which are soft or broken are then rejected, the good ones being put on the upper storey of the stone shed to get quite hard and dry.

"When the cutch is mixed with the lime used for the chew, mastication will at once produce the red saliva so familiar in all betel-chewing countries. For various other descriptions of cutch and *kath* (a purer form of cutch) see Watt, *op. cit.*, vol. i, pp. 30-34." (See also pp. 194-195, of the present volume.)

Page 178. Kurumo (Oriya agriculturists).

"This caste has several village deities. Every family apparently keeps the house-god within the house, and it is worshipped on all important occasions. The god itself is usually represented by five *areca-nuts*, which are kept in a box. These nuts must be filled with pieces of gold, silver, iron, copper and lead, which are introduced through a hole drilled in the base of the nut, which is plugged with silver."

Page 398. Malasar (forest tribe cultivators).

"The Malasars of the plains observe a curious custom connected with the dead. The widow chews *betel leaf* and *areca-nuts*, and spits the *betel* over the eyes and neck of the corpse. On the third day after death, cooked rice and meat are offered to the soul of the deceased on seven *arka* (*Calotropis gigantea*) leaves. The male members of the family then eat from the same leaf."

Vol. v, p. 195. Nambūtiri Brāhmans (of Malabar).

"Among their festivals is one called *Tiruvatira*, a day on which Śiva is especially worshipped and only a single meal is taken. Night vigils are kept both by the husband and wife, seated before a lighted fire, which represents the *sākshi* (witness) of Karmas and contracts. They then chew a bundle of *betel-leaves*, not less than a hundred in number. This is called *keṭṭuvēṭṭila tinnuka*. As the chewing of betel is taboo except in the married state, this function is believed to attest and seal their irrefragable mutual fidelity."

Page 358 *et seq.* Nāyar (traders, artisans, washermen, etc.).

"On the death of an important member of a *taravād* (descendants in the female line of one common female ancestor) the practice of not shaving the entire body, for a period varying from forty-one days to a year, is involved. The observance, known by the name of *diksha*, necessitates the effected man offering half-boiled rice and gingelly seeds to the spirits of the deceased every morning after his bath. He is also under restriction from women, from alcoholic drinks, from *chewing betel*, and also from tobacco."

Vol. vi, p. 97. Paraiyan (low-class pariahs of the Tamil country).

"*Betel* enters largely into every part of the marriage ceremonies, which are long and intricate. After the exchange of *betel* has ratified the agreement of marriage, the bridegroom, with several relations, etc., proceeds to the bride's home, where more *betel* is exchanged. After the lapse of a few days the girl's family is expected to pay a return visit, and the party should include at least seven men. *Betel* is again exchanged, and the guests are fed, or presented with a small gift of money. When marriage follows close on betrothal, the girl is taken to the houses of her relations, and goes through the *nalaṅgu* ceremony, which consists of smearing her with turmeric paste (see *Ocean*, vol. viii, p. 18), an oil bath, and presentation of *betel* and sweets. The auspicious day and hour for the marriage are fixed by the Valluvan, or priest of the Paraiyans. The ceremonial is generally carried through in a single day. On the morning of the wedding day three male and two married female relations of the bridegroom go to the potter's house to fetch the pots, which have been already ordered. The potter's fee is a fowl, pumpkin, paddy, *betel* and a few annas. The bride, accompanied by the headman and her relations, goes to the bridegroom's village, bringing with her a number of articles called *petti variṣai*, or box-presents. These consist of a lamp, cup, brass vessel, ear-ornament

called *kalāppu*, twenty-five betel leaves, and areca-nuts, onions and cakes, a lump of jaggery (crude sugar), grass mat, silver toe-ring, rice, a bundle of betel leaves, and five cocoanuts, which are placed inside a bamboo box.

"Numerous other ceremonies follow, with which we are not concerned. Towards the close of the marriage day, fruit, flowers and betel are placed on a tray before the couple, and all the *kankanams*, seven in number, are removed, and put on the tray. After burning camphor, the bridegroom hands the tray to his wife, and it is exchanged between them three times. It is then given to the washerman. The proceedings terminate by the two going with linked hands three times round the *pandal*."

Page 360. *Sēnaikkudaiyān* are a caste of betel-vine cultivators and betel-leaf sellers, who are found in large numbers in the Tinnevely district, and to a smaller extent in the other parts of the Tamil country.

Vol. vii, p. 24. T(h)anda Pulaiyan (cultivators).

"Every kind of sickness is attributed to the influence of some demon, whom a magician is capable of exorcising. In the event of sickness, the sorcerer is invited to the hut. He arrives in the evening, and is entertained with food, toddy and betel. He then takes a tender cocoanut, flower of the areca-palm, and some powdered rice, which he covers over with a palm leaf. The sick person is placed in front thereof, and a circle is drawn round him. Outside the circle an iron stylus is stuck in the ground. The demon is supposed to be confined within the circle, and makes the patient cry out: 'I am in *pai* (influence of the ghost) and he is beating me,' etc. With the promise of a fowl or sheep, or offerings thereof on the spot, the demon is persuaded to take his departure. Sometimes, when the sorcerer visits a house of sickness, a rice-pan containing three betel leaves, areca-nuts, paddy, tulsi (*Ocimum sanctum*), sacred ashes, conch and cowry (*Cypræa moneta*) shells, is placed in the yard. The sorcerer sits in front of the pan, and begins to worship the demon, holding the shells in his hands, and turning to the four cardinal points of the compass. He then observes the omens, and, taking his iron plate, strikes it, while he chants the names of terrible demons, Mullva, Karinkāli, Aiyinār and Villi, and utters incantations. This is varied by dancing, to the music of the iron plate, sometimes from evening till noon on the following day. The sick person works himself up into the belief that he has committed

some great sin, and proceeds to make confession, when a small money fine is inflicted, which is spent on toddy for those who are assembled."

Page 178. Toreya [toluvar?] (cultivators, chiefly of betel-vine).

"When a married girl reaches puberty she is taken to her father's house, and her husband constructs a hut with branches of *Ficus glomerata*. On the last day of her confinement therein the hut is pulled down, and the girl sets fire to it. The house is purified, and the female relations go to the houses of the Ejamān (headman) and caste people, and invite them to be present at a ceremonial. A small quantity of turmeric paste is stuck on the doors of the houses of all who are invited. The relations and members of the caste carry *betel*, and other articles, on trays in procession through the streets. The girl is seated on a plank, and the trays are placed in front of her. Rice-flour, fruits, *betel*, etc., are tied in her cloth, and she is taken into the house. In the case of an unmarried girl the hut is built by her maternal uncle."

The above extracts, or précis, clearly show the numerous ceremonies among different tribes and castes of Southern India in which betel and areca-nuts play a part.

With regard to marriage ceremonies the use of betel leaf and areca-nuts is everywhere predominant. In the first place betel must be looked upon as synonymous with our "tip." Thus, if it is necessary to employ a barber, washerman, priest or artisan in connection with the wedding ceremonies, one may be sure he will receive a "tip" of betel leaves and areca-nuts, to which a fowl and other objects are sometimes added.

Then there is the *exchange of betel* to be considered. This act constitutes a binding oath. After the fathers have exchanged betel the wedding is formally agreed upon and arranged. The bride and bridegroom then exchange betel, which act constitutes a mutual oath of fidelity.

In all the minor ceremonies as well, betel is constantly chewed or given away as a general mark of friendship and rejoicing. If the bridegroom can afford it, a wholesale distribution of *pān-supāri* is made.

We may thus say that, as betel-chewing is the *sine qua non* of the Hindu's life, it has naturally become an object of good augury. Consequently it not only figures largely at marriage ceremonies, but also appears at birth, puberty, sacred thread and tāli-tying

ceremonies. The widow, being unlucky, must not use it, but the dead husband will need it just the same, and must have some put in his grave or on his funeral pyre.

Assam, Burma, Annam and Siam

With the exception of certain parts of Assam, mentioned below, betel-chewing is found throughout the four countries which head this section.

To the east the custom stretches through Cambodia and Cochin China to Southern China, while to the south it continues into Malaya and so to the Eastern Archipelago.

References and short descriptions of betel-chewing are naturally found in nearly every travel-book on the particular locality concerned. It will, therefore, be superfluous to attempt to supply a list of works which mention it. I shall merely select what I consider reliable and correct descriptions, whether they be from old or recent works.

In the case of Assam we naturally turn chiefly to the works of Mills, Hutton and Smith. Among both the Sema¹ and Angami² Nagas the only narcotic known is tobacco. With the Ao Nagas, however, the betel and areca-nut are in very common use. In villages where the ingredients are easily obtainable most adults chew *pān* and areca-nut (*koyi*).

A quid consists of a little areca-nut, some lime (*shinū, sūni*), a scrap of tobacco and a bit of one of several kinds of bark or wood which have the effect of increasing the flow of saliva, all wrapped up in a "pān" leaf. *Pān* is grown in many villages, but the areca-nut has to be obtained from the plains, though an inferior wild variety is sometimes used. Lime is either bought in the plains or made from snail-shells or egg-shells.³

We get further details in Smith's work⁴ on the same tribes, who quotes largely from previous observers. Betel-chewing is practised by a number of the hill tribes. "*Pān* leaf, betel-nut and lime," writes Hunter,⁵ "are essential to the comfort of all the hill people, who are inveterate chewers of *pān*. They commence at an early age, and are rarely seen without a *pān* leaf in their mouths; the females are quite disfigured from the practice."

¹ J. H. Hutton, *Sema Nagas*, 1921, p. 99.

² J. H. Hutton, *Angami Nagas*, 1921, p. 101.

³ J. P. Mills, *The Ao Nagas*, 1926, p. 152.

⁴ W. C. Smith, *Ao Naga Tribe of Assam*, 1925, pp. 137-138.

⁵ *Statistical Account of Assam*, vol. ii, p. 220.

The Khasis "are addicted to the use of . . . betel-nut . . . which is chewed in large quantities by both sexes."¹

"They greatly disfigure their countenances," writes Dalton,² "by the constant and untidy chewing of *pān* leaf."

"They are inveterate chewers," comments P. R. T. Gurdon,³ "of *supāri* and the *pān* leaf (when they can get the latter), both men, women, and children; distances in the interior being often measured by the number of betel-nuts that are usually chewed on a journey."

"Betel-nut," writes Edward Stack,⁴ "(*kōvē*; Khasi, *kwaī*) is largely consumed in the usual way, with lime and *pān*-leaf (*bīthī*); and (as among the Khasis) time and distance are computed by the interval required to chew a nut. (The phrase is *ingtāt ē-ōm-tā ēr* — 'the time it takes to chew the nut and *pān*-leaf red': *ingtāt*, roll for chewing; *ē*, one; *ōm*, chew; *ēr*, red.)"

The practice is current among the Kachins. "The acknowledged form of introduction and friendly interchange of courtesies," comments Ola Hanson,⁵ "is by exchanging betel-nut boxes." The Karen⁶ also practise constantly the habit of betel-chewing. Professor Hutton is responsible for the statement that betel-chewing among the Naga tribes is "confined to Aos, Lhotas and Konyaks in touch with the betel-chewing plainsmen."

Mills⁷ says that "betel-nut is chewed with *pān* and lime in the villages near the plains. Lime used to be made locally from the ground-up shells of fresh-water snails, but is now bought in the plains."

The Rev. S. A. D. Boggs, a former missionary among the Garos, reported to the writer that betel-chewing has been on the increase among the Garos. It is common among the Assamese, and it is the opinion of Mr Boggs that the Garos have learned the habit from the Assamese. Among the Ao Nagas the habit is deeply entrenched. However, some questions arise in this connection. The palm-tree which bears the areca-nut does not thrive well in the hills, and so the Nagas frequently substitute the bark of a certain root for the nut. This may mean that they brought the habit with them into the hills and have been keeping it up in spite of the scarcity of one of the principal ingredients, or else they may

¹ *Census of India*, 1901, vol. i, p. 198.

² *Descriptive Ethnology of Bengal*, p. 57.

³ *The Khasis*, 1907, p. 5.

⁴ *The Mihirs*, 1908, p. 14.

⁵ *The Kachins*, Rangoon, 1913, p. 57.

⁶ H. I. Marshall, *The Karen People of Burma*, 1922.

⁷ *The Lhota Nagas*, London, 1922, p. 82.

have learned the habit from others since taking up their present abode.¹

T. C. Hodson² quotes Dr Brown³ as saying that the Manipuris, both male and female, are inveterate chewers of *pān supāri*. The whole of this is brought from the neighbouring district of Cachar, and forms a considerable trade. The areca-nut tree will not grow in Manipur territory.

The Shans of Northern Burma are also very addicted to the habit, and their teeth become black and shiny. So far from considering this a blemish, they look upon it as a mark of beauty, saying: "All beasts have white teeth."

Mrs Leslie Milne⁴ gives an interesting account of the method of making lime for chewing. A place is chosen in the jungle where firewood is easily found, and where lime-stone blocks are near at hand. A round hole or pit, six feet in diameter and five feet in depth, is dug. Then a similar excavation is made near it, the intervening ground being pierced near the bottom of the pits to unite them. The first hole is filled with limestones, which are placed with care, leaving plenty of fissures through the mass, so that fire and smoke may pass between the stones. In the second pit a fire is made, then plenty of wood is piled on the flames; the top is covered, so that the smoke and fire can find an exit only through the limestones of the first hole. Lime thus made is sometimes sold without further preparations, but often turmeric is beaten into it, making it red. When areca-nut is chewed, lime is always added, and sometimes cutch, tobacco and spices folded in a betel leaf.

Writing under the pseudonym of Shway Yoe,⁵ Sir George Scott gives us a very clear description of betel-chewing in Burma. It is sometimes carried on simultaneously with smoking, but most people prefer to economise enjoyment, and chew only in the interval between smokes. Chewing is hardly an exact expression, and the use of it frequently leads the experimenting Briton into the unpleasant predicament of having all the interstices between his teeth choked up with little fragments of the nut, which, with their indescribable aromatic flavour, stimulate the flow of saliva for four hours afterwards. The Burman splits his nut in half, smears a little slaked lime, usually white, but sometimes tinted pink or salmon-coloured, on the betel-vine leaf, puts in a little morsel of

¹ See further, Smith, *op. cit.*, pp. 155, 158 and 161.

² T. C. Hodson, *The Meitheiis*, 1908, p. 48.

³ R. Brown, *Annual Report on the Manipure Political Agency*, 1874, p. 33.

⁴ *Shans at Home*, 1910, p. 173.

⁵ *The Burman, his Life and Notions*, p. 71. For a short description of Burmese betel-boxes see p. 273.

cutch and tobacco, and then rolls it up and stows away the quid in the side of his mouth, occasionally *squeezing* it a little between his teeth. It is as well to be very cautious with the lime and cutch (the juice of the *Acacia catechu*) the first time you make a trial. The latter especially is very astringent. Chewing *kolng-thee* is an unlovely practice. The Burman has none of the delicacy with regard to a spittoon which characterises the American, and these articles require to be of a very considerable size. The monks are perhaps the most persistent chewers of the good betel. Smoking is prohibited, but nothing is said against betel, and it is considered a great stimulator of the meditative faculties. The lime used very speedily corrodes and destroys the teeth, and then the old *pohn-gyee* (Burmese Buddhist monk of highest order) has to make the scholars crush up the nuts, so that they may not hurt his toothless gums. It is a common belief that no one can speak Burmese well till he chews betel.

In concluding this brief section on Burma I would quote, as an example of the present-day spread of betel-chewing, a passage from a work by W. G. White on the nomadic Mawken people of the Mergui Archipelago.¹

"Among the Dung Mawken, who are taking to the Burmese habit of betel-chewing, the custom is coming into vogue of the 'joiners' [*i.e.* the go-between, who arrange marriages, etc.] offering to chew areca-nuts with the father of the girl and any other members of the family who are to take part in the ceremony. If the offer is accepted, agreement is signified, and if it is declined, the 'joiners' cannot fulfil their task."

Passing over Annam, where we are told² "all the Annamese, rich and poor, chew the betel-nut" (read "areca-nut and *pān*"), we turn to Siam and Laos.

The areca-palm is grown in every part of Siam, but in few districts is the production sufficient to meet the enormous demand which the chewing proclivities of the Siamese create. In some parts of Southern Siam, however, the supply exceeds the demand, and a certain quantity of areca-nut is exported thence to other parts of the kingdom and to Singapore and Penang. In the suburbs of Bangkok the areca-palm is grown in gardens, where the trees are planted in orderly rows, interplanted with such other fruit-trees as are found to thrive in the thin shade which they cast. In the provinces the trees are grown in rough plantations, round about the houses of the peasantry, and on any patch of available waste

¹ *The Sea Gypsies of Malaya*, p. 203.

² G. M. Vassal, *On & off Duty in Annam*, p. 107.

land. With its smooth, straight stem, graceful topknot of leaves and hanging bunches of fruit, sometimes full fifty feet from the ground, the areca is one of the most graceful of all the palm family. Once planted in a moist situation, it requires absolutely no care, and though it is possible that, by selection and manuring, the fruit might be improved, the Siamese cultivator has never thought it worth while to take any trouble about it. The areca-nut is used fresh, dried or pickled. When fresh, the edible, or rather chewable, kernel is yellow and soft; when dry, it is brown and extremely hard, and has to be cut up or pounded before it can be used, and when pickled, it is soft and brown and rotten-looking. The trees yield fruit at the end of their third year, and bear usually once—but in some places twice—a year, from a hundred to five hundred nuts. There appears to be a ready and constant demand for areca-nut both in India and China, and it is probable that plantations of these palms in Southern Siam would be found highly profitable. Hitherto, however, European planters have not taken any interest in this product of agriculture.¹

The betel-vine is grown in gardens, more especially in the neighbourhood of Bangkok, where the consumption of it is so great that one large market is devoted entirely to its sale. The vine requires much care, yields leaves fit for use when about a year old, and continues to do so for five years, at the end of which time the foliage becomes small and of too strong a flavour to be of value.

In his book on a journey through Upper Siam and Laos, Carl Bock² gives an illustration of the golden betel set of the King of Siam. It consists of a number of beautifully carved boxes with pyramidal tops, fitting into the upper portion of an elaborately made round box which contains the betel leaves.

As in India, the areca-nut plays a conspicuous part in the wedding ceremony. In fact, it actually gives the name to the ceremony itself. It is served on a metal or plaited tray, and must be accompanied by three other articles: a cake, called *Kanom-cheen*; a kind of mincemeat, highly seasoned, wrapped in plantain leaves, and cooked by steaming; and thirdly, the *sirih* leaf and red lime. These are all termed *Kan mak*—literally, “a basin of areca-nut”—and this is the common Siamese name for a wedding. “Like the Siamese,” says Bock,³ “the Laosians are perpetually chewing. Whether they are busy or idle, they chew: whether they

¹ A. W. Graham, *Siam, a Handbook*, 1912, pp. 318-319.

² *Temples and Elephants*, London, 1884, pp. 24, 186.

³ *Op. cit.*, pp. 254, 255.

sit or walk, they chew. Teeth or no teeth, every Laosian, from almost infancy to old age, chews betel. The toothless old folks assist nature by placing the areca-nut with the accompanying ingredients into a small mortar—a sort of hybrid between a child's popgun and a syringe—which they always carry with them; a few strokes of the rod suffice to crush the nuts and reduce them to a pulpy mass warranted not to hurt the softest gums."

In concluding the notes on Siam we may quote from the anonymous article originally published¹ in the little-known *Bangkok Calendar* for 1864. After dealing in some detail with the agricultural aspect, the writer continues:

"The natives of Siam much prefer the nut in a fresh state, before it is fully ripe. For this purpose, they first divide the entire fruit, with its hull, into longitudinal quarters, and then cleave each quarter of the nut from its covering, by means of a slender knife, cutting (native fashion) outward from the thumb and fingers which hold it—very dexterously managing to leave a small bit of the inner and lower part of the hull on each quarter, to serve as a delicate handle, by which it can be the more gracefully put into the mouth. The work of thus preparing the Betel-nut for chewing, falls by custom exclusively upon the women and girls, in which they spend a large portion of their time. To have it thus made ready, is a mark of politeness always due from them to the males, more especially their own relatives and friends, and to all whom they wish to make their friends. Wives must prepare it for their husbands, sisters for their brothers and sweethearts for their lovers.

"But if the nut be in a dried state, the work seems by common consent to fall into the hands of the more muscular sex. They break it up into a fine powder in a metallic barrel as large as the lower end of a common musket, and about eight inches long, open at each end, one end being smaller than the other. Putting a wooden plug into the small extremity, they drive the nut down from the other end upon it, and there break it to pieces, with a gouge-like pestle neatly fitted in a spheroid handle, generally made of ivory. The nut when thus broken into small particles, and commingled with vermillion-coloured lime paste and a little ceri-leaf, is then driven out of the mortar, plug and all, by the way it was driven in, and forms a delicious mouthful, or cud, for the aged and toothless. Indeed all classes are sometimes reduced to the necessity of preparing their Betel-nut in this way at certain seasons, when the fresh nut cannot readily be obtained."

¹ It was reprinted, though not in its entirety, in *Notes and Queries on China and Japan*, vol. II, 1868, pp. 136-139, under the title of "The Betel Tree."

After describing the effects of chewing on the saliva, lips and teeth (to be quoted later in this Essay) the writer concludes with an interesting description of the "vermillion-coloured lime paste" mentioned above.

"... the plastic lime... is made of newly burnt stone lime. Before the burnt stone has been slaked, an infusion of turmeric root is poured upon it, which causes it to fall into powder taking a fine vermillion colour. Enough of the infusion is employed to leave the lime in a plastic state. In this state it is brought to market, sometimes in large masses of several hundredweight, ready to be ladled out into little earthen pots, holding less than half a pint each. These little vessels accompany the pedlar, and he will commonly sell twenty of them for seven and a half cents, or a bucket full containing three gallons, for fifteen cents.

"This plastic lime is spread on each ceri-leaf with a wooden spatula as we spread butter on bread; and then rolling the leaf up with the 'lime-butter' inside, it is immediately put into the mouth to join the Betel already in the mill. Not satisfied with this, the natives (more especially the women) will take a pinch of cut tobacco and hold it deliciously between the upper front teeth and the lip. But it should be said that Siamese women seldom smoke tobacco, while the males are the most inveterate smokers, even from infancy, before they have been weaned from their mother's breast."

Without quoting from further works on Siam¹ we will travel south to the Malay Peninsula, where betel-chewing is universal.

The Malay Peninsula

All Malays chew betel, and the pagan tribes of the Peninsula have learned the habit to a certain extent from their overlords.

Skeat and Blagden² give several instances of this. Thus the Mantra and Besis smoke tobacco and chew betel, or, as a substitute, cassia leaves, together with gambier and lime, which they obtain by barter from the Malays of the coast. Betel is only sparingly used, however, among most of the Semang tribes. The Perak Sakai are exceedingly fond of tobacco and betel, the leaf of a wild

¹ See F. A. Neale, *Narrative of a Residence at the Capital of the Kingdom of Siam*, 1852, pp. 153-155; J. G. D. Campbell, *Siam in the Twentieth Century*, 1902, pp. 146-147; A. C. Carter, *The Kingdom of Siam*, New York and London, 1904, pp. 166-167; and W. A. Graham, *Siam*, two vols., London, 1924, vol. ii, pp. 27, 28, 32.

² *Pagan Races of the Malay Peninsula*, vol. i, p. 93.

betel, *chambai*, being used when the *Piper betle* is unobtainable. Ridley¹ says that several wild pepper leaves are used as substitutes for the betel leaf. He has seen Selangor Sakai near Kuala Lumpur cut off long strips of bark from *Piper argenteum*, with the object of chewing them. A portion only of the bark was taken in each case, so that the plant might not be killed.²

The Benua-Jakun also chew betel, but not to excess as was formerly customary among the Malays.³

Mr Skeat refers me to his remarks on the use of betel leaf in Malay marriages.⁴ The leaf (*sireh*) is sent to typify the formal proposal of marriage. One of the youth's representatives, going with others to meet the girl's parents, takes a betel-leaf tray furnished with the usual betel-chewing appliances, and invites the parents to partake of betel, saying, before witnesses: "This is a pledge of your daughter's betrothal." The passing of betel leaf between the families signifies the formal acceptance. A regular exchange of presents takes place; formerly, the woman would occasionally carve a chain, consisting of three or four links out of a single areca-nut, in which case the prospective bridegroom was supposed to redeem it by the payment of as many dollars as there were links. The areca-nut presented on these occasions would be wrapped up in a gradation of three beautifully worked cloths, not unlike "d'oyleys" in general appearance. Among the articles of ordinary wedding furniture is a betel tray placed inside the bed-curtain. Presentation "betel-leaf trees" were formerly carried in procession at weddings, also the blossom-spikes of the cocoanut and areca-nut palms in vases, along with the many other things.

The *Pinang* (areca-nut) occurs in many compound words associated with marriage. Thus *pinang kau* is "to betroth one's daughter," *bēpinang* is "the betrothed," *mēminang* is "to ask in marriage," *pinang muda* is "the young areca-nut" of which the two halves are symbols of a perfect match. It also means a procuress or pimp—the innuendo apparently being (so Sir Richard Winstedt tells me) that he does not await the ripening of the areca-nut sent at formal proposals of marriage. So too *sireh*, the leaf occurs in terms used only in connection with marriage. Thus *sireh bērchakap* is the leaf offered by the suitor, if accepted it becomes *sireh mēminang*. *Sireh bērsulur* is a leaf twisted in a

¹ See his important work, *The Flora of the Malay Peninsula*, 5 vols., London, 1922-1925. The sections on *Piper betle* and *Areca catechu* will be found in vol. iii, p. 40, and vol. v, p. 4, respectively.

² Skeat and Blagden, *op. cit.*, vol. i, p. 122, 122n².

³ *Ibid.*, pp. 129, 133.

⁴ *Malay Magic*, pp. 365-367, 374.

particular manner to convey a love message, while *sireh kuning*, is "a dainty morsel," i.e. a pretty girl.

The great importance of betel as a pledge of courtesy, hospitality and good-fellowship entered so much into the social life of the Malays, that definite fines were enumerated in the Malaya code for any such breach of etiquette:

"Shall the courtesy of offering betel be not returned, it is a great offence to be expiated by the offenders going to ask pardon with an offering of boiled rice and a betel stand; if the neglect be committed towards the headman, it is greatly aggravated, and besides the aforesaid offering, the offender shall do obeisance and be fined ten *mas*; if previous to a marriage, or other ceremony, the customary offering of betel be not sent, giving notice thereof to headman and elders, the party shall be fined the offering of boiled rice and a betel stand; shall a headman give a feast to his dependents and omit this etiquette, he shall be entitled not to the name of *pēnghulu*, but of *tuah-tuah* only. At circumcisions and ear-boring, too, he who has not received the customary offering of betel cannot be considered to have had a proper invitation."

Sir Richard Winstedt, who quotes the above in a paper on Malay life and customs,¹ says that the betel quid was the Malay valentine, "and the highest favour that could be bestowed on a subject from a prince's hand, or rather mouth. But the younger generation no longer admires the red saliva and the teeth-blackening effect, and so has discarded betel for 'Cycle' cigarettes and the Burma cheroot: perhaps a more liberal diet and the cultivation of a more sensitive palate has hastened its disuse."

Mr Ridley, in course of correspondence, has given me many curious bits of information about betel in Malay: when about to descend a stream containing dangerous rapids, it is correct to perform a sacrifice to the spirit of the waters. It is safest to offer a white chicken, but, if one is not handy, a chew of betel is a good substitute. Bananas and cigarettes also serve as token offerings. "I once went down the Perak river rapids on a raft of bamboos," says Mr Ridley, in a letter to me, "and it is both exciting and risky. The old Malay who conducted our raft, which went first (we had three rafts), before we started made up a 'chew' consisting of lime, gambier, areca-nut, and betel leaf. He then declaimed a long incantation and hurled the 'chew' into the water as an offering to the demon of the river." Among curious uses to which areca-nut is put may be mentioned that in cases of difficult labour. An old

¹ *Papers on Malay Subjects*, Pt. ii, *The Circumstances of Malay Life*, Kuala Lumpur, 1909, pp. 60-61.

woman fills her mouth with small pieces of broken nut and spits it up the vagina of the expectant mother. The idea seems to be one of suggestion—just as the betel-chew produces an increased flow of saliva, so will the desired result be brought about.

Some further curious customs are given in an article, "Notes on Malay Magic," by Sir Richard Winstedt.¹ If a child is taken out in the late afternoon, the lobes of its ears and the crown of its head are smeared with betel-juice, whose redness spirits fear. And at the same hour a Perak woman will walk round a house where young children are and spit out yellow turmeric at seven places. At a Malay burial betel is often put inside the grave for the use of the deceased in the next world. For the uses of betel in Malayan folklore see Overbeck, *Journ. Malayan Branch Roy. As. Soc.*, vol. ii, Pt. iii, December 1924, pp. 283, 284, and vol. iii, Pt. iii, December 1925, pp. 22, 23, 25, 26 and 28. See also *Awang Sulong Merah Muda*, edited by A. J. Sturroch and R. O. Winstedt, Malay Literature Series, 2nd edition, Singapore, 1914, pp. 9 and 34-35, 13 and 57, and 88-89; and R. O. Winstedt, "An Old Perak Account of Betrothal Ceremonies," *Journ. Malayan Branch Roy. As. Soc.*, vol. vii, Pt. iii, pp. 448-450. For verses accompanying the offering of betel at betrothal and other ceremonies in Kuala Pilah (Negri Sembilan) see *Johol*, Papers on Malay Subjects, 2nd Ser., J. E. Nathan and R. O. Winstedt, Calcutta, 1920, pp. 89, 90; and the latter's *Shaman Saiva and Sufi*, 1925, pp. 112, 132-133 and 143.

*The East Indian Archipelago*²

The whole of this wide area can be described as a betel-chewing region. Even if space permitted, it would be superfluous to quote most of the accounts of the custom, as they nearly all are mere repetitions of previous observers. Nearly every traveller and missionary, since the days of Raffles and Marsden, have had something to say on the subject.

I shall therefore avoid, as far as possible, quoting accounts which give us no new information.

Sumatra

One of the earliest accounts, though brief, is that of Jean and

¹ *Malayan Branch Roy. As. Soc. Jour.*, vol. iii, Pt. iii, December 1925, p. 11.

² I use this term in preference to "Malay Archipelago," as I mean it to exclude the Malay Peninsula, and to include Sumatra, Java, Timor, Borneo, Celebes, the Philippines, and the Moluccas. I treat both Micronesia and Melanesia under separate headings.

Raoul Parmentier¹ who visited Sumatra in 1529. On arriving at Ticou (Tico or Tiku) on the west of the island (Lat. 0° 25' N.) they describe the presents received from the king as follows:

"Et quand nous fusmes arrivez et jetté l'ancre hors, arriva un autre esquif de terre qui fit present de par le Roy au capitaine de deux chevreaux, un quarteron de coques, et un boisseau de ris, avec feuilles de botre [betre] et chaux esteinte [slaked lime], et d'une racine fort mince en une escuelle de cuivre en façon de tasse, le bord espais et le demeurant tendre, bien legere. La botre est une feuille dont ils tiennent grand compte et en mangent fort souvent devant ou après leur repas, avec un peu de chaux esteinte, et en la mangeant, elle donne bonne odeur, et rend un jus rouge dont ils ont les dents rouges, et cela leur garde leurs dents."

The most interesting and reliable account, however, is undoubtedly that given by Thomas Bowrey (1669-1679). In describing Achin he says²:

"The Betelee Areca is here in great plenty and much better then in many Other countries of the East and South Seas. Very few houses here but have Severall trees of it growinge that beare all the yeare longe, and the inhabitants in Generall doe Eat thereof, prepared thus: They cutt the Areca nut into very thin Slices, and put about one halfe of a nut into their mouth, and then one betelee leafe or two (accordinge as they are in bignesse), and Spread a little qualified lime thereon, which by them is called Chenam, which folded up together they eat with the Nut, which after a little Chew-ing doth produce very much Liquorish moisture in the mouth, which for the most part they Swallow downe, and after a good while chawinge untill it is dry, they spit it out and take more that is fresh, and thus will they almost all day longe chew betelee Areca. They hold it good for the Stomach, and keepinge the breath Sweet, the latter of which I am very well Satisfied in, but if the Nut be green, which here is very much in Use, they onely cutt the nutt in 2 pieces and paringe off a little of the green rine, eat it with betelee as the Other, which doth eat much more pleasant then the Old Ones doe.

"The Leafe is the betelee, a broad leafe not very much Unlike

¹ *Le Discours de la Navigation de Jean et Raoul Parmentier de Dieppe. Voyage à Sumatra en 1529*, edited by Ch. Schefer, Paris, 1883, p. 61. It forms the 4th publication of the "Recueil de Voyages et de Documents pour servir à l'histoire de la Géographie depuis le XIII jusqu'à la fin du XVI siècle," edited by Ch. Schefer and H. Cordier.

² *Countries Round the Bay of Bengal*, edited by Sir R. C. Temple, Hakluyt Society, 1905, pp. 304-306.

to an Ivie leafe, only Somethinge thinner, and groweth resemblinge the Vine, as followeth [see Plate XVII, facing p. 308].

"Areca, vizt. commonly called betelee Nut, doth grow Upon a very comely Streight and Slender tree, taperinge in joynts, and the nutt groweth out of the body thereof below the branches as followeth [see Plate XVII, as above]. It is a very hard wood, and much Used by many in India to make lances and pikes On."

In describing the reception by the Queen, Bowrey speaks¹ of her "Great Gold betelee box as bigge as one of [the] eunuchs can well beare in his arms, brought downe and placed before them, and they must eat thereof, although never Soe little, which is accompted as great an honour here, as knighthood in the Courts of European Kings there."

It is interesting to compare the above descriptions with those given by William Dampier when discussing the products of Mindanao in the Philippines, and Tonquin. (See later, p. 272 *et seq.*)

Turning to modern accounts C. Snouck Hurgronje² states that the use of the betel leaf (*ranub*) with its accessories (*pineung*, *gapu*, *gambé*—areca-nut, lime and gambier—*bakōng* and sundry odoriferous herbs) is absolutely universal. It figures both in betrothal and marriage ceremonies, while the areca-nut as one of the means of pronouncing a divorce (*taleuë*, from the Arab *talāq*) is for the husband to take three fragments of ripe areca-nut and hand them over one by one with a kind of dignified anger to the wife with the words "one *taleuë*", two *taleuë*", three *taleuë*", thou art to me but as a sister in this world and the next." Thereupon they give notice of the dissolution of the marriage to the *teungku* [title given to those who hold an office connected with religion].

The idea of divorce is thus intimately connected in the minds of women with these three pieces of areca-nut. When particularly angry with her husband, a woman will ask him to give her "the three bits of areca-nut."³ It sometimes happens that a person who has just paid a visit to a grave is seized with a colic, or sits down and behaves as though doting. He is then said to be *seumapa*, meaning that a dead person has addressed him or greeted him. In such cases the sufferer is bespewed with charmed *sirih* spittle, a universally recognised remedy for many ailments in Achéh. Should

¹ *Op. cit.*, pp. 309-310.

² *The Achéhneses*, translated by A. W. S. O'Sullivan, Leyden and London, 1906, p. 32. The earlier account of William Marsden, *History of Sumatra*, 3rd edition, 1811, pp. 281, 282, may be consulted with advantage.

³ Hurgronje, *op. cit.*, p. 369.

this red spittle turn yellowish in hue on his body, the conjecture that he is *seumapa* becomes a certainty.¹

Areca-nut is used in one way or another for the cure of nearly every illness. In the case of cholera the nut is pounded and the extract drunk in rice-water.

More recent information on betel-chewing in Sumatra is to be found in O. J. A. Collet's *Terres et Peuples de Sumatra*, Amsterdam, 1925. The first general description appears on p. 233 as follows:

"En revanche, la chique de *sirih* joue un rôle fondamental. Ce masticatoire se compose d'un fragment de noix d'arec, d'un morceau de *gambier*, d'un soupçon de chaux vive blanche et d'une pincée de tabac enveloppés dans une feuille fraîche de *sirih* (*piper bettel*), pliée selon des règles immuables. Le bétel, dont le principe actif est une sorte de pipérine, agit sur le système nerveux comme un narcotique léger. La salive trop abondante pour ne pas nuire à l'organisme, communique une couleur pourpre tout à fait répulsive, aux lèvres et à la cavité buccale."

In another passage on p. 236, in view of what has previously been said about the five fruits, it is interesting to note that the ingredients of a "chew" are, in Sumatra, called the "five brothers," referring to the betel leaf, the areca-nut, lime, gambier and tobacco.

Mr Blagden tells me that the above are the five recognised ingredients throughout the whole of Malaya. The inclusion of tobacco points, of course, to the recent date of at least one of the five ingredients, but I have no reason to doubt that the number still reflects the influence of Hinduism and Buddhism in the Eastern Archipelago:

"Comme dans toute la Malaisie, la présentation du *sirih*—les 'cinq frères' d'après le nombre des ingrédients de la chique de bétel—vient au premier rang des rites de l'hospitalité entre indigènes. Au point de vue de cérémonial, le rôle de ce masticatoire implique l'agrément ou le refus: il reste le commencement, la source sociale, l'amorce rituelle de toute conversation—*Kapala Adat*, *Kapala Bahasa*—en même temps que l'offre de la cigarette tronçonnée roulée dans une feuille de maïs. Jamais non plus on n'oublie de présenter une natte au visiteur pour qu'il s'y accroupisse."

He gives (p. 311) a full description of betel-boxes and the different implements they contain. He also mentions the use of betel at both marriage and death ceremonies (see pp. 330, 367).

¹ *Op cit.*, p. 413.

Java

An early description of chewing is that given by François Leguat¹ in 1697: "Every one knows what the *Betel* Leaves, and Arequa Nuts are, which all the natives of this Island, both Men, Women, and Children chew incessantly . . .," and he proceeds to give the usual account of the process.

Tavernier² (1643-1649) gives an amusing description of the King of Bantam chewing betel:

"On his right side there was an old black woman, who held in her hands a small mortar and a pestle of gold, in which she crushed the betel leaves, with which she mixed areca-nuts and dissolved seed pearls. When she saw that the whole was well pounded, she placed her hand on the King's back, who at once opened his mouth, and she put the betel in with her fingers as women do when they give pap to their infants, because the king had no teeth, for he had eaten so much betel, and smoked so much tobacco, that his teeth had fallen out."

Modern accounts³ tell us little fresh. Campbell (vol. ii, p. 1001) says that if the labourer cannot afford a *siri*-box, a small supply of betel and nuts will usually be found in the corner of his handkerchief. Every petty chief and his wife have their *siri*-box, that of the man being termed *epok* and that of the woman *chepuri*. As in the case of the Sultan of Jogjakerta, these *siri*-boxes are sometimes of solid gold and bejewelled with rare workmanship; they are then considered as family heirlooms. Cardamoms and cloves make up part of the articles in the *siri*-box of a person of condition and quality.

Borneo

The methods of chewing in both Borneo and Celebes present no innovations. Nearly all travel-books to the East Indies of the nineteenth century contain the usual short account.

Speaking of the Dyaks (or Dayaks) of Sarawak, Hose says they are constantly chewing and have both lips and teeth discoloured with the practice.⁴

¹ See Pasfield Oliver's edition for the Hakluyt Society, vol. ii, 1891, pp. 229-230.

² See Hall's edition, vol. ii, 1889, p. 354; or the 1925 reprint, edited by W. Crooke, vol. ii, pp. 275-276.

³ See, for example, E. R. Scidmore, *Java the Garden of the East*, New York, 1898, p. 42; D. M. Campbell, *Java: Past and Present*, 2 vols., 1915.

⁴ C. Hose and W. McDougall, *Pagan Tribes of Borneo*, vol. i, 1912, pp. 32, 60. See also C. Hose, *Natural Man*, London, 1926, p. 94.

Spencer St John gives us details of the use of the nut and betel leaf in Dyak betrothals and marriages.¹

Besides the ordinary attention which a young man is able to pay to the girl he desires to make his wife, there is a peculiar testimony of regard which is worthy of note. About nine or ten at night, when the family is supposed to be asleep within the mosquito curtains in the private apartment, the lover quietly slips back the bolt by which the door is fastened on the inside and enters the room on tiptoe. He goes to the curtains of his beloved, gently awakes her, and she, on hearing who it is, rises at once, and they sit conversing together and making arrangements for the future in the dark over a plentiful supply of *sirih* leaf and areca-nut, which it is the gentleman's duty to provide. If, when awakened, the young lady arises and accepts the prepared areca-nut, happy is the lover, for his suit is in a fair way to prosper, but if, on the other hand, she rises and says: "Be good enough to blow up the fire," or "to light the lamp," then his hopes are at an end, as that is the usual form of dismissal. Of course, if this kind of nocturnal visit is frequently repeated the parents do not fail to discover it, although it is a point of honour among them to take no notice of the visit, and, if they approve of him, matters take their course; but if not, they use their influence with their daughter to ensure the utterance of the fatal: "Please blow up the fire."

When the courtship is satisfactorily concluded, and it is decided that the girl shall be definitely asked in marriage, then, with the parents' consent, a day is fixed upon which they shall meet together to discuss the *harta*, or price that is to be paid by the young man for his bride.

As a preliminary to this, a present of nine areca-nuts, nine *sirih*-fruits and some gold or silver ornaments has to be sent to the girl. In the olden times of the head-hunters a fresh human head was an indispensable preliminary to any marriage negotiations; but this abominable practice was effectually stamped out by the Dutch Government many years ago. It is probable that this ghastly present was intended not only as a proof of personal bravery on the part of the young hero, but as a promise that in the world of spirits the young bride would have at least one slave to wait upon her.² The *harta* was in former times usually paid in land, houses, sago-weer-trees, pigs, cloths, etc. Nowadays it is often paid in money,

¹ *Life in the Forests of the Far East*, 2nd edition, 2 vols., London, 1863, quoted by S. J. Hickson, *A Naturalist in North Celebes*, p. 274 et seq.

² G. A. Wilken, "Jets over Schedelvereering bij de volken van den Indischen Archipel," *Bijdragen tot de Taal-Land-en Volkenkunde van Nederlandsch-Indië*, vol. iv, 1889, pp. 89-121.

one thousand guilders (£84) being about the highest *harta* known.¹

At the appointed time the members of the young man's family repair to the house of the bride, bringing with them the *harta*, and after that comes the bridegroom himself. They mount the steps of the house and take their places at a long table in the principal room, the bride and bridegroom sitting side by side at one end of it. At first everything is very stiff and formal. Food is served, but not a word is spoken by the young couple; not a muscle of their faces moves; not even a stray glance passes from one to the other.

Then comes the priest, who takes a piece of areca-nut and solemnly chews it for some time with the *sirih* and lime; this he removes from his own mouth and puts it into the bridegroom's mouth, who continues the process for some time and passes it on to the bride.

When this is done the *walian* (or *balian*—i.e. "he who turns the spirit"—a priest) gives the bride and bridegroom rice and pork to eat and sagoweer wine to drink, and the official part of the ceremony is concluded. At this moment the couple retire to the nuptial chamber, while the guests amuse themselves by feasting, drinking and singing, and the priest implores the *empungs* (ancestral heroes, gods or spirits) to pour blessings on the happy pair.

In Dayak Kampongs one notices numerous upright pillars, usually carved into human form. They are known by the name of *kapatongs*, and are erected as guardians of the dead. One of the first duties of surviving relatives is to make the *kapatong*, the soul of which waits on and guards the soul of the departed one.

A woman carrying a betel-box is believed to watch well, because when chewing betel one does not sleep; but in her case there must always be a male *kapatong* near by, for a woman alone is not sufficient protection. Betel makes the mouth and lips beautiful in the estimation of the natives, therefore many *kapatongs* are seen with betel-box in hand.²

Among the Dusun peoples of British North Borneo the ingredients of a "chew" are given by Ivor Evans³ as consisting of "a *sirih* leaf, a piece of nut from the betel palm, a piece of gambier,

¹ N. Graafland, *De Minahasa*, Rotterdam, 1867-1869. There was an enlarged edition published at Haarlem in 1898.

² See Carl Lumboltz, *Through Central Borneo*, New York, 1920, vol. i, p. 116, and vol. ii, p. 352. For further short notices see H. Ling Roth, *Natives of Sarawak and British North Borneo*, 1896, pp. 100, 394, 395; H. Low, *Sarawak: its Inhabitants and Productions*, 1848, pp. 41, 42; A. C. Haddon, *Head-Hunters: Black, White and Brown*, 1901, p. 217.

³ *Among Primitive Peoples in Borneo*, London, 1922, pp. 115, 116. For *sirih*-boxes see pp. 89 and 234.

which is bought from the Chinese in small cubes, a little native-grown tobacco, and a smear of lime obtained by burning sea- or fresh-water shells or coral. The coarsest veins are stripped out of the *sireh* leaf, and a smear or two of lime put on its upper surface. Sufficient quantities of betel, gambier and tobacco are then put into the half-folded leaf, and the whole made into a bundle and pushed into the mouth. Occasionally, when too little lime has been added to the chew, a native will produce his lime-box and taking out some of the lime-paste on his little finger smear it on a back tooth.

"Chewing causes a copious flow of saliva and colours it red, so that a new-comer to the country, following a path much used by natives, might think that a wounded man had preceded him along it. The habit is certainly not particularly pleasing, and the appearance of a quite pretty young woman is often spoiled by her having a ragged-looking wad of half chewed *sireh* and tobacco protruding from one corner of her mouth. Old people, who have lost their teeth, find it impossible to manage a quid made up in the manner described above; but for all this they are not to be deprived of one of their chief pleasures, so they put the ingredients of the chew into a tabular mortar or iron, brass, or bamboo, and pound it up with a pestle with a sharpened end.

"A *sireh* quid has an aromatic, pungent and astringent taste, and, speaking from my own experience, is distinctly stimulating. When a guest visits a Dusun house the host immediately produces *sireh* and tobacco, the former being contained either in a tray or in one of those beautiful old brass caskets so treasured by the Dusuns. These are always much worn at the bottom from being perpetually pushed along the floor of the house from guest to guest. The caskets contain small boxes for the lime, tobacco and gambier, with a pair of special scissors for cutting up the betel-nut. Not to offer a guest *sireh* would be a breach of the laws of Dusun hospitality."

Celebes

Throughout Celebes the custom plays a very important part in the social life of the inhabitants. Many accounts could be quoted, but it will suffice to quote from that given by Hickson,¹ who deals almost exclusively with Minahassa, the most northerly province of the island:

¹ S. J. Hickson, *A Naturalist in North Celebes*, London, 1889, pp. 273-274 and 303-304. See also pp. 332-333; and the useful bibliography of one hundred and four items on pp. 369-375.

"The areca-nut¹ plays an important part in courtship in Minahassa, as it does all over the Archipelago.

"When the young Minahassa falls in love with a young woman he sends her a prepared areca-nut. If she accepts it, it is taken as a sign of encouragement, and the young man sends an emissary asking her to send him one. If she refuses to do this, or sends him one which is not prepared for chewing, then it is a sign that he is rejected; but if she wishes to become his wife she sends him a well-grown nut, with the necessary ingredients, and the lover knows that he is accepted.

"Thus the word 'to court' is in Tombulu language *pahaleija-leijan lemaan* and in Tompakewasch *pangilengilekkan tenga*, which means 'to continually ask for areca-nut of one another.'

"We constantly find the areca-nut mentioned in the love songs and romances:

"*Ajohan-o-mej tetengaan sambe eh rumojoro*
Aku rumojor-o mange-mo witi walenamij."

"Give me the areca-nut box, my friend, and I will go.
I will go below, and I will go to our house."

"The concluding portion of one of their old love songs tells us of the reconciliation of the two lovers:

"*She*: If you return to your former feelings, then shall I have better thought of you.

"*He*: Love shines through your words, and on that account my thoughts return to you.

"*She*: If your words are true, dearest, I need have no more heartache for you.

"*He*: Weeping, cut the areca-nut in two. Weep no more, for I will truly take you to me.

"*She*: A young areca-nut I will cut in two for you, my young love. The young areca-nut will I cut in two, for I love you.

"*He*: Place one half of the young areca in my mouth, and my feelings will be ever with you."

In his work on Central Celebes, Grubauer² gives an interesting

¹ I have altered the word "betel" to "areca" whenever it is incorrectly used.

² A. Grubauer, *Unter Kopffägern in Central-Celebes*, . . . Leipzig, 1913, pp. 482, 483, also 255. See also Ethnological Studies in Celebes, VI, *Art in Central Celebes*, W. Kaudern, Göteborg, 1944, p. 98 (pestle used by the toothless), pp. 147-151 (gourd lime-boxes), pp. 252, 253 (betel-bags).

description of the betel-bags, and reproduces eighteen specimens on p. 482. They exhibit a great variety of beautiful designs. For the most part they are oblong, and usually have two tassels at the base corners. The particularly well-worked specimens date back many years, and it would seem, as we saw was the case in Ceylon, that few bags with such elaborate work are being made to-day. The colours used in the dyeing are derived from orchids and various minerals found locally.

Grubauer also gives a plate (on p. 489) showing areca-nut cutters. They display excellent workmanship, and fit neatly into a small case which allows the handles to remain uncovered. The women's cutters differ slightly in design from those used by the men.

Philippine Islands

Turning to the Philippine Islands, one of the earliest mentions of areca-nuts is to be found in the *Chu-fan-chi*, already quoted on p. 211. The author describes the chief products of the country as yellow wax, cotton, pearls, tortoise-shell, medicinal areca-nuts and *yü-ta* cloth.

One of the first detailed accounts of chewing is that given by De Morga at the end of the sixteenth century. He describes the betel leaf and the areca-nut as if they both came from the same tree. As the main part of the account tells us nothing new I shall merely give extracts.

"The ordinary dainty in all these islands," he says, according to Stanley's translation,¹ "and in many kingdoms of the mainland, of these parts is the *buyo*. This is made from a tree which has a leaf of the pattern of the mulberry leaf, and the fruit is like an acorn of an oak, and the inside is white; this fruit, which is called *bonga*, is cut lengthwise in parts, and each one of these is put into a wrapper or envelope, which is made of the leaf, and a powder of quicklime [lime] is put inside with the *bonga*, and this composition is put into the mouth and chewed . . . all their treats and luxury consist in dishes and salvers for *buyos* much gilt, and well arranged, as chocolate is served in New Spain; in these *buyos* poison has been given to many persons, of which they have died poisoned, and this is a very common occurrence.

"The natives, when they go out of their houses, especially the great men, carry with them for state and show their small boxes

¹ Issued by the Hakluyt Society, 1868, p. 280 *et seq.*

which are called *buccetas* of *buyos* ready made up, and the leaf and nut and quicklime [lime] separately; with these curious boxes of metal and other materials, and scissors and other tools for making *buyos* with care and neatness, wherever they stop they make and use them, and in the *Parians*, which are the markets, they are sold, ready prepared, and the materials for making them."

About a hundred years later we find a good account given by William Dampier¹ during his voyage round the world. He is discussing the products of Mindanao, and says:

"The Betel-Nut is much esteemed here, as it is in most places of the *East-Indies*. The Betel-Tree grows like the Cabbage-Tree, but it is not so big, nor so high. The Body grows strait, about 12 or 14 foot high without Leaf or Branch, except at the Head. There it spreads forth long Branches, like other Trees of the like nature, as the Cabbage-Tree, the Coco-Nut Tree, and the Palm. These Branches are about 10 or 12 foot long, and their stems near the head of the Tree as big as a Man's Arm. On the top of the Tree among the Branches the Betel-Nut grows on a tough stem as big as a Man's Finger, in clusters much as the Coco-Nuts do, and they grow 40 or 50 in a cluster. This Fruit is bigger than a Nutmeg, and is much like it, but rounder. It is much used all over the *East-Indies*. Their way is to cut it in four pieces, and wrap one of them up in an Arek-leaf, which they spread with a soft Paste made of Lime or Plaster, and then chew it altogether. Every Man in these parts carries his Lime-box by his side, and dipping his Finger into it,² spreads his Betel and Arek-leaf with it. The Arek is a small Tree or Shrub, of a green Bark, and the Leaf is long and broader than a Willow. They are packt up to sell into Parts that have them not, to chew with the Betel. The Betel-Nut is most esteem'd when it is young, and before it grows hard, and then they cut it only in two pieces with the green Husk or Shell on it. It is then exceedingly juicy, and therefore makes them spit much. It tastes rough in the Mouth, and dyes the Lips red, and makes the Teeth black, but it preserves them, and cleanseth the Gums. It is also accounted very wholsom for the Stomach; but sometimes it will cause great Giddiness in the Head of those that are not us'd to

¹ *A New Voyage Round the World*, London, 1697, pp. 318-319. See also the edition of the Argonaut Press. It contains a really excellent Introduction by Sir Albert Gray, late President of the Hakluyt Society. The betel reference will be found on p. 219.

² For a modern photograph of this action see Plate V, facing p. 22 of R. F. Barton's *Philippine Pagans*, London, 1938, and see the note on p. 79 for the etiquette of betel-chewing.

chew it. But this is the Effect only of the old Nut, for the young Nut will not do it. I speak of my own experience."

Readers will at once see that Dampier has confused the areca-nut with the betel leaf. However, he soon discovered his mistake, and when writing on Tonquin, in his next work, *Voyages and Discoveries* (p. 52), made the necessary corrections. After repeating the manner of preparing a "chew" he speaks of the betel-boxes:

"The poorer Sort carry a small Pouchful about with them: But the *Mandarins*, or great Men, have curious oval Boxes, made purposely for this use, that will hold fifty or sixty Betle Pellets. These Boxes are neatly lackered and gilded, both Inside and Outside, with a Cover to take off; and if any Stranger visits them, especially *Europeans*, they are sure, among other good Entertainment, to be treated with a Box of Betle. The Attendant that brings it, holds it to the left Hand of the Stranger; who therewith taking off the Cover, takes with his right Hand the Nuts out of the Box. 'Twere an Affront to take them or give or receive any thing with the left Hand, which is confined all over *India* to the viler Uses.¹

"It is accounted good Breeding to commend the Taste or Neatness of this Present; and they all love to be flatter'd. You thereby extreamly please the Master of the House, and ingage him to be your Friend: and afterwards you may be sure he will not fail to send his Servant with a Present of Betle once in two or three Mornings, with a Complement to know how you do. This will cost you a small gratuity to the Servant, who joyfully acquaints his Master how gratefully you received the Present: and this still engages him more; and he will complement you with great Respect whenever he meets you."

Further descriptions are unnecessary. I shall therefore refer readers to that enormous work on the history of the Philippines, 1493-1898, in fifty-five volumes, by Blair and Robertson.² The index occupies the last two volumes. Full references to betel-chewing will be found in vol. liv, p. 144, under the word "Buyo."

Southern China

Betel-chewing has been known in Southern China from a very early date, and in all probability owes its existence to the introduction of Buddhism.

¹ For the unclean left hand among the Moslems see Burton, *Nights*, vol. i, p. 264, 264n³, and vol. iv, p. 129n¹. and especially Moule & Pelliot, *Marco Polo*, vol. i, p. 389.

² Published at Cleveland, Ohio, 1903-1909.

One of the early references is to be found in *Nan shih*, the biography of Liu Mu-chih (ob. 417), which was compiled in the seventh century.

In c. 15, fol. 2 v^o we read¹:

"Mu-chih used to go to his wife's brothers' house to sponge on them for meals. His wife was ashamed of this, but could not stop it. Mu-chih still went, and after the meal asked for areca-nut (*pin-lang*). Mu-chih [wife]'s brothers laughed at him and said: 'Areca-nut makes food vanish [*i.e.* accelerates digestion], that is why you are always hungry.'"

In *T'ang shu*, the history of T'ang, A.D. 600-900, is a description of the country of P'an-p'an in the Southern Sea, where "at all weddings they make presents of areca-nut."

We get further information from *Ling-wai-tai-ta*, in which the author's preface is dated 16th November, 1178. In a paragraph on *pin-lang* (c. 8, fol. 3) he says: "The fruit grows on the leaves, fastened to them in clusters, as on willow twigs. When gathered in the spring it is called *juan-pin-lang* (or soft areca-nuts), and is commonly known as *pin-lang-sien* (or fresh areca-nuts); it is then good to chew. When gathered in the summer or the autumn and dried it is called *mi-pin-lang* (or rice areca-nuts). Preserved in salt it is called *yen-pin-lang* (or salted areca-nuts). Small and pointed nuts are called *ki-sin-pin-lang* (or chicken heart areca-nuts), large and flat ones *ta-fu-tz'i* (or big bellies)."²

The above passage was repeated verbatim by Chau Ju-Kua in his *Chu-fan-chi*,³ who describes the *pin-lang* as coming "from several foreign countries,⁴ also from the four districts of Hai-nan; it is likewise found in Kiau-chi. The tree resembles the coir palm. . . . When chewed, these nuts have the effect of preventing eructation. In San-fo-ts'i they make wine out of the juice." He also borrows from *Ling-wai-tai-ta* in saying that the Customs at Canton and Ts'üan-ch'ou derive an annual income of several tens of thousands of strings of *cash* from the trade carried on in this product by foreign ships. The "fresh nuts" and "salted nuts"

¹ I am indebted to the Rev. A. C. Moule for this translation, and also for the two following references. Pelliot says (*T'oung Pao*, vol. xxviii, p. 443) that the text appears in the *Sung shu* (*Song Chou*) which was written about A.D. 500, a century before the *Nan shih*.

² For texts concerning the use of areca in China Pelliot refers us to Ch. 971 of *T'ai-p'ing yu-lan*. It contains, among other things, an earlier reference to the *ta-fu-tz'i* (or big bellies). See also the excellent article by Camille Imbault-Huart, in *T'oung Pao*, vol. v, 1894, pp. 311-328.

³ Translated and annotated by Hirth and Rockhill, pp. 213-214.

⁴ In a report on the trade of Canton in 1834 (p. 451) it is stated that most of the "betel" imported into China came from Java, Malacca and Penang.

come from there, whereas the *ki-sin* and the *ta-fu-tai* varieties come mostly from Ma-i [the Philippine Islands].

In a chapter on Hainan Chau Ju-Kua describes the island as having mountains covered with areca- and cocoanut-palms, and that the areca-nuts are "extraordinarily plentiful."

The great Chinese encyclopædia, *T'u Shu Chi Ch'êng*, has several references to areca-nuts and betel-chewing. In quoting the passages it must be remembered that the encyclopædia consists of long extracts or précis from Chinese works *en masse*, and not of comprehensive articles, such as are found in similar Western works.

Thus the *Nan-fang ts'ao-mou tchouang* of Hi Han (*cf.* Laufer, *Sino-Iranica*, Chicago, 1919, p. 263) states that "Betel-nut is grown in Lin-i [Champa, or Annam], and the natives prize it highly. When entertaining relations by marriage, this is the first thing they offer them, and if it is not produced when they happen to meet, bad blood will ensue." The above statement is repeated in *Ch'i min yao shu* and other works. *Pên ts'ao kang mu* describes the climate of the southern regions as very damp, "and unless areca-nut be eaten, there is no way of warding off malaria. . . . The inhabitants of Ling-nan [Kuangtung and Tongking] use areca-nut in place of tea as a prophylactic against malaria. Its virtues are fourfold: (1) it can make sober men drunk; (2) it can make drunk men sober; (3) it can still the pangs of hunger; (4) it can give an appetite for food."

The above translations have been kindly made for me by Dr Lionel Giles, and are from xx, 285, of the *T'u Shu Chi Ch'êng*. (See his *Index to the Chinese Encyclopædia*.)

With regard to the use of the areca-nut in Chinese funerals, De Groot explains¹ how a kinsman or friend of the family clears the way through the streets at the head of the procession. When anything obstructs the passage, such as a stall of goods for sale, or a load set down by a coolie for rest, he requests the owner to remove it, at the same time offering him, by the hands of a coolie who follows at his heels, a piece of an areca-nut and a little wet lime-dough, wrapped in one or two *siri* leaves. This coolie, who wears no mourning, carries a basket of these articles for distribution. In Southern China the chewing of betel and *siri* as a stimulant seems to have been very common in bygone centuries, but it has now almost entirely died out, being supplanted, it would appear, by tobacco- and opium-smoking. Nevertheless, probably as a survival of those good old times, it is still customary for any man living at

¹ *Religious System of China*, vol. i, 1892, pp. 153-154 and 205.

variance with another, in case he desires to apologise and accommodate matters, to send some of these articles to the latter's house, like a flag of truce; and it would be considered highly improper on the part of the party to whom the hand of reconciliation is tendered in this way to refuse to accept the same. This fully explains why betel and *siri* are also distributed at funerals. Indeed, the clearer of the road confesses himself in the wrong with regard to the person whom he disarranges, and accordingly he immediately makes his apologies. In many instances, clearing the road is simply entrusted to the coolie alone; at most of the plainer funerals it is entirely omitted. At burials of the highest order it is customary to station men along the road to distribute *siri* leaves and areca-nuts amongst the notable persons walking in the procession.

Though most of them do not partake of these drugs, it would be inconsistent with good manners to refuse to accept them. So most men just hold them between their fingers, or give them away to the coolies or anybody who likes them.

In the *Chinese Materia Medica*, pp. 46-47, G. A. Stuart refers to the usually accepted theory that the Chinese name for areca-nut, *pin-lang*, is a transcription of the Malay *pinang*, but states that one authority, Li Shih Chen, says it means "an honoured guest," and that the characters in question are used because of the practice of setting the betel-box before guests.¹

The betel-vine is said to grow in South China as far north as Szechuan. The leaves are used in Yunnan as a condiment.

Areca-nuts form one of the chief exports from Hainan, where there are large groves of the areca-palm, especially at Aichow and Lingshui. The trees are planted some fifteen feet apart, and bear fruit from the age of ten to ninety years. Their most prolific period is between their fifteenth and thirtieth year, when one tree will produce seven or eight hundred nuts, valued at about forty cents. Large herds of cattle are allowed to roam at will through the plantations, and their manure serves to fertilise the soil. The groves are said to be the seat of malaria, especially at the season when the trees are in flower. Hainan nuts are superior to those from Singapore, which are imported for the purposes of adulteration.

In recent years it appears that the areca-palm is cultivated in Hainan only on a very small scale compared with the extensive cultivation in Indo-China. The Chinese soil and climate are not

¹ There is a variant in the *Yao lou* of Li-Tang-che, of about the middle of the tenth century, where the areca-nut is called "the door of the guest." See further, *Young Pao*, vol. xxviii, p. 444.

so suitable for its growth, owing to the excessive presence of moisture.

The ingredients for chewing are, or were, sold in the streets of the more important towns of Southern China. In Plate XXXII of his *Picturesque Representations of the Dress and Manners of the Chinese* [1814], William Alexander depicts a man seated on a bamboo stool in the act of slicing areca-nuts, which are shown piled up in a box. The stand on which the box is placed displays a fine selection of fresh green betel leaves arranged on a large sloping tray. In front is a small container piled up with powdered *chunām*. The areca-box, or rather, bag, is shown in Plate XXVI.

Apart from the use of areca-nuts in Southern China for chewing, and their connection with various ceremonies, such as weddings, etc., to which we have already referred, they are also eaten in different ways. They are generally cooked with chicken essence and served at the end of a meal as dessert, or else they are sliced thinly and rolled up in green herbage, accompanied by slices of fresh cocoanut.

In the years 1922-1924 the average tonnage of imported areca-nuts was 3175, while the export for the same years was 1219. For the latest years published the imports were: 1938, 824 tons; 1939, 1808 tons; 1940, 3122 tons. The exports for the same years were 16,145 and 316 tons respectively.

Micronesia

Micronesia embraces the Pelew (Palew or Palau), Caroline, Marianas and Gilbert groups of islands.¹ Betel-chewing exists in the first three groups, but appears to be unknown in the Gilbert Islands, where *kava*-drinking is the chief narcotic. "There is certainly no betel-chewing in the Gilbert or Ellice Islands," says Mr Woodford (of the Solomon Islands) in a letter to me: "both groups are merely coral atolls and the areca-palm would not grow there."

The Pelew Islands

Accounts of the custom in the Pelew Islands seem very few and far between. I notice, however, several references in Keate's work, derived from the journals of Captain Henry Wilson²:

¹ The Marshalls, the Carolines, including Yap and Pelew, and the Marianas, with the exception of Guam, form the Pacific Mandated Islands, taken from Germany and mandated to Japan under Article 119 of the Treaty of Versailles. By the vote of the United Nations Security Council on 2nd April, 1947, the U.S. were given full administrative powers.

² *Account of the Pelew Islands*, 2nd edition, London, 1788, pp. 299, 311. Similar

"The Beetle-nut they had in abundance, and made great use of it, though only when green; contrary to the practice of the people of India who never use it but when dry."

The plate facing p. 332 shows a betel-basket, without which "no man stirred abroad—the common order of people had a short piece of bamboo, in which they carried the powdered *chinam*, to strew over the beetle-nut before they put it in their mouths. The *Rupacks*, or great people, had their *chinam* in a long slender bamboo nicely polished, and inlaid with pieces of shells at each end; and these were often not inelegantly fancied."

As in so many other betel-chewing areas, the Pelew islanders place betel on the grave of the deceased, often by the side of cocoa-nuts, both of which will be wanted in the future life.

The Carolines

As we proceed eastwards from the Pelew Islands we are gradually approaching the *kava*-drinking area. It is even more difficult to determine exactly where these two customs meet in Micronesia than it is in Melanesia.

A comparative study of the overlapping of the two cultures, for so we must designate them, as shown in these two great Oceanic groups of islands, presents a most interesting problem, which would repay a much closer study by anthropologists than it has as yet received. As we shall shortly see, Dr Rivers has studied the problem as far as Melanesia is concerned, but Micronesia offers even greater opportunities for research. The whole history of all the Oceanic peoples is involved.

In Micronesia the dividing line between betel-chewing and *kava*-drinking clearly falls in the Caroline Islands. From the evidence I have studied at the Royal Geographical Society I would put it mid-way between Yap in the west and Ponape in the east. It seems impossible to make any more definite statement than this.

The problem, however, is not one to be easily solved, for the Carolines afford paradoxical evidence. Thus in Yap the words used for betel show their Polynesian origin, yet *kava*-drinking here is unknown. In Ponape and Kusaie two varieties of areca-palm (*katai* and *kotop*) grow in abundance in the highlands, yet betel-chewing is absent and *kava*-drinking in vogue.¹

evidence is found in J. S. Kubary, *Ethnographische Beiträge zur Kenntniss des Karolinen Archipels*, Leyden, 1895, p. 165.

¹ See F. W. Christian, *Caroline Islands*, London, 1899, p. 189, and also pp. 263-264 and 334; and cf. the article by H. N. Moseley "on the inhabitants of the Admiralty Is.," *Journ. Ant. Inst.*, vol. vi, 1877, pp. 393 and 402. Frazer gives several references to betel in Yap in his *Belief in Immortality*, vol. iii, 1924, pp. 10, 171.

In his *Rip Tide in the South Seas*, 1936, p. 23 (and reprinted in his *Japan's Islands of Mystery*, 1944, p. 60), Willard Price deals with the interesting subject of what deductions can be made by the "betel juice reader" of Yap:

"Apparent bloodstains mark all the frequented trails of Yap. Most of these trails are not dirt paths, but stone causeways, upon which any such mark is clearly revealed and easily studied. By the freshness of the stain, the good betel-juice reader can tell you how recently, within a few minutes, someone has passed that way. He can also tell you many other things about the spitter—basing his conclusions upon such considerations as volume, chemical strength, frequency of discharge, relative location, angle of deflection and so on. Knowing the particular betel habits of individuals, he can often tell exactly who has passed—as well as whether he was in a hurry, tired or brisk, calm or excited, travelling light or under a load, in company or alone, talking or silent, where he stopped to rest, where to chat, where he interrupted his betel-chewing to eat, what he ate, as betrayed by the juice of the new quid, and many other considerations more recondite. What the American redskin could tell from a footprint the redmouth can deduce from a betel stain."

The Marianas Islands

The largest and most important island of the Marianas or the Ladrões group is Guam. It lies about 1200 miles east of the Philippines, and was discovered by Magellan in 1521. He named the islands *Islas de las Velas Latinas* "Islands of the Lateen sails," but the ship's crew dubbed them *Islas de los Ladrones* "Islands of the Thieves" on account of the thieving propensity of the inhabitants. In 1565 Lopez de Legaspi took formal possession, and in 1668 the name was changed to "Marianas" by the Jesuit Padre Sanvitores in honour of Queen Marie Anna of Austria, widow of Philip IV of Spain. Guam became a dependency of the United States after the Spanish-American war of 1898. On 11th December, 1941, it was occupied by the Japanese until it was recovered by the United States on 10th August, 1944.

Narratives of early navigators and accounts of contemporary Jesuit missionaries tell us that the custom of betel-chewing was universal among the Chamorros, as the natives of the Marianas are called, and that the lime used in the "chew" was obtained by

burning coral rock. *Kava*, so widely used throughout Polynesia, was unknown.

To-day matters have changed but little, and every native is addicted to betel-chewing. Both the areca-palm and the betel-vine had been cultivated on the island before its discovery by Magellan, while the only other narcotic known, tobacco, was introduced by the Spaniards from America. The areca-palm, although frequently planted by the natives, also grows spontaneously. "Thousands of young plants may be seen," says W. E. Safford, in his report on Guam, "in the rich valleys of the southern part of the island where seeds have fallen from the palms."¹ The betel-vine occurs only in a state of cultivation, but requires little care, the natives propagating it very easily from cuttings and allowing it to creep upon stone walls and to climb over trees.

Excellent illustrations of the areca-palm and betel-vine will be found in Plates XXXV and LXIII of Safford's work. He points out that several important plants, such as rice, the betel-vine and the areca-palm, cultivated by the aborigines of Guam, were entirely unknown in Eastern Polynesia. They are, he says, undoubtedly of Malayan origin and bear Malay names.² They probably found their way to the Malayan Islands after the departure of the people who spread over the eastern Pacific Islands, but before the separation of the settlers of Guam from the parent stock.³

In her excellent work on Guam,⁴ Laura Thompson tells us that betel-chewing is very old in the Marianas as evidence of it has been found on the teeth of skulls unearthed in archaeological sites. The habit not only gives the individual the physical satisfaction of a narcotic, but has deep-rooted social and ceremonial significance as well. The offering of areca-nuts plays a prominent role in all the major crises of Chamorro life—birth, naming, betrothal, marriage and death. It also figures in communal social functions such as thatching parties and at Christmas and Easter celebrations. On all these occasions the areca-nut, *pugua*, is offered in a shallow rectangular basket made of plaited pandanus, together with fresh betel leaves and bits of lime about the size of half a pea, all neatly arranged in separate compartments. American influence has

¹ *The Useful Plants of the Island of Guam*. . . Contributions from the U.S. National Herbarium, vol. ix, Smithsonian Inst., Washington, 1905, pp. 146-147.

² The areca-nut is called *pugua* in Guam, *pua* in the Banda Islands, *puah*, *buah* in Ambuina, *niga* in the Solomons, *bue* in New Britain, *bua* in the Pelew Islands, and *bonga* or *bunga* in the Philippines. The vine is called *pupulo* or *pupulu* in Guam, *kolula* in the Western Solomons.

³ Safford, *op. cit.*, p. 154.

⁴ *Guam and its People*, revised third edition, Princeton, New Jersey, 1947, pp. 284 and 26.

introduced chewing gum which is apparently finding favour among the young Chamorros.

The *kava* pepper does not grow in Guam, and in islands where it is cultivated, its leaves are occasionally used in the place of those of the betel-vine for chewing.

Melanesia

Of the three great groups of islands into which Oceania is divided, Melanesia, the most southerly, especially claims our attention. For it is among this group of islands that we can see the farthest eastern limit of betel-chewing, and the gradual substitution of *kava*-drinking.

Melanesia consist of the following:

- | | |
|--|----------------------|
| (1) Bismarck Archipelago. | (6) Banks Islands. |
| (2) Eastern New Guinea. | (7) New Hebrides. |
| (3) Louisiade Archipelago. | (8) Loyalty Islands. |
| (4) Solomon Islands. | (9) New Caledonia. |
| (5) Santa Cruz Islands (with
Cherry Island, Mitre
Island and Tikopia
Island). | (10) Fiji Islands. |

I have arranged the list as far as possible from west to east, in order to show clearly where betel-chewing dies out. The first four groups are betel-chewing peoples. No. 5 indulges in both practices (though *kava*-drinking here is chiefly ceremonial), and Nos. 6 to 10 are exclusively *kava*-drinkers.¹

The two customs never really exist together, and if they appear to do so, we can be sure that we are witnessing the swamping of the one by the other. It would seem that betel-chewing is gaining on *kava*-drinking, but, as already intimated, the importance of this aspect of our subject is much greater than merely to excite the curiosity of a chance observer. It helps to determine the history of Melanesian immigrants into Melanesia and in showing the existence of a culture altogether different from that prevailing farther south and in Polynesia. To such an extent was Dr Rivers struck by the high importance of the division of Melanesia into these two classes—those who chew betel, and those who drink *kava*—that in his great work, *The History of Melanesian Society*, he bases his whole theory of Melanesian immigration on the acceptance

¹ For a note on the geographical diffusion of *kava* and betel, see *Man*, vol. xvii, 1917, art. 77, p. 110.

of the existence of two separate peoples, whom he calls the "Betel-people" and the "Kava-people."

In a letter to me on the subject, Professor Williamson considers it *possible* that the "Betel-people" may have reached Polynesia, though he owns that during his long experience in Polynesian society¹ he has never found betel-chewing to exist. We shall return to the subject again shortly.

It is unknown both in Australia and New Zealand.

Speaking of the natives of New Ireland (New Mecklenburg) D. Rannie says² that he has seen a very marked effect on them when, during a trip to Queensland, they have been deprived of their "chew." When starting chewing again on their return they become very dull, stupid and sleepy, but the effect wears off in a few days.

It will be amply sufficient for our purpose to discuss betel-chewing in Papua, the Solomons and, finally, the little island of Tikopia, which I regard as the most easterly point where the custom is observed.

Eastern New Guinea

In Eastern New Guinea, or Papua, betel-chewing occurs among the Massim in the south-east, including all the island groups, such as the Louisiade Archipelago, and among the western Papuo-Melanesians, stretching as far west on the southern coast as the Cape Possession.

Professor Seligmann refers me to his work, *The Melanesians of British New Guinea*, in which he has inserted a sketch-map delimiting these two large groups (p. 6), and also a photograph of the ceremonial lime-gourd of the Peace, or Priest Chief (the two are synonymous) of a Mekeo tribe, who can stop any quarrels by scattering lime from his gourd (p. 343).

There appears to be some doubt as to whether the leaf of *Piper methysticum* is used in betel-chewing. Rivers, *Melanesian Society*, vol. ii, p. 533, states that in the Bismarck Archipelago the leaf used in betel-chewing is *probably* that of *Piper methysticum*, while in *Man*³ E. W. Pearson Chinnery has written an article on the subject. Rivers may possibly be right about the Bismarck Archipelago, but Chinnery can hardly be correct about Papua. As Sir Everard im Thurn clearly proved in a later number of *Man*,⁴ his

¹ See his *Social and Political Systems of Central Polynesia*, 3 vols., Cambridge, 1924.

² *My Adventures among South Sea Cannibals*, 1912, p. 267.

³ February 1922, p. 24 et seq.

⁴ April 1922, p. 57.

own description of the leaf in question shows that it must have been either the well-known *Piper betle* or possibly the *Piper insectifugum*, which is similar in habit or growth.

Chinnery speaks of the leaf as "a creeping plant which clings to trees in the gardens and villages," and has found by personal experience that its flavour is bitter and hot. The true *kava*-plant is an upright-growing shrub, and is not bitter and hot to the taste. (See further the article by im Thurn, noted above.)

Chinnery's article, however, affords a very interesting description of betel-chewing in the Mambare and Kumusi divisions of Papua. The ingredients used are three in number—*dang* or *cha* (the areca-nut), *ong* (lime) and *pingi* (*Piper betle*?).¹ *Dang* or *cha* is the nut of a species of areca-palm, which is extensively cultivated by the Binandere-speaking tribes of the coast and the lowlands of the interior. It is similar to the cultivated *buatau* (pidgin Motuan) of other coastal regions. *Ong* is obtained by burning river shells in kilns. A layer of shells is placed between each layer of mid-ribs of the *nipa* palm, and the kiln is lighted from the top; it burns downwards and deposits the burnt shells in a heap among the ashes, from which they are afterwards separated and reduced to powder by pounding. Betel-chewing occupies a place of great importance in the ceremonial life of the Binandere. The man who has been decorated for homicide, and has attained the state known as *kortopu*, is permitted to ornament his lime-gourd with beeswax and red seeds, and rattle his lime stick against the opening of the gourd when withdrawing it from the lime. Temporary abstinence from betel-chewing is a form of self-denial which people are at times obliged to practise. An instance of this is seen in songs of instruction during the ceremonies following burial, when widows fulfilling the obligations of mourning are forbidden, among other taboos, to eat the betel mixture or even desire it. The phrases of the betel-chewing taboo are:

"*Dang ta ge go Lorie!*
(Areca-nut of speak not widow.)
Pingi ta ge go Lorie!
(Betel-pepper of speak not widow.)"

Another instance of the ceremonial importance of areca-nut (in this case the wild variety) was observed by Chinnery on Mount Chapman. There he was informed that tribes usually at war with

¹ Here Chinnery wrote *Piper methysticum*.

one another congregate peacefully during initiation ceremonies. The symbol of this temporary truce is a piece of broken areca-nut (*ve*—the wild variety), which is distributed among those gathered together by the givers of the ceremony. The ceremony finished, all who have participated return to their districts and the truce ends. In this district lime is produced from the many limestone caves which occur in the locality, and carried in leaves, gourds being absent.

The use of the *pingi* plant as part of the mixture of betel-chewers has an extremely wide distribution in Papua. On the watershed of the Kiko river, M. Staniforth Smith (*Annual Report*, British New Guinea, 1911, p. 170) found a *kava*-plant, *Macropiper methysticum*, in a native garden, but saw no evidence of the manufacture of the beverage.

The betel-chewer, when starting on a journey, invariably carries in his netted bag a supply of areca-nuts and a gourd filled with lime, but he does not appear to stock himself with pepper in the same careful way. His appearance in the village he is visiting is a signal for someone to dash away to the outskirts and reappear in a few moments with a coil or stalks of the pepper plant. He accepts this as a matter of course, and frequently gives areca-nuts in return; others gather around, and in a few moments all of them are chewing and talking with evident enjoyment.

In some of the mountain districts visited by Chinnery betel-chewing is not known. Chief among these are the Biagi districts of Mount Victoria. But the influence has spread far inland in other parts, though in the mountainous regions the areca-nut-palm is seldom cultivated, and the habit is not so much in favour as it is on the coast. Evidence of this is shown by the white teeth of the inhabitants, and the frequent absence of lime-gourds in mountain districts.

Chinnery is of the opinion that betel-chewing is a relatively late influence. Further botanical evidence is required, however, before any definite statement on this point can be made.

Although betel-chewing is apparently not indulged in by the Mafulu mountain people to such an extent as it is in Mekeo and the coast, the custom can be described as fairly common. For a month or so before a big feast, during which period they are under a strict taboo restriction as to food, they indulge in it largely. The betel used by them is not the cultivated form used in Mekeo and on the coast, but a wild species only about half the size of the other; and the lime used is not made by grinding down sea-shells, but is obtained from the mountain-stone, which is ground down to a

powder.¹ The gourds in which the lime is carried are similar to those used in Mekeo, except that usually they are not ornamented, or, if they are, the ornament is done only in simple, straight-lined geometric patterns (see Plate LI, Figs. 6 and 7, p. 166).

The spatulæ are sometimes very simple and rudely decorated.² The people spit out the betel after chewing, instead of swallowing it, as is the custom in Mekeo.

Before passing on to the Solomon Islands, I will conclude this section with a description of the custom among a little-known tribe dwelling on the banks of the Fly river.

About sixty miles from the mouth of the Fly, on the eastern side, is a point called Gaima. This forms the first outlet on the river bank of a people called Girara by Mr W. N. Beaver,³ who was magistrate in the Western Division of Papua for twenty-seven years.

They inhabit the inland district between the rivers Fly and Bamu. All the Girara people are inveterate betel-chewers, and a bag containing a lime-pot and chewing gear is the invariable companion of every man wherever he goes. The betel is not the variety used in the east end, but a species which the Motuans call *viroro*. As is well known, betel is eaten with lime and various peppers, the best kinds of which are grown as climbers. The Giraras obtain lime by burning *epa* shell, which they obtain principally from Pagona, on the Fly. Betel-chewing appears to be attended with rather more ceremony here than Beaver noticed elsewhere. When about to indulge in an orgy of chewing, the Girara man seats himself cross-legged on the ground and spreads his chewing gear around. (See the illustration facing p. 192.) He peels four or five nuts and places them on his thigh. Then, drawing a long thin bone needle or skewer from its case in the bag, he impales the nuts, one at a time, and starts to chew, adding lime and pepper until he has a suitable quid. The quid is kept in the mouth day and night, and even when a man is talking to you, you can see the large red ball projecting from his lips. The lime sticks and betel needles are usually made of cassowary bone, but appear not to have reached the high stage of the Trobriand islander, who considers it a

¹ R. W. Williamson, *The Mafuku Mountain People of British New Guinea*, London, 1912, p. 66.

² For fine photographs of spatulæ, lime gourds, etc., see the numerous examples in Raymond Firth's *Art and Life in New Guinea*, 1936, with a short account on pp. 22, 23.

³ W. N. Beaver, *Unexplored New Guinea*, London, 1920, p. 205 *et seq.* It has now been settled that the name of the tribe should be "Gogodara." See A. P. Lyons, "Notes on the Gogodara Tribe of Western Papua," *Journ. Roy. Anth. Inst.*, vol. lvi, 1926, p. 329 *et seq.*

mark of esteem to manufacture pieces of his dead relatives' bones into lime sticks. As amongst most betel-chewers, the rattle of the lime stick in the gourd is used to express the feeling of the user. He may sit stolidly enough, chewing, but you can tell by the way he rattles his stick whether he is pleased, angry, contemptuous or just merely "don't care." The continued chewing among the Giraras renders them somewhat dazed and stupid-looking, and Beaver is of the opinion that the betel used in the district is a very strong variety. Owing, however, to the universal use of areca-nut, there is very little *gamada* (*kava*) drunk.¹

The Solomon Islands

The earliest description of betel-chewing in the Solomon Islands is that given by Alvaro de Mendaña in 1568. It will be noted that he omits any mention of the areca-nut. I quote the following passage from Amherst and Thomson's edition, published by the Hakluyt Society²:

"Their tongue and lips are very red, for they colour them with a herb which they eat; it has a broad leaf, and burns like pepper; they chew this herb with lime which they make from white *lucaios*, which is a stone formed in the sea like coral; and having a piece of this lime in their mouths, it makes a red juice, and this is why their tongues and lips are always so red; they also smear their faces with this juice for ornament. Although they chew this herb, they do not get this red juice unless they mix it with the said lime."

Mr Woodford, the late Resident Commissioner, tells me that, as far as his observation goes, the *Areca catechu* does not occur wild in the Solomons, but is grown always as a cultivated tree. There are certain inferior species of *Areca* indigenous to the Solomons which are also used in the absence of the cultivated nut. The unhusked nuts of *Areca catechu* are yellow when ripe, and as large as a small hen's-egg. The nuts of the indigenous species of areca are much smaller, about the size of large acorns, but are more numerous to the spathe.

Dr Guppy³ mentions five species of areca besides the cultivated

¹ Further references to betel-chewing in Papua will be found in J. H. Holmes, *In Primitive New Guinea*, London 1924, pp. 53, 54, 56 and 61. and W. J. V. Saville, *In Unknown New Guinea*, p. 64.

² *Discovery of the Solomon Islands*, edited, with Introduction and Notes, by Lord Amherst of Hackney and Basil Thomson, Hakluyt Society, London, 1901, p. 134.

³ *The Solomon Islands and their Natives*, London, 1887, p. 303.

Areca catechu. In another part of his work¹ he gives further details about betel-chewing.

In St Cristoval and the neighbouring small islands the lime is carried in bamboo boxes, which are decorated with patterns scratched on their surface. In the islands of Bougainville Straits gourds are employed for this purpose, the stoppers of which are ingeniously made of narrow bands of the leaf of the sago-palm wound round and round in the form of a disc and bound together at the margin by fine strips of the vascular tissue of the *sinimi* fern (*Gleichenia* sp.). Plain wooden sticks, like a Chinese chopstick, are used for conveying the lime to the mouth; but frequently the stick is dispensed with, when the fingers are used, or the areca-nut is dipped into the lime.

The betel, known in Bougainville Straits as the *kolu*, is grown in the plantations, where it is trailed around the stems of bananas and the trunks of trees. In these straits, as on the Malay coast of New Guinea, the female spike, or so-called fruit, is more usually chewed with the areca-nut. Around St Cristoval the leaves are generally preferred.

Dr Guppy also gives an interesting account of the effect the chewing of one, and then of two, areca-nuts had on his pulse, head and sight. He found their intoxicating qualities far greater than he had before suspected (see *op. cit.*, p. 96).

For the ceremonial use of the areca-nut among the people of San Cristoval see the work by C. E. Fox,² who gives several folktales in which both nuts and leaves play an active part.

There is a curious belief that if a man bites *round* an areca-nut someone in his clan will die. He must always bite lengthwise.

If a boy with his first set of teeth chews areca, he must throw the husks into the fire, or his teeth will fall out.

The areca-nut enters largely into black magic, as well as playing an important part in pregnancy, child-birth and marriage. For full details see W. O. Ivens, *Melanesians of the South-east Solomon Islands*, 1927 (see index "areca" and "betel"); *idem.*, *Island Builders of the Pacific*, 1930 (index under "areca nuts" and "Betel pepper"; and B. Blackwood, *Both Sides of Buka Passage*, Oxford, 1935, pp. 293-295 and index as above.

Tikopia Island

The natives of the Reef Island chew betel and do not drink *kava*.

¹ *Op. cit.*, pp. 95-96.

² *The Threshold of the Pacific*, London, 1924, pp. 116, 121, 159, 160, 167, 183, 212, 230, 321 and 322.

But in the Santa Cruz group and in the Vanikolo Island, to the south-east, we find that, although betel-chewing is in vogue, *kava* is drunk on ceremonial occasions. The same conditions are found in Tikopia and Cherry Island.

East of this, *kava*-drinking exists alone and forms the chief feature of the whole of Polynesia. As to the different methods of making *kava*, and the significance this has on the movement of the cult, readers should study ch. xxvi of Rivers' work.¹ It follows, he argues, from the distribution of *kava* and betel that the *kava*-people settled in Southern Melanesia, Fiji and Polynesia, while the betel-people did not extend in their south-easterly movement beyond the Solomon and Santa Cruz islands.

As Tikopia is the most easterly point where betel-chewing occurs, we will conclude with a few details given by Rivers in *Melanesian Society* (vol. i, pp. 333, 322, 316, 314).

Tikopia is a tiny volcanic island situated in lat. 12° 17' S., and long. 168° 58' E. The inhabitants are very fond of betel, which enters largely into the more important of their ceremonies. Both the areca-nut (*kaura*)² and the betel leaf (*pita*) must be very plentiful. The lime, called *kapia*, is kept in simple undecorated gourds, and the elderly chief of the Taumako, whom Rivers saw on his visit, prepared his betel mixture in a cylindrical vessel with a spatula, exactly in the same way as it is done by elderly men in the Solomon Islands.

It seemed quite clear to Rivers that the *kava*, which is used so extensively in ceremonial, was never drunk.

The Tikopians become possessed by the *atua* or ghosts of their ancestors, and when in such a state (recognised by a sort of ague, staring eyes and shouting) are asked questions by men of equal rank. A man who asks a question chews betel, and taking some of the chewed mass from his mouth he holds it out to the possessed man, saying, "Eat," and it is eaten by the possessed man, who is then ready to answer his questioner.

Offerings of *kava* and food are made to the dead, and with the food some areca-nut, without either betel leaf or lime, is given. At the death of a chief all the relatives abstain from betel for about two months.³

¹ *Melanesian Society*, vol. ii, pp. 243-257.

² Raymond Firth, *We, the Tikopia*, London, 1936, p. 116, gives two varieties of areca-nut, *haua* and *fuarihi*. The lime is obtained by burning coral lumps.

³ For further references to betel-chewing in Papua see H. Cayley-Webster, *Through New Guinea and the Cannibal Countries*, London, 1898, p. 27; George Brown, *Melanesians and Polynesians*, London, 1910, p. 407; A. K. Chignell, *An Outpost in Papua*, London, 1911, pp. 17, 124, 214, 238; and F. Coombe, *Islands of Enchantment*, London, 1911, pp. 137, 183, 184, 190, 203, 210, etc.

We have now sufficiently covered the whole area in which betel-chewing can be called an established custom. Its further spread has been checked by various factors. The first of these is botanical. The necessary ingredients can be produced only in latitudes and altitudes favourable to the cultivation of the areca-palm and the betel-vine.

Another factor to be considered is that in most countries the betel-vine requires expert attention, and is not a plant which could be properly cultivated by such primitive people as, say, the aborigines of Australia.

Then, there is the question of a rival narcotic. It is obvious, I think, that the custom of betel-chewing would have long since spread all over China had not opium, introduced from Asia Minor, already obtained such a strong influence over the people.

In localities where betel-chewing and *kava*-drinking meet, we are presented with an anthropological problem, which, as yet, has been only partially studied.

Effects of Betel-Chewing

There remains to consider briefly the effects of betel-chewing, and to determine, if possible, what causes those effects.

Although the narcotic and stimulating effects of betel-chewing had been noticed by travellers and botanists of the sixteenth century, it was not until the first half of the nineteenth century that any attempt was made to study them scientifically. One of the first men to make a serious study of the subject was Ernst Freiherr von Bibra, who, in his *Die narkotischen Genussmittel und der Mensch* (Nürnberg, 1855) devoted a special chapter to betel-chewing and its effects. He based some of his observances on F. J. F. Meyen's account of betel in the Philippines published in his *Reise um die Erde* (Berlin, 1835, vol. ii, pp. 214-217). In 1903 considerable impetus was given to the study of betel-chewing and its effects by the Colonial Museum at Haarlem which offered special rewards for the best treatises on the subject. The outstanding essays, which dealt almost exclusively with betel in the Dutch East Indies, were published in the museum's Bulletin¹ in 1905. One of the most

¹ *Bulletin van het Koloniaal Museum te Haarlem*, No. 32, February 1905. "Bijdragen tot de Kennis van het Gebruik van Sirih in Nederlandsch-Oost-Indië" (Bekroonde antwoorden op de prijsvraag)—with 13 plates and many illustrations in the text. The prize-winning papers were eight in number, and were by the following authors: H. R. Rookmaaker, pp. 18-48; C. Hartwich, pp. 49-97 (with 8 plates of nuts, sections, requisites, boxes, cutters, etc.); J. H. Meerwaldt, pp. 98-117; L. A. T. J. F. van Oyen, pp. 118-133 (with 8 illustrations on 4 plates—Javanese); Sastro Winangoen, pp. 134-141; T. J. Bezemer, pp. 142-149; L. Th. Mayer, pp. 150-158; and A. B.

important papers was that submitted by the German pharmacognosist Carl Hartwich. This led to the chapter on betel in his *Die menschlichen Genussmittel* (Leipzig, 1911). Meanwhile, Louis Lewin had published his hundred-page monograph, *Über Areca Catechu, Chavica Betle und das Betelkauen* at Stuttgart in 1889. He followed this up the next year by an article in the *Internationales Archiv für Ethnographie*,¹ and in 1924 published his work on drugs, *Phantastica*,² to which he devoted a section on betel. Efforts were made by chemists to determine the alkaloids of the areca-nut, and the findings of such men as Bombelon, Jahns, Emde, Hess, Trier, Winterstein, Chemnitz, Bourcet, etc., led to certain established facts. These can be conveniently studied in T. A. Henry's *The Plant Alkaloids* (4th edition, 1949, pp. 8-13), where full bibliographical details are given.

From the numerous accounts of betel-chewing which we have read in this Essay, we are fully aware that as soon as a person begins to chew in the usual way—by rolling the quid from cheek to cheek and pressing it between or against the teeth and so squeezing out the juice—he produces an abundant flow of saliva. Many chewers follow the advice given by Garcia da Orta (p. 192) and spit out this first juice. Bontius³ agreed with this, and wrote: "I think such a precaution is very proper; for otherwise the calx, which is mixed with it, would excoriate the gums and palate."

Others, however, swallow it—betel juice and all. But so great does the flow of saliva become that continual spitting is necessary. Travellers are only too well aware of the disgusting mess that this filthy habit makes of both public and private buildings.

As to the red colour of the saliva, I shall deal with that later on in some detail. We must consider first the next effects of the chewing. These are undoubtedly of a narcotic and soothing nature. Hunger disappears, tiredness and irritability vanish, and gradually a sense of well-being permeates the whole body. Moreover a pleasant odour remains in the mouth, and this has been described as one of the charms of betel-chewing.

In order to attempt an explanation of these experiences it is necessary to say a word on the chemistry of the areca-nut.

Lucardie, pp. 159-173. There is no copy in the British Museum, but the library of the Natural Hist. Mus., S. Kensington, has one.

¹ Band III, 1890, pp. 61-65. On p. 62 is a table showing the native names for all ingredients of a "chew" in Java, Borneo and Sumatra.

² A second edition appeared in 1927: *Phantastica. Die betäubenden und erregenden Genussmittel*. It was translated into English by P. H. A. Wirth in 1931 when it was called *Phantastica: Narcotic and stimulating drugs* . . . , but when reprinted in 1938 its title was altered to: *Drugs: their use and abuse*.

³ *An Account of the Diseases . . . of the East Indies*, London, 1769, p. 190.

As early as the first quarter of the eighteenth century Kaempfer¹ had drawn attention to the similarity of effects experienced after chewing betel and smoking tobacco. It was, however, not until 1935 that Hermann Emde showed clearly the chemical relation of these two lipoid soluble alkaloids. The areca-nut contains the alkaloids arecoline, arecaidine (or arecaine), guvacine, arecolidine, guvacoline, *iso*-guvacine and choline. Of all these it is the first two which are the most important. Arecoline is toxic and acts, in many ways, like nicotine. It irritates the mucous membrane, reacts on the central nervous system by stimulating its reflexes to the extent of causing cramps, accelerates breathing and reduces the action of the heart. Opinions, however, differ greatly as to the effect of arecoline. Hartwich denied any effect from it, but more recent research proves that nearly all the effects of betel-chewing can be traced to the arecoline in the nut. Burkill states that it can produce paralysis, which may be preceded by convulsions, and can even cause death by arresting respiration. Such cases, however, would appear to be very rare. The astringency, so often mentioned, is due to the presence of tannin. Other constituents are fat, and some sugars. The effect of the addition of lime has not yet been fully explained. The suggestion made by Lewin that it helps to absorb the alkaloids combined in the nut, and probably in the leaf, has not been generally accepted, but he proved that the lime liberates an etheric oil in the nut which causes the agreeable smell of the mouth. It has also been shown that the addition of lime neutralises the hyperacidity of the stomach, due in those countries to the type of food eaten. This would naturally lead to a sense of well being. As has already been mentioned, the tannin in the areca-nut produces astringency, but apparently this only occurs when small quantities of the nut are taken. When large portions are chewed the opposite effect is caused, but the necessary remedy is to be found in the astringent nature of the lime. Lewin refers to what is called "betel smell" which is a most unpleasant breath noticeable in many old and inveterate chewers. It is caused by the decomposition of small pieces of the "chew" stuck between the teeth, which are not properly cleaned. He also refers to "tooth-stone" which is a crust, mainly consisting of calcium carbonate, which forms in course of time in the teeth and gums of chewers who do not keep their mouths sufficiently clean. As only the rich can indulge in sufficient betel to produce such an effect, in the Admiralty Islands it is regarded as an attribute of the dignity of chief.

¹ *Amamitatum exoticarum politico-physico-mediciarum fasciculi V*, . . . Lemgoviae, 1712.

In the Ethnographical Gallery (Nicobar Islands, Case 149) of the British Museum, one could see, before the war, specimens of teeth covered with calcium carbonate as the result of excessive betel-chewing. Unfortunately the Gallery will not be open to the public for some time to come. An illustration of two completely calcified teeth with only the roots showing can be seen on p. 2946 of the *Ciba Zeitschrift's* pamphlet "Betel."

The extent to which chewing blackens the teeth has been a subject of contradictory statement. It would appear, however, that if they are properly cared for and regularly cleaned this does not occur. On the other hand, if the betel-chewer's mouth is not kept scrupulously clean decay will soon turn the teeth black. But as in many countries black teeth are considered beautiful¹ the gradual staining of the teeth by betel-chewing, so far from being regarded with disfavour, is accelerated by the use of certain lacquers to turn them jet black. The reason for this seems to have been twofold. In the first place it was believed that it preserved the teeth, and in the second place it made them different from the animals whose teeth are always white! So too the filing of the teeth, a highly important ceremony in many countries—particularly in Malaysia, is considered beautiful and a contributory mark of differentiation. In his *History of Sumatra* (1811, pp. 52, 53) William Marsden has an interesting paragraph on the subject:

"Both sexes have the extraordinary custom of filing and otherwise disfiguring their teeth, which are naturally very white and beautiful from the simplicity of their food. . . . Many, particularly the women of the *Lampang* country, have their teeth rubbed down quite even with their gums; others have them formed in points; and some file off no more than the outer coat and extremities, in order that they may the better receive and retain the jetty blackness, with which they almost universally adorn them. The black used on these occasions is the empyreumatic oil of the coconut shell. When this is not applied, the filing does not, by destroying what we term the enamel, diminish the whiteness of the teeth; but the use of betel renders them black, if pains be not taken to prevent it. The great men sometimes set theirs in gold, by casing, with a plate of that metal, the under row; and this ornament, contrasted with the black dye, has, by lamp or candle light, a very splendid effect . . ."

We get some additional information from an anonymous article

¹ See W. H. Furness, *Homa-Life of Borneo Head-Hunters*, Philadelphia, p. 157 and Plate LXIV.

entitled "The Betel Tree."¹ The writer, who is dealing with Siam, tells us that the black teeth produced by chewing have a continual thickening of their black encasement, which in a little time overlaps the gums, and effectually protects the teeth from carious influences. However, the absorption of the bony sockets of the teeth, makes them fall out, perfectly sound, at or before middle age. "If perchance any of them remain until old age, they become often horribly deformed by the immense accumulation of Betel composition deposited upon them, so that nearly all resemblance of what they once were, is lost; and they then appear more like ill-shapen lumps of charcoal than their original form. . . . It should be stated that the blackening process on the teeth, produced by chewing Betel, does not become complete without rubbing them occasionally with a kind of varnish, produced by charring a dry cocoa-nut shell in a small earthen pot, covered with a plate of iron; the fire being kindled under the pot and not in it. The liquid products of the combustion, condensed on the cold iron, are at first of a dark brown colour, but soon change to a jet black. This is taken and rubbed over the teeth, by which means their blackened enamel is intensified in its colour and polish."

In modern days little has changed, although prolonged contact with Europeans has caused the custom to be discontinued, or modified, among the younger generation. Thus, in a recent work² on Bali, we read that although the older inhabitants still blacken their teeth with a sort of lacquer, the younger people keep their front teeth white by polishing them with ashes. In many cases, however, they still blacken the molars. The custom of filing and blackening the teeth has its roots (according to Covarrubias) in animistic ritual, to avoid long white teeth like those of dogs. So great is the repugnance of the Balinese for actions characteristic of animals that children are not allowed to crawl on all fours.

In some localities the beauty of white teeth is fully realised, thus in the Philippines the Chinese and half-caste women rub their teeth white after chewing by using the fibres of the areca-nut shells.

Apart from the staining of the teeth, other effects of chewing, both on them and on the gums, must be considered. Here again we find contradictory evidence. It will suffice to remind readers of various passages in the present Essay. Thus in the thirteenth century we find Marco Polo saying:

¹ *Bangkok Calendar*, 1864, pp. 87-92 (see also p. 80), reprinted in *Notes and Queries on China and Japan*, vol. II, 1868, pp. 136-139.

² Miguel Covarrubias, *Island of Bali*, London (U.S.A. printed), 1937, pp. 119, 129. Cf. P. H. Hiss, *Bali*, 1941, p. 21.

"And they have their teeth very good because of a herb which they use to eat, which makes them digest very well and is very wholesome to man's body."

In the fifteenth century 'Abdu-r Razzāq says that betel-chewing strengthens the teeth. In the sixteenth century Tomé Pires says likewise and adds: "so that men here [Goa] who eat it usually have all their teeth, without any missing, even at eighty years of age." Both Mas'ūdī¹ (tenth century) and Linschoten (sixteenth century) state that chewing strengthens the gums and tightens the sockets of the teeth. Pyrard of Laval and John Fryer (seventeenth century) support these views. Yet in spite of all this evidence the exact opposite appears to be the case as many careful observers have noticed. Bontius² (1592-1631) is very clear in his views. He writes: "However, a long and continued use of it not only erodes the teeth by the calx it [*i.e.* the "chew"] contains, but even causes them to fall out. Nay, I have frequently seen people, who, as yet in their youth, had not a single tooth remaining . . . Hence you will observe the Javans, and other Indians, have empty spaces in their jaws, which the richer fill with teeth made of gold." The very fact of the existence of the areca-nut pounder proves that the inveterate chewer has lost his teeth and is quite unable to bite the nut. We have also seen (p. 256) that Sir George Scott, in writing of Burmese chewers, tells us that the lime very speedily corrodes and destroys their teeth, and that the old *pohn-gyee* or Buddhist monk, has to make the scholars crush the nuts so that they may not hurt his toothless gums. W. L. Meyer, Louis Lewin and others speak of the loosening of the teeth caused by prolonged chewing. It would seem, however, that such conclusions have been drawn too hastily. If the personal habits of the individual chewers could have been investigated it would probably have been discovered that the teeth were not kept in good condition, and that neither the tooth-stick nor the brush were habitually used. In India the twig of the Neem- or Nim-tree (*Melia indica*, Brandis) frayed at the end is usually employed for such a purpose. Almond shell charcoal mixed with salt for brushing night and morning is also used. By such simple methods the teeth of the chewer can be preserved, and in support of this Dr Wallis, whom we shall meet shortly, quotes the case of an Indian chewer of seventy-five who still has *all* his teeth in perfect condition. The tannins of both areca-nut and

¹ See C. Barbier de Meynard et Pavet de Courteille, *Les prairies d'or*, vol. ii, Paris, 1863, pp. 84, 85.

² *An Account of the Diseases . . . of the East Indies*, London, 1769, pp. 190-192.

catechu are regarded as tightening to the gums, and in this respect it is interesting to note that at least from early Victorian times until the outbreak of the last war powdered areca-nut has been sold in this country as a tooth-powder. Thus in the 1st edition of Pereira's *Elements of Materia Medica* (London, 1839, 1840, Pt. i, p. 187, and Pt. ii, p. 616), we read of areca-nut charcoal tooth-powder, its superiority being ascribed to the extreme hardness of its particles (4th edition, vol. i, 1854, p. 322). One of the simplest formulas is: Myrrh 4 drachms, chalk 7 ounces, powdered areca-nut 1 ounce and flavouring as desired.

We can conclude, therefore, that continual chewing throughout the day and no cleaning of the teeth leads to decay, as, apart from food, the particles of the various ingredients of the "chew" collect round the teeth. On the other hand these ill effects can be avoided by constant use of the tooth-stick and -brush, while the astringency of the tannin tightens the gums. The discrepancies in the accounts of travellers are due to the different status and habits of the people they chanced to encounter. We now turn to purely temporary effects of chewing.

The immediate effects of betel-chewing to the beginner are often of a more disturbing nature. We have already seen the effect produced on Niccolao Manucci—how his head swam to such an extent that he felt he was dying. He fell down, lost his colour and suffered agonies. Lewin tells us¹ that the beginner experiences a disagreeable, acrid and burning taste, and a feeling of constriction in the throat after a very short period of mastication. Slight sores on the tongue and throat also occur. As more betel is chewed, this at first almost intolerable sensation diminishes. Finally, it disappears altogether and in its place an agreeable sensation at once soothing and comforting is experienced. In time the addict discovers that the troubles and trials of life, insufficient or bad nourishment, hard work, rough weather and illness all become bearable with the help of the "chew." During the Oxford expedition to Sarawak (*Borneo Jungle*, 1938, p. 51) Tom Harrisson found chewing of the greatest help when worn out after an hour's hard climbing. Five minutes chewing sent him "shooting up again," the stuff sending a wave of energy through his body. It becomes a *sine qua non* of life itself, and the hardened chewer would rather give up everything on earth than his betel. As Lewin says, even if Europeans became accustomed to the taste of betel, and, I would add, could obtain a constant supply of the leaf and nut in good condition, there is one circumstance which would prevent its

¹ *Phantastica*, London, 1931, pp. 236, 237.

adoption, and that is the excessive amount of saliva produced and especially its colour which varies in its depth of red according to the amount of lime used. And this leads us to a consideration of the causes of this curious coloration. So varied and contradictory have been the explanations given as to exactly what ingredient or ingredients of the "chew" turn the saliva red, that we must consider the matter in some detail. As early as the time of Jacobus Bontius (1592-1631) it had been realised that lime was the chief factor in the colouring of the saliva. The passage in question is worth quoting¹:

"It is also to be observed, that if the betele, and arecca without the calx, be chewed, the juice, pressed from it in mastication, is of a green colour: but upon adding a small quantity of calx, the same juice becomes redder than blood. This circumstance of a redness in the spittle led me at first into a great mistake, for I thought it proceeded from an hæmoptoe."

Other travellers have also mistaken the red juice for blood, and on seeing bespattered houses and streets thought that some savage battle had taken place! Rumphius (1627-1702) declared categorically that only the combination of the three vital ingredients caused the red colour and that if one was absent the effect was not produced. "... si enim unum ex illis omittatur," he writes (*Herbarium Amboinese*, Libr. I, Cap. 6) "duo reliqua penitus sunt insipida, et nunquam rubescunt." Pietro della Valle (1586-1652) declared that the red colour proceeded from the juice of the betel leaf. François Pyrard, on the other hand, said that it was caused solely by the areca-nut. And so the contradictory statements continue.

When first writing on betel-chewing some twenty years ago I said that I was of the opinion that the red colour was due to the action of the lime on the juice of the betel leaf and that the areca-nut had nothing to do with it at all.² I was supported in this theory by Mr C. M. Woodford, the Resident Commissioner of the Solomon Islands (1896-1914) who had made several experiments. He found that lime produced a similar change of colour in other vegetable juices. For instance, a decoction of the root of *Morinda citrifolia* is yellow, but changes to red with the addition of lime, and forms the source of the red dye used by the natives of the Solomon

¹ *Op. cit.*, ch. xviii, pp. 190-192.

² I notice that in his *East India Vade-Mecum* (vol. i, 1810, p. 497) Thomas Williamson writes: "The saliva will not be tintured, if the *clumum* (i.e. the lime) be omitted, it is evident that the alkali produces the color thus obtained from the juices contained in the *pamut*."

Islands. Yet, on the other hand, Dr Guppy¹ says that the red colour may be readily obtained by mixing the areca-nut and lime in rain-water. It seems clear, then, that if a root, leaf or seed contains any red colour the action of the lime at once extracts it and imparts the colour to any water or saliva present. It will be appreciated that European observers cannot always be certain exactly what ingredients are being used in a particular "chew"—especially if gambier, tobacco, etc., are included. Thus the apparently contradictory statements have been made. As was long ago suspected by von Bibra the catechin found in cutch or catechu turns the saliva red if lime is added. This fact is noted by Thurston (see p. 249). Moreover, in describing the preparation of cutch in South Canara, H. A. Latham of the Forest Department tells us² that in Mysore the catechu is dissolved in water and the boiled sliced areca-nuts steeped in the solution in order to give them a redder colour. It also imparts a different taste, and decreases the bitterness. There is no mention of lime. It would appear that the boiling causes a diffusion of colour from the ruminations into the white endosperm thus causing the nuts to acquire the redder colour. Lewin made certain experiments with "chews" of different ingredients and described the colour of the saliva as yellowish-brown, brownish-red or blood-red according to the amount of lime used. The mixture of the areca-nut, the betel leaf and lime produced a red-brown colour while if catechu (gambier or cutch) was added the colour became blood-red.

Being still unsatisfied with the evidence, I wrote to the Wellcome Research Institution (Chemical Laboratories) who put me in touch with Dr T. E. Wallis of the Pharmaceutical Society of Great Britain. This gentleman has kindly supplemented his own knowledge by important data received from an Indian friend of his who regularly uses the mixture of betel leaf, areca-nut, lime and catechu. In the first place he confirms Bontius' statement that the leaf and seed together do not give a red colour. If the seed (areca-nut) is chewed alone a dull purplish pink results. Fresh leaf and lime give a reddish colour, but not the characteristic bright red. Lime, catechu and areca-nut give a dull brown, but the deep red is obtained only when fresh betel leaf is present. If dried betel leaf is used, no red results. In order to get the bright red a suitable proportion of catechu must be included in the "chew." In commenting upon these data, Dr Wallis says that it seems clear that the red colour

¹ *The Solomon Islands and their Natives*, London, 1887, p. 96.

² From Thurston's *Castes and Tribes of Southern India*, vol. iv, Madras, 1909, p. 103.

must be related to something in the fresh betel leaf which disappears during drying, and the constituent which suggests itself is the volatile oil. This oil contains a phenol known as betel-phenol which is isomeric with eugenol (from oil of cloves). Now phenols in general give colours, often red or violet, under various conditions. Ordinary phenol becomes red on exposure to air and light. This is, I think, all that can be said on the subject of the red juice.

On the whole, betel is a comparatively harmless stimulant, and except for the pathological changes to the teeth never causes serious organic or physiological damage. The only exception one might mention is the oral cancer caused to certain chewers in Travancore as discussed by I. M. Orr.¹ But here the harm is due solely to the fact that the poor coastal Travancorean uses a cheap irritating variety of tobacco in his "chew" from the Coimbatore district, locally known as "vadacan." Moreover, he keeps the "chew" in his cheek all day and actually sleeps with it. Furthermore he uses only the fresh green nut and not the dried sliced sections used in other parts of India. Lastly, his diet of tapioca, rice and water is lacking in vitamin A. All these combined factors produce conditions in the mouth conducive to cancer.

It has, in the past, been repeatedly stated that betel is an aphrodisiac, but most modern writers deny it categorically. It would appear that the general euphrasy, contentment of mind, and sense of well-being experienced by the chewer tends to induce a feeling of affection, which, in certain circumstances, especially among younger men, would naturally lead to erotic desires. But this hardly justifies the classification of betel as an aphrodisiac any more than we could include tobacco or alcohol under that heading. Effects vary with different people and in different circumstances. In some cases excess—whether it be of betel-chewing, smoking, eating highly-seasoned food or consuming alcohol—may act as an aphrodisiac.² In others it will merely produce a feeling of contentment leading perhaps to a comatose condition³. Thus any generalisation is to be avoided.

In the above pages I have paid but little attention to the agri-

¹ "Oral Cancer in Betel Nut Chewers in Travancore, its Aetiology, Pathology, and Treatment," *The Lancet*, vol. cccxv (Vol. ii for 1933), 9th September, pp. 575-580.

² In R. F. Barton's *Philippine Pagans*, 1938, p. 99, one of the natives chewed areca-nut without betel leaves or lime as an aphrodisiac all through the night, with apparently highly satisfactory results.

³ In 1858 Sir Richard Burton (*Journ. Roy. Geog. Soc.*, vol. xxix, p. 34 note 1) wrote: "The effect upon a European in the moist, relaxing climates of the tropics is simply tonic and astringent."

cultural side of the areca-palm and betel-vine, whilst by-products have been ignored. Such aspects of the subject do not concern our inquiry in this Essay. To those readers interested in these branches of the subject I would suggest a visit to the catalogue room of the library of the Imperial Institute. Here they will find well over a hundred references dealing with the planting, growing, fertilising, diseases and pests, grading, packing and marketing of the plants. Substitutes, by-products, varieties, analyses and statistics are also additional headings found in the cards.

In conclusion I think I may claim that sufficient has been said to justify the contention that betel-chewing holds a unique place among the customs of the world.

BIBLIOGRAPHY

THE notes throughout the Essay provide ample bibliographical reference for further study on the subject. There are, however, very many articles in Encyclopædias, magazines and publications of Learned Societies which I have consulted, but have not mentioned in the text or notes. I now add a selection of these which can be regarded as a short supplemental bibliography. I would first refer readers to the bibliography of thirty-three items on p. 2947 of No. 84 "Betel" of *Ciba Zeitschrift*, Basel, February 1942. Copies can be seen at the British Museum and Victoria and Albert Museum libraries.

Edward Balfour's *Cyclopædia of India*, 3rd edition, 1885, s.v., "Areca catechu," "Betel-box," "Betel-leaf," "Betel-nut" and "Betel-nut cracker"; *Encyclopædie van Nederlandsch-Indië*, 4 vols. 's-Gravenhage and Leiden, 1917-1921, s.v., "Areca Catechu," "Areca- of Betelnootkust," "Pinang" and "Sirih"; *Winkler Prins Algemeene Encyclopædie*, edited by J. de Vries, Amsterdam, 1932-1938, s.v., "Areca catechu," "Betelnoten," "Betelpalm," "Betelpeper" and "Sirih"; *Enciclopedia Universal Ilustrada*, Barcelona Tomo VIII, s.v., "Betel," with the bibliography on p. 506, and Tomo II (Apéndice), p. 190; *Grande Enciclopédia Portuguesa e Brasileira*, vol. iii, Lisboa and Rio de Janeiro, s.v., "Areca," and vol. iv, s.v., "Betele"; *La Grande Encyclopédie*, Paris, 1886-1903, s.v., "Aréquier," with illustrations on p. 819, and "Bétel"; *Enciclopedia Italiana*, s.v., "Areca," "Betel" and "Catecù." C. W. E. Cotton, *Handbook of Commercial Information for India*, Calcutta, 1924, pp. 285, 286; J. Mollison, *Text-book on Indian Agriculture*, vol. iii, Field and Garden Crops of the Bombay Presidency, Bombay, 1910; A. Mendis Gunasekara Mudaliyar, "Betel," Notes and Queries, *The Ceylon Antiquary and Literary Register*, Colombo, 1915-1916, vol. i, Pt. 2, October 1915, pp. 124, 125; *All about the Areca Palm (Betel-nut) and specially its cultivation in Ceylon to guide intending planters*. Compiled by J. Ferguson, Colombo, 1897; P. C. Patil, "The Crops of the Bombay Presidency," *Bombay*

Dept. Agriculture Bull., No. 109 of 1921, Bombay, 1922; John Burnell, *Bombay in the Days of Queen Anne*, Hakluyt Society, London, 1933, pp. 77, 78 and 90. Ibn Batūta—see C. Defrémery and R. B. Sanquineti, *Voyages d'Ibn Batoutah*, Soc. As. Paris, vol. xi, 1914, pp. 204, 205 and H. A. R. Gibb's trans. 1929, p. 114. For good botanical references see the *Index Londinensis* under "Areca catechu, Linn." "Chavica betle Miq." and "Piper betle Linn"; see also M. H. Baillon, *Dictionnaire de Botanique*, vol. i, 1876, "Arec," with two illustrations in the text, and "Bétel"; F. J. F. Meyen, *Outlines of the Geography of Plants*, Ray Society, 1846, pp. 351-355; R. Bentley and H. Trimen, *Medicinal Plants*, vol. iv, 188, No. 276, "Areca Catechu," with coloured plate and bibliography; C. E. P. von Martius, *Historia Naturalis Palmorum*, Lipsiæ, vol. iii, 1836-1850, pp. 169, 170 and Tab. 102; E. Blatter *Palms of British India and Ceylon*, 1926, pp. 471-480 and Pl. XCII; A. F. Hill, *Economic Botany*, 1937, pp. 286, 287; E. M. Forster *Abinger Harvest*, 1936, pp. 309-314; F. A. G. Miquel, *Systema Piperacearum*, Roterodami, 1843, pp. 228-232 (*Clavica betle*); M. Grieve, *A Modern Herbal*, vol. i, 1931, p. 54, "Areca Nut"; H. B. Guppy, *Studies in seeds and fruits*, 1912, see index under "Areca"; T. Cooke, *Flora of the Presidency of Bombay*, 1908, vol. ii, pp. 528 and 809—both with lists of references; *Curtis's Botanical Magazine*, vol. vi, N.S. (vol. lix), 1832, No. 3132 "Piper Betle"; *Hackh's Chemical Dictionary*, 3rd edition, by Julius Grant, 1944, s.v., "areca," "arecaine," "arecaine," "arecoline" and "betel"; E. Thorpe, *Dict. of Applied Chemistry*, vol. i, 1921, p. 370, and also the 4th edition edited by J. F. Thorpe and M. A. Whiteley, vol. i, 1937, p. 458, "Areca Nut," and p. 687 "Betel Leaves." For excellent coloured illustrations of the betel-planter, lime-preparer and method of chewing I would refer readers to the magnificent work of F. Baltazard Solvyns, *Les Hindous ou Description de leurs mœurs, contumes et cérémonies*, 4 vols. Paris 1808-1812. See vol. i, Pt. iv, No. 6. "Berage Pawn-planter"; vol. i, Pt. x, Plate IV, "Chunharys, Preparers of Fine Lime"; and vol. iv, Pt. xi, Plate VI, "Pawn."

Short magazine articles include: "The Betel-Nut Tree," with a wood-cut, *The Penny Magazine*, 23rd January, 1836, No. 244, pp. 25, 26; "Betel-Nut Chewing," *The Leisure Hour*, 1st May, 1869, pp. 311, 312 [the number of chewers is estimated at more than 150,000,000], see also 1st September, p. 592, where a writer from Mangalore adds interesting facts about the lime made from shells, coralstone and limestone stating that there is also a *vegetable chunām*. This is produced from trees growing in the Ghant jungles, such as *Terminalia tomentosa* (i.e. *T. alata*, Heyne, see Burkill, vol. i, pp. 2134, 2135), *Shorea robusta*, etc., by burning the bark and frying the ashes; G. Arbour Stephens, "The Eating or Chewing of Pan," *Westminster Review*, vol. clxviii, No. 2, August 1907, pp. 163-167; "Pawn and Tobacco in India," *Chambers's Journal*, 14th May, 1892, 5th Ser., vol. ix, pp. 319, 320. Further references will be found in the *Index-Catalogue of the Library of the Surgeon-General's Office, U.S. Army*, Washington, for which see 2nd Ser., vol. ii, p. 283, 3rd Ser., vol. i, p. 723, and vol. ii, p. 490, 4th Ser., vol. i, p. 701.

INDEX

- Aborigines in Tasmania exterminated by poisoned rum, 11
- Acidity of stomach neutralised by lime, 291
- Aconite, monk's-hood, or wolf's-bane, 10, 11, 67
- , different uses for, 10
- , girl rubbed with ointment made from the juice of, 67
- from the Himālayan districts—*biś*, *biśh* or *biśh*, 10
- used by the Gurkhas of Nepal as a poison in warfare, 11
- used for making *bhūng* from Indian hemp, 10
- , wella poisoned with crushed, 11
- Aconites confined to mountain tracts from Afghanistan to Burma, 10, 11
- Adoption of a dancing-girl, 168, 169
- Adulterous wife, nose of, cut off, 43
- Agave or maguey, Pulque, a drink made from the sap of the, 63n³
- Air, dragons pollute the, 30
- polluted by girl's poisonous breath, 24
- Air-tight armour, men in, 30
- Alkaloids of the areca-nut, 290, 291
- Alleged discovery of the *Secretum Secretorum* by Yahya ibn Baṭrīq (John son of Patricius), 19
- Ally of Chandragupta, Parvataka, a former, 16, 17
- Almond shell charcoal mixed with salt used for cleaning teeth, 294
- Alms distributed at *basiri* dedication ceremony, 161
- Aloes-wood, lign-aloes, Eagle-wood, etc., *Aquilaria agallocha*, 192n², 193n
- Amorous bite, 36, 36n³
- Anglo-Indian *patn*, from *pān*, betel-leaf, 188, 239
- Anglo-Norman text of the *Secretum Secretorum* by P. D'Abernum of Fetcham, 20n², 3
- Animals, garlic juice and human saliva dangerous to poisonous, 27
- Anti-aphrodisiac, camphor said to be an, 197
- Anti-poisonous compounds (*agadas*), 4
- drugs smeared on drums, 4
- Antidote suddenly applied kills poison-daniel, 28
- Antiquity of syphilis in Central America, 61
- Aphrodisiac, opium as an, 32
- Aphrodisiacal properties of betel, 198, 216, 217, 222, 226, 298, 298n²
- Appliances of betel-chewing, 203-208
- Architects of the temples at Luxor and Thebes, 94
- Area covered by the custom of betel-chewing, 202, 203
- Areca, probably from Canarese *adake*, *adike*, and Malayālam *adukka*, *adehka*, 188
- is stupefying and intoxicating (Garcia da Orta), 192
- Areca-nut, the—*pāga*, 201
- , Skr. *pāga-phalam* and *gucāka*, 188
- , alkaloids of the, 290, 291
- , in Arabic: *faufal*, *faufel*, *fāfal*, *foufal*, etc., 33, 188, 189, 191, 216
- in Assam *koyi*, 253
- , in Baluchistān and Persian, *pōpal*, 188
- in boiling water used for trial by ordeal (Bonthuks), 245
- , called *chevole* by Varthema, i.e. the Arabic *faufal*, etc., q.v., 31
- called *avelana India* or *avelā da India* by the Portuguese, 219
- and catechu tannins tightening to the gums, 294, 295
- , chemistry of the, 291
- chewing used to compute time and distance, 254
- cutter, 203, 204, 205, 246, 269, 271
- in Eastern New Guinea, *Dany* or *cha*, 283
- and its husk, first-known illustration of the (Clusius), 199
- (*haura*) and betel leaf (*pita*) in Tikopia, 288
- known in different Indian languages as *pāku*, *pōka-vahka*, *pucah*, *phophal*, etc., 188
- in Malaya, *pinang*, 260
- mixed with rain-water produces a red colour, 297
- in Mysore reddened by use of catechu, 297
- palm, *Areca catechu*, 33, 187, 224
- of the Philippines, *Bongu*, 271
- (*pin-lang*), 274
- pounder, 256, 258, 269, 294
- as protection against malaria, 275
- shells used to clean teeth by Chinese and half-caste women in the Philippines, 293
- spat into the vagina to assist in cases of difficult labour, 262
- , *supāri*, *supāri*, *supyāri*, *supāri*, *hopāri*, etc. See also *Pān-supāri*, 188, 201
- tooth-powder, 295
- used as an aphrodisiac by native of the Philippines, 298n²
- used for divorce among the Achinese (Achehnese), 264
- Areca-nuts, constituents of, 291

- Areca-nuts and betel leaves at *dāva-dāsa*'
 dedication, 160, 161, 167
 —, effects of the arecoline in, 291
 — exported to Fiji, 202
 — exported from Hainan, 276
 —, five, represent house-god of Kurumo
 caste, 249
 — flavoured and coloured by the use of
kossa, 194, 195
 — given to call council meeting among the
 Badhōya, 245
 — produce *kossa*, 194
 — prominent in Chamorro life (Guam), 279,
 280
 — in Southern China, 274
 —, tannin causes stringency in, 291
 Areca-palm, *Areca catechu*, 33, 187, 224
 — and betel-vine grown in the suburbs of
 Bangkok, 256, 257
 — conservatory likened to a cathedral, 239
 — grown throughout Siam, 256
 Arecaidine (or arecaine), alkaloid of the
 areca-nut, 291
 Arecoline, alkaloid of the areca-nut, 291
 Arm of corpse used to aid escape, 80
 Armour, men in air-tight, 30
 Arrow poisons, 10, 10n²
 — used in *tāli*-tying ceremony, mimic, 246
 Arrows of Kāma, the five, 201n²
 Arsenic and corrosive sublimate put in
 springs and provisions, 11
 — powder used for poisoning in coffee, 7
 —, shirt soaked in, 10
 —, white, mixed with lime, 34
 Articles and clothing containing poison, 8-10
 Artificial language spoken when search is
 made for camphor, 196
 Ascetic, thief disguised as a Pāsūpata, 76
 Ascetics, opium welcomed by, 35
 Ashes of *Datura*, *Alca-harus*, etc., used to
 purify poisoned water, 4
 Assassins sent to the enemy's camp,
 nocturnal, 3
 Asses and wine, trick with the, 79
 "Assumption of the bodice," *angiyō*, 139
 Astringency in areca-nuts due to tannin, 291
 Athletic feats of dancing-girls—*tterria coo-
 tho*, 156

 Baby girl put in huge snake's egg and
 brought up by snakes, 25
 Bad breath hidden by use of camphor, 197
 Ball at the end of the betel-bag handle,
ēgedi hōra, 205
 Balls of catechu produced by the Kudubi
 caste, 248, 249
 — of *rasa*, or cutch extract, hardened by
 use of wood-ash, 249
 Bamboos bent in growth for use as *palankeen*
 poles, 232, 232n¹
 Band, string or tape used to hold up drawers
 or trousers in India, etc., 157
 Bank Thief, The, 124, 125
 Barber of the Chāliyan caste, Pothuvan, 246
 Barrier founded by magic circle, 26
 Basilisk, 37
 "Basin of areca-nut," *kan mah*, i.e. a
 Siamese wedding, 257
 Basket, *gopālam* or begging, 161
 Bathing in the healing spring of mercury, 56
 Beads in Tibetan and Burmese rosaries
 usually number to 8, 142n¹
 Beard, veneration of the, 86
 — worn by Pharaoh, false, 86
 Beards shown on Egyptian monuments, 86
 Bearded royalty in Babylon and Assyria, 86
 "Bearer of the Betel-bag, The," 209
 Beauties of women, the five, 201n²
 Beautiful maiden fed on poison, 22
 Begging basket, *gopālam*, 161
 Belief in the poisonous look of snakes, 29
 Bending of the growing bamboo for
palankeen, 232, 232n¹
 Betel, the present English form of the word,
 formerly, *betola*, *betle*, *bettele*, etc., 188,
 188n¹
 — as an aphrodisiac, 198, 216, 217, 222, 226,
 298, 298n²
 "Betel-bag, The Bearer of the," 209
 Betel-bags in Celebes, 271
 — described by Coomaraswamy, 205-206
 —, patterns embroidered on, 206
 Betel-basket in the Pelew Is., 278
 — worn by the Land Dyak, 208
 Betel, being of good augury, must not be
 used by widows, 245, 253
 — at betrothals and marriages in Sarawak,
 267, 268
 Betel-box and -basket, various names for
 Malayan, 206, 207
 — of gold encrusted with sapphires and
 rubies, 207
 Betel-boxes, Burmese, 255n⁵
 — with pyramidal tops belonging to the King
 of Siam, 257
 — in Tonquin, 273
 — and -trays in Malaya, 206, 207
 Betel-carrier (*Betelero*) of Arakan, 207
 Betel "Chew," the—*Pān-supārī*, 188, 244,
 247, 252, 254, 255
 —, ceremonial, used as a sign of *congé*,
 196, 224
 — includes camphor as an ingredient,
 192, 195, 196, 216
 — offered to demon of river when about
 to shoot rapids, 261
 — often synonymous with our "tip," 252
 —, pearl ashes used in, 211
 —, poison conveyed in a, 33, 228, 271
 —, poisoned, given to Nazerkan by
 Shāhjahān, 228
 — thrown or spat in face as insult, 33, 214
 — wrapped in gold leaf, 196
 Betel-chewers, "tooth-stone," a crust on the
 teeth of, 291
 — in Travancore, oral cancer among, 298
 Betel-chewing in Annam, 256
 —, appliances of, 203-208
 —, area covered by the custom of, 202, 203

- Betel-chewing in Assam, 253, 254
 —, bad effects to the teeth due to, 255, 266
 — in Bali, 293
 —, beneficial effect of, on the teeth, 213, 216, 219, 226
 — in Borneo, 266–269
 — in Burma, 255, 256
 —, calcified teeth due to, 292
 —, camphor used in, 192, 193, 195, 196, 214
 — in the Carolines, 278, 279
 —, *Chaux estinte*, slaked lime used in, 215, 227, 263
 — in the City of Cail, in the Tinnevelly District of Madras, 212, 214
 — customs in Celebes, 269, 270
 — described by Marco Polo, 213, 214
 —, different colours of saliva in, 297
 — among the Dusun peoples of British North Borneo, 268, 269
 — in Eastern New Guinea, or Papua, 282–286
 —, effects of, 289–298
 —, effects of, on Niccolao Manucci, 238
 —, erotic desires occasionally aroused by, 198, 216, 217, 222, 226, 298, 298n²
 —, essays at the Colonial Museum at Haarlem on, 289, 289n¹
 —, etymological evidence connected with, 187–189
 —, gambier used in, 34, 194, 259, 261, 264, 265, 268, 269
 —, Garcia de Orta on, 189–199
 —, Idriai on, 193, 211, 213
 — in India, beginning of, 209
 — in India prior to A.D. 1800, 209–229, 238–244
 — ingredients sold on street-stalls in Southern China, 277
 — in Java, 266
 — in Lar (Gujarāt, etc.), 212, 213
 —, lime (*chūdm*) used in, 188, 211, 214, 254, 255, 268, 269, 271, 272
 —, lime the chief factor in turning saliva red in, 297
 —, Malay criminal uses poison in, 33
 — in the Malay Peninsula, 259–262
 — in the Maldives, 225–227
 —, Marco Polo describes, 213–215
 — — on the effects on the teeth and the digestion of, 213
 — in the Marianas, 279–281
 — in Mekeo, 284, 285
 — in Melanesia, 281–288
 — in Micronesia, 277–281
 — in Northern and Central India, 240–244
 — often turns the teeth black, 217, 220, 255, 261, 272, 292, 293
 —, original home of, 202, 203
 — in the Philippine Islands, 271–273
 —, pleasant odour and after-effects caused by, 216, 226, 238, 290
 —, pounded mussel- or oyster-shells used in, 32, 33, 192, 215
 — referred to in the Jain scriptures, 209
 — referred to in Pali works, 209
 Betel-chewing, requisites shown in de Bry's illustrations, 207
 —, saliva turned red by, 216, 220, 221, 226, 238, 249, 269
 —, similarity of effects of smoking tobacco and, 291
 — in the Solomon Islands, 286, 287
 — in Southern China, 273–277
 — in Southern India, 244–252
 —, spitting out of first juice caused by, 192, 221
 — in Sumatra, 262–265
 —, supplemental bibliography on, 299, 300
 — in Yap, 278, 279
 — in Zanzibar and Pemba, 202, 202n¹
 Betel described in the Sanskrit medical works of the first century A.D., 209
 — first appears in Buddhist and Hindu literature in the fourth century A.D., 210
 Betel-growing caste—Barā'i (Baraiyā, Bārui), 240–244
 Betel-juice against the teeth, squeezing of, 256, 290
 —, on public and private buildings, disgusting habit of spitting, 290
 "Betel juice reader" of Yap, 279
 Betel-leaf of accepted Malayan suitor *sirih māmīrang*, 260
 — in Arabic, *tambōl*, 188
 — at Malay marriages, 260, 261
 — offered by Malayan suitor, *sirih bērchakap*, 260
 —, *pān*, the Anglo-Indian *pāten*, 187, 188
 —, —, Deccani, 188
 —, —, *nāgur-vel*, Gujarati, 188
 —, *Tambōl*, *tambūl* in Persian, 188
 —, *tāmbūl*, *tambur*, *tambul*, etc., 187, 188, 189, 215
 —, thumb nail left long to remove veins from, 192, 221
 —, various words in different Indian languages for, 188
 —, *vidē-cha pān*, Marathi, 188
 — has volatile oil containing phenol, 298
 Betel leaves and areca-nuts at *dēva-dāsī* dedication, 167
 —, areca-nuts and *lunkum* (red powder) distributed by dancing-girls, 144
 —, etc., at *havi* dedication ceremony, 160, 161
 "Betel, leaves of the," *Nāgavallī*, 188
 Betel leaves preserved in honey, 211
 — used as a condiment in Yunnan, 276
 — of various kinds, 224, 225
 — from Yemen, 211
 — at Malay marriages, 260, 261
 — at marriage ceremonies, use of, 246, 250, 251, 252, 260, 261
 — mentioned in the *Avadāna Mālā*, but not in the earlier *Avadāna Sātaka*, 209
 — by Hsuan-tsang, 210
 — not mentioned in the *Mahābhārata* or *Rāmāyaṇa*, 209
 — in the *Mahāvagga* or *Chullavagga*, 209

- Betel-nut and betel-nut palm, incorrect references for areca-nut, etc., 187
- Betel offerings at bethrothal and other ceremonies at Kuala Pilah (Negri Sembilan), 262
- Betel-phenol isomeric with eugenol, 298
- Betel as a pledge of courtesy, 261
- Betel-selling caste—the Tamboli (Tamoli, Tamdi), 240
- Betel and *siri* distributed at Chinese funerals, 276
- "Betel smell," 291
- Betel, *Tāmbūla*, the Sanskrit for, 188
- thrown or spat in a person's face by way of insult, 33, 214
- used in all important ceremonies in the life of a Brāhman, 245, 246, 246n¹
- as a valentine, 261
- Betel-vine, *Piper betle*, Linn (*Chavica betle*, Miq.), leaves of the—known as *pān* or *tāmbūli*, 187, 188, 242, 260
- , Kodikkāl-veḷḷiḷḷan, cultivators of the, 247
- in South China, Szechuan is northern limit of, 276
- Betel wrongly identified with *folio indo*, 198
- Bibliographies on venereal disease, 44n¹
- Bibliography on betel-chewing, supplemental, 299, 300
- on Hammurabi in *Cambridge Ancient History*, 173n²
- of the MSS. of the *Secretum Secretorum*, 19n²
- of works of Iwan Bloch, 45n¹
- Bile of the green tree snake, green water-frog and jungle crow used as poison, 33, 34
- of a Kapila (brown) cow, 4
- Birth of Gautama, number of Brāhmanas at (to8), 142n¹
- Bite, Amorous, 36, 36n¹
- of poison-darnsel, fatal, 36, 36n¹
- Black teeth caused by betel-chewing—often considered beautiful, 217, 220, 255, 261, 272, 292, 293
- Blackening of teeth by lacquers, 292, 293
- "Blackening of the teeth," *miss rite*, 139, 144
- Blanket, *Cambly* or country-made, 160
- Blood becomes magically toxic at times of sexual intercourse, 43
- , red saliva caused by betel-chewing mistaken for blood, 296
- Blue eyes (Arabic, *azrak*), 29, 30
- Bodice or short jacket—*cholee* or *choli*, 154, 154n¹
- Bodies, maidens with serpents in their, 38
- of vanquished chiefs hung on the walls of Thebes and Napata by Amen-hotep II, 86
- Bodily powers of endurance of dancing-girls, 156
- Body hung up in piazza, 111
- "Body marks," 36n¹
- Body of thief hung from wall, or outside city gate, 79, 81, 120, 126
- removed from wall by trick, 79, 121
- without a head, 79
- Boilers used in the preparation of cutch, 248
- Bones of Ancient Egyptian mummies found to show no traces of syphilis, 60
- found in North and South America, syphilitic, 61
- and skulls claimed to be syphilitic, survey of all, 60, 61
- thrown in the Ganges, 77, 82, 126
- Book, the story of the poisoned, 8
- Boundary of Persia at one time, the Beis, 13
- "Box of the weeping dragon," *puan naga taru*, one of the gold Perak betel-boxes, 207
- Branding of *baviti* with emblems of Vishnu, 161
- of *baviti* girl with emblems of Vishnu, 161, 161n¹
- Brandy, poisoned, given to soldiers, 11
- Breaking through walls and digging tunnels, Indian method of thieving, 75, 75n¹
- Breasts of Maabar temple girls very firm and prominent, 148
- Breath, bad, hidden by use of camphor, 197
- of poison-nourished girl pollutes the air, 24
- , the poisonous, 23, 24, 30-34
- Breeches taken off person by trickery, 118, 123
- Bridegroom represented by a dagger, 141, 143
- by *dāsī* in male attire, 168
- by a drum, 162
- by an idol of Kriahoa, 143
- by mask of god, 145
- by a sword (with a lemon or lime on its point), 161, 163
- Bridegrooms die in the marriage chamber, 40
- Bride-price in Sarawak, *harta*, 267
- Brides of the god—*entu* and *naṭitu*, 173, 174
- Brothel, *olepa*, 86
- , daughter of king placed in, 80, 86, 87
- Brother, or son, cuts off trapped thief's head, 78, 81, 92, 119, 126
- Brown (Kapila) cow, bile of a, 4
- Builders, twins as, 93, 94
- Bull god and lion goddess worshipped by the Hittites, 180
- Burglar in Greek is *τορυφύτης*, i.e. "the man who digs through the wall," 75n¹
- Burnt stone lime in Siam, Turmeric root used to powder and colour, 259
- Cake used at Siamese wedding, *kanom-chen*, 257
- Cakes used at Kallan menstrual ceremony, 247
- Calcified teeth due to betel-chewing, 292
- Calcium carbonate forming a crust on teeth of betel-chewers, 291, 292
- Camel-litter, the *musaffah* or *haml musaffah*, 230
- Camel-litters used by pilgrims to Mecca, 230
- Camphor, *chandra-dharma*, 200

- Camphor, *karpūra*, also vernacular *kāpūr*, *kappin*, etc., 200
 — as an ingredient of a betel "chew," 192, 193, 195, 196, 214
 "Camphor of Borneo," 195
 Camphor burned at Paraiyan marriage ceremonies, 251
 —, cooling properties of, 200
 — crystals, magical search for, 196
 — customs of the Bataks, 196
 —, fantastic account by Ibn Batūta on, 196
 —, islands and lands of, 195
 — language, curious, 196
 "Camphor-produced"—*Karpūrasambhava*, 195
 Camphor said to be an anti-aphrodisiac, 197
 — spirit summoned by flute-playing, 196
 Camphor-tree, Sumatran, *gābū* or *gāmbū*, 196, 200
 Camphor-trees in Sumatra, 196
 Camphor used against bad breath, 197
 Cancer among betel-chewers in Travancore, oral, 298
 Cane, or wand, carried by *basīs*, 161
 Car Festival at Puri, 141
 Caravan traders give small-pox to American Indian tribes, 11
 Cardamom, *ilāchi*, 201
 Cardamoms and cloves found in Javanese *siri*-boxes, 266
 Carvers of eyes of images, the Kammālan caste of Tamil, 247
 Cassia leaves chewed by certain Malayan tribes as substitute for betel, 259
 Caste of dancers, singers and prostitutes, *Tatāij*, 139
 — of watchmen and thieves, Dandāsi, 246
 Castes connected with betel—the Barā'i, and the Tamboli, 240
 — of Southern India, *Sūdra*, 170
 Castrated *Gallī*, 180
 Castration during intercourse, fear of, 36n¹, 43
 —, symbolic, 41
 Catching thief with cask of molasses, 119
 Catē, i.e. catechu or cutch, 192, 194, 195, 221
 Catechin contained in *kath*, 194
 — in cutch or catechu turns saliva red if lime is added, 297
 Catechism by St. Xavier, first work printed in India (1557), 189n²
 "Catechu," in Oxford English Dictionary, 194
 Catechu and areca-nut tannins tightening to the gums, 294, 295
 —, the *cacho* of Duarte Barbosa, 194
 —, extract of—Cutch—Hind., *kāt*, *kath*; Sans. *khadira*, 201
 — or cutch in its purest form is known as *kath*, 194
 — — strong in catechu-tannic acid is best for dyeing, 194
 —, *hachu* in Malay, *hāchu* in Canarese and *kāsu* in Tamil, 194
 — obtained by the Kudubi caste, 247-249
 Catechu produced from areca-nuts called *kossa*, 194
 — from the *Uncaria gambir*, 194
 — used to redden areca-nuts in Mysore, 297
 Cathedral taken as a simile of an areca-palm conservatory, 239
 Ceremonial "chew" used as a sign of *congé*, 196, 224
 Ceremony, puberty (*hamm*) of the *basīs* girls, 161
 Chain carved out of an areca-nut at Malay betrothal, 260
 Chair-litter, the *serion*, *terrian*, *sirian*, *cerion*, *cirian*, etc., a kind of, 234, 235
 Chambers in Egyptian buildings hidden by movable stones, 88-90
 Characteristics of betel juice spitter betrayed to expert "reader" in Yap, 279
 Charms against diseases in the *Atharva-veda*, 65
 Checks of sentinels shaved by way of insult, 79
 Chemical laboratories of the Wellcome Research Institution, 297
 Chemistry of the areca-nut, 290, 291
 Chemists' experiments on the areca-nut and its alkaloids, 290
 Chess alluded to in the *Secretum Secretorum*, 21
 "Chew," *pān-supārī*, the betel, 188, 244, 247, 252, 254, 255
 —, ceremonial, used as a sign of *congé*, 196, 224
 — includes camphor as an ingredient, 192, 195, 196, 216
 — offered to demon of river when about to shoot rapids, 261
 — often synonymous with "tip," 252
 —, pearl ashes used in, 211
 —, poison conveyed in a betel, 33, 228, 271
 —, poisoned betel, given to Nazerkan by Shāhjahān, 228
 — of betel thrown or spat in face as insult, 33, 214
 — wrapped in gold leaf, 196
 Chewing. See under Betel-chewing.
 — gum ousting betel among the young Chamorro (Guam), 281
 Child brought up on poison to kill Roman Emperor, 67
 — urinates on real father, 127n¹
 China root as a cure for syphilis, 57, 58
 —, *Smilax china*, Linn. 57
 Chips of *Acacia catechu* (*chakkai*), 195, 247, 248
 —, *Chakkai* of *Acacia catechu* boiled to produce cutch, 195, 247, 248
 Chloride of mercury used to poison wells, 12
 Cholera, effects of arsenic poisoning resemble those of, 7
 Choline, alkaloid of the areca-nut, 291
 — contained in the areca-nut, 291
 Cinnamon of Calicut, *checcam*, 193
 Circle drawn round sick person by sorcerer of the Tanda Pulaiyan, 251

- Circle of human saliva, 27
 — made of *husarra* (flour), 26
 —, the magic, 26, 27
 —, magic, of dittany juice, 26
 —, snakes unable to escape from magic, 26
 — traced with young hazel branch, 27
 City of al-Barrāqa, the white, 195
 — of Cail, betel-chewing in the, 212, 214
 Classical versions of the tale of Rhampsinus, 91-97
 Clearing the road at Chinese funerals by offering betel "chew," 275, 276
 Clitoridectomy not unknown in India, 43
 Cloth hammock slung on a bamboo pole—the *dandy*, 234
 Clothes left for enemy to find, diseased, 3, 11
 Clothing and objects containing poison, 8-10
 Clove, leaves of "chew" tied with silk thread or fastened by a, 202n¹, 225, 240
 — used to fasten "chew" in Zanzibar, 202n³
 Cloves, *Lavanga*, the *cravo* of Garcia da Orta, 190n¹, 191n, 201, 218, 219, 244
 Clove-tree, the, *Caryophyllus aromaticus*, Linn; *Eugenia aromatica*, Kuntze, 190n¹, 201
 Clove-trees of Bachian (Pacham), island in the Moluccas, 218
 Cobra in India, dread of the, 68
 — regarded as the phallus, 44
 —, reverence paid to the, 68
 — sting, a clue to the poison-damsel myth, 68
 Coconut baller, *chippu*; used in boiling chips, *chakkai*, in making cutch, 248
 — juice, betel-leaf tips floating in, to foretell luck of new house, 247
 — represents deceased husband's spirit, 243
 — rolled to and fro in marriage ceremony, 168
 — and sugar offered to god by *bhādrin* girl, 145, 162
 Coconuts at *basiti* dedication ceremony, 160, 161, 162
 — broken before preparing cutch, 247
 Code of Hammurabi, 172-176
 Coffee, unusual method of poisoning by, 7
 Coin, the *pagoda* a gold (*varāha* or *hūn*), 154, 154n¹
 Colonial Museum at Haarlem—papers on betel-chewing, 289, 289n¹
 Colours of flowers, the five, 201n²
 Communications from Aristotle to Alexander, *Secretum Secretorum*, a collection of, 18
 Comparison of incidents of the thief tale from Herodotus and *Ali Baba*, 107-109
 Compounds, anti-poisonous (Agadas), 4
 Concealed entrance to the Great Pyramid, 88
 Concubine of the gods, *Zikru*, "vowed woman," 174
 Concubine's neck rubbed with poison, 28
 Condemnation of the use of poison by writers on military law, 5
 Congi, ceremonial betel "chew" used as a sign of, 196, 224
 Connection between snakes and intercourse, 44
 Consecrated women of Babylon, 174
 Conservatory, Cathedral taken as a simile of an areca-palm, 239
 — in which *pān* is grown treated with reverence, 239, 240, 242
 Constituents of areca-nuts, 291
 Constitution of the human body, theory of the, 193, 194
 Containers in Malay betel-boxes, various kinds of, 207
 Continence before feast, 63
 Cooling properties of camphor, 200
 Coral rock burned to obtain lime for "chew" in the Marianas, 279, 280
 Corpse of thief burnt by trick, 77, 82
 — — — removed from wall by trick, 79, 121
 — used to aid escape, arm of, 80
 Correspondence between Alexander and Aristotle, 14, 18
 — in the *Lancet* re syphilis and yaws, 45n³
 Corrosive sublimate and arsenic in springs and provisions, 11
 Costume of the *karbi* caste of dancing-girl, 142, 143
 — of sacred prostitutes at Tanjore, 151
 Council meeting among the Badhōyis called by present of areca-nuts, 245
 —, originally consisting of five people—*panchdyat*, 163, 164
 — of Ten, official use of poisons by the Venetian, 7n¹
 Counsellor with red hair to be avoided, 29
 Court of Chandragupta, the, 14-16, 133
 Courtesans of Vijayanagar, 145
 Courtesy, betel as a pledge of, 261
 Covered litter. See further under Palankeen
 "Covering of the head," *sir dhanhāi*, 139
 Cow, bile of a *Kapila* (brown), 4
 —, the five products of the, 162, 201n²
 Cowry, *Cypraea moneta*, 251
 "Crab and candle" incident, 122, 123
 Cramps occasionally caused by arecoline in areca-nuts, 291
 Creation of the Aztec Sun-god, 62
 Creations, Aztec legends of, 62
 Crocodile God, Sobek, 179
 Crushed aconite, wells poisoned with, 11
 Crust on the teeth of betel-chewers called "tooth-stone," 291
 Crypts in Egyptian temples, secret, 89, 90
 — in the Temple of Hathor at Dendera, twelve, 89
 Crystals of camphor found by magic, 196
 Cult of the great mother-goddess in Western Asia, 180
 — of Ishtar, sacred prostitution in the, 176, 178
 Cultivation of *pān*, 241, 242
 Cup of the Arabs, *finjāl* or *finjān*, the handleless, 7
 Cure of syphilis by guaiacum, 50, 52, 54, 55, 56, 57, 58, 59
 Cures for syphilis by Ruiz Diaz de Isla, 54
 Curved pole of *palankeen* artificially made in growth, 232, 232n¹
 Cutch called *rusa*, variety of, 195

- Cutch and gambier closely connected, 194
 —, the extract from the *Acacia catechu*, 194, 201
 — as prepared in South Canara (Kanara), 297
 — by the Kudubi caste, preparation of, 247-249
 — or catechu contains catechin which turns saliva red when lime is added, 297
 —, tobacco and spices in betel "chew" among Shans, 255
 — used for betel-chewing in its purest form, known as *kath*, 194
 Cutch-tree or Khair-tree, 194
 Cutter for areca-nuts, 203, 204, 205, 246, 269, 271
 Cutting off nose of adulterous wife, 43
 Cycle of tales of Sami-Khamois, Egyptian, 84
 Cymbals, Indian made of two metallic cups, *majira*, 143
- Dagger, *Bogam jân* married to a, 143, 144
 —, *Kasbi* dancing-girl married to a, 141
 Damasked silk used for pyjamas, 158
 Dancing-dress and musical instruments worshipped, 143, 144
 Dancing-girl, adoption of a, 168
 —, costume of the *Kasbi* caste of, 142, 143
 Dancing-girls, bodily powers of endurance of, 156
 — in Guzerât, 140
 — as poison-damself, 3
 —, Tansen, the patron-saint of, 137
 Dates and pieces of turmeric, five, used in *bavri* dedication ceremony, 160, 161
 Daughter of Cheops prostituted, 87
 — of doctor of Perugia used to poison king, 67
 — of king placed in brothel, 80, 86, 87
 — of queen nourished on poison, 23
 — of Shâhjahân, Begum-Saheb, Jahânâra, favourite, 228
 Deadly glance of snakes, 29
 — sting of the cobra and krait, 68
 Death ceremonies among the Malasar, 249
 — of King Ladislaus of Naples, legend of the strange, 67
 — — Wenceslaus II, legend of the strange, 67
 — very occasionally caused by effects of arecoline in areca-nuts, 291
 — simultaneous with twins, 93
 Deaths from snake-bite in India, statistics of, 68, 69
 — from sting of Russell's viper, 68
 Dedication rites of *bavri*, 159-163
 Defeat of the Gandaridæ, Alexander prevented from the, 13
 Defloration of girls, mechanical, 36n⁴
 Degeneration of Râjpûts partly due to opium, 35
 Demotic Papyri from the temple of Sobek, 179
- Dentata, Vagina motif, 41-44
 Derivation of *deling* and *serriou* by C. O. Blagden, 233, 235
 Descent of Rhampsinitus alive into Hades, 84
 Description of the *andor* by Castanheda and Gaspar Corrêa, 234
 — of the *seriou* or chair-litter by Fray Sebastien Manrique, 234
 Destruction of Hindu temples in Northern India by Mohammedans, 137
 Dice played by Hermes (Thoth) and the moon, 84
 — — for the magic book of Thoth, 84
 Dice-playing scene on the Fortified Gate at Medinet Habu, 84, 85
 Differences between syphilis and yaws, 45
 Different colours of saliva in betel-chewing, 297
 — schools of thought on the origin of syphilis, 44, 45
 Difficult labour aided by areca-nut spat into the vagina, 262
 Digestible snake venom, 69
 Digestion, effects of betel-chewing on the, 213
 Digging through houses, *Job* xxiv. 16, 75n¹
 — tunnels and breaking through walls— Indian method of thieving, 75, 75n¹, 81
 Diplomatic missions of Peter Martyr to Bohemia and Egypt, 49
 Discoverer of the *Secretum Secretorum*, Yahya ibn Batrîq, the alleged, 19
 Discus, *Chakra*, an emblem of Vishnu, 161, 161n¹, 162
 Disease, Bibliographies on venereal, 44n³
 — in connection with the poison-damself tales, venereal, 44, 66
 — regarded as magic poisoning in the Middle Ages, venereal, 67
 —, venereal, 44-68
 — which struck Europe about 1500, inconsistency of the current accounts of the, 45
 —, yaws, a non-venereal children's, 45
 Diseased clothes left in woods for natives to find, 3, 11
 — troops in army of Charles VIII of France infect Naples, 47
 Disguise of thief as a Pâsupata ascetic, 76
 Disgusting habit of spitting betel-juice on public and private buildings, 290
 Dittany in the works of classical authors, 26n¹
 — juice, circle traced round snake with, 26
 Diversion on the Palankeen, 229-238
 Dividing-line between betel-chewing and *kava*-drinking, 202
 Divorce (*talut*) among the Achinese (Achehnese) obtained by use of areca-nut, 264
 Doctor of Padua, a certain, 28
 — of Perugia bribed to kill king by poisoned daughter, 67
 Doe rubbed with poison and sugar, 28, 29
 Dog god, Xolotl, 62

- Dog of Tobias, 39
 Doge and the cunning thief, the, 111-117
 Doge's daughter sleeps in room with twenty-five men, 115, 116
 Door of the South Pyramid of Dahshûr, 88
Double of the god Khonsu, 39, 40
 — pupils in one eye, glance is injurious from women who have, 38
 Dragon, medieval legend of a, 27
 Dragons pollute the air, 30
 Draughts, game of, depicted on reliefs in private Egyptian tombs, 85
 —, played between the king and Isis, 85
 Drawers, *dislik* 'knee things,' Turkish linen. See also under *Pyjamas*, 157
 — of gold brocade, 151
 —, *shaltar* or *jalear*, long Turkish, 157
 —, string, termed *pyjamas*, 154
 Dread of cobra in India, 68
 — of twins, 93
 Dreams and legends of the Vagina Dentata, 41-44
 Dried cocoanuts, without shells, at *basici* dedication ceremony, 161
 Drink called pulque made from the agave or maguey, 63, 63n¹
 —, poison put into, 7
 Drum, bridegroom represented by a, 162
 — made of two half-bowls covered with goat-skin (*tabla*), 143
 Drums unseared with plasters of anti-poisonous drugs, 4
 Duck lives in poison, the Pontic, 31
 Dye used to discover culprit, 115, 116, 125
 Dyeing, catechu or cutch strong in catechutannic acids is best for, 194
 Eaglewood, Lign-aloes, Agallochum or Calambac, the fragrant diseased wood of the *Aquilaria agallocha*, 192n²
 Ear ornament called *kulappu*, 251
 Ear-pendants (*tôfu*), removal of the, 166
 Earliest medical book of India, the *Atharvaveda*, 64, 64n²
 Early history of opium, 34, 34n¹
 Earthenware pots, *madike*, used in the preparation of cutch, 248
 "Eat leaf, to," i.e. to chew betel, *mahan sirih* (Malay), 207
 Eating and drinking of opium, 34
 Effects of arecoline in areca-nuts, 291
 — of arsenic poisoning resemble those of cholera, 7
 — of betel-chewing and smoking tobacco, similarity of, 291
 — — — on the teeth, 213, 217, 220, 255, 261, 266, 272, 292, 293, 294, 295
 Egg, baby girl put in snake's, and brought up by snakes, 25
 Eggs of snakes as big as bushel baskets, 25
 Egg-shells or snail-shells used for lime in Assam, 253
 Eight-stage tower at Borsippa, 175
 Elephant *howdahs* and litters, 231, 231n¹
 Elephants of Porus, 13
 Emblem of the Saivite gods, the *linga*, 161n
 Emblems of royalty, the five, 201n²
 — of Upper and Lower Egypt, 85
 — of Vishnu, 161n¹
 Embrace, killing by poisonous, 22, 67
 Embroidery of betel-bags, 206
 Enclosure of Zeus Belus, sacred, 175
 Endurance of dancing-girls, bodily powers of 156
 Enforced temporary prostitution of Babylonian women, 175
 Epidemic of syphilis in Europe, 47
 Erotic desires occasionally aroused by betel-chewing, 198, 216, 217, 222, 226, 298, 298n²
 — writer of c. A.D. 450, Vātsyāyana, 36
 — significance of yellow, 160n²
 Erotics, the Science of, 133
 Escape achieved by use of arm of corpse, 80
 Essays on betel-chewing at the Colonial Museum at Haarlem, 289, 289n¹
 Essence, magical, or *sa*, 40
 Etheric oil in areca-nut causes agreeable smell in mouth, 291
 Etymological evidence connected with betel-chewing, 187-189
 Etymology of Rhampsinitus, Brugsch on the, 82
 Eugenol (from oil of cloves) isomeric with betel-phenol, 298
 Eunuchs, etc., hold shares in Tanjore temple, 147
 Evacuation of Gakdool, 12
 Evil eye possessed by women in Scythia, 29n³, 37, 38
 Exchange of betel—a binding oath, 252
 Execution of thief for entering apartment of princess, 75
 Exogamy, relic of the system of, 180
 Export of areca-nuts to Fiji, 202
 — — — from Hainan, 276
 Extract from the *Acacia catechu*, cutch, the, 247
 — of boiling *Acacia catechu* chips known as *rasa*, 195
 Eye of women with double pupils is injurious, 38
 Eyes of images, Karmājan caste of carvers of, 247
 —, women with precious stones in their, 37
 Falling in love with a thief, 75, 81
 False beard worn by Pharaoh, 86
 Fan held by prostitutes at the Court of Chandragupta, 133
 Fangs or teeth hidden in the vagina, 41
 Fasting, power that lies in, 27
 Fatal bite of the poison-damself, 36
 — look, the, 29-31
 — miscounting *motif*, 107, 107n¹
 Fear of castration during intercourse, 36n¹, 43
 Feast called Xochihuitl, continence observed before, 63

- Fed on poison, beautiful maiden, 22
 Female sex, the *nāmam*, sign of the, 160, 160n¹, 161n, 162
 Festal car, Hindu, 151
 Festival of Nāg-Panchmi, 243
 — of *Taravatira*, 250
 Fever—the "King of Diseases," 65
 Fiddle, Indian, *sāraṅgi*, 143
 Filing of the teeth considered beautiful, 292
 Firm flesh of temple girls in Maabar, 148
 First intercourse after marriage considered dangerous, 36
 — juice caused by betel-chewing, spitting out of, 192, 221, 290
 — known illustration of the areca-nut and its husk (Clusius), 199
 — mention of betel in Buddhist and Hindu literature is in the fourth century A.D., 210
 — of betel-chewing in India, 209
 — published drawing of the *Piper betle* leaf (Rumao), 199
 — work printed in India, a catechism by St. Xavier (1557), 189n²
 Five, a lucky number, 201
 —, a mystical number, 160n¹
 — areca-nuts represent house-god of Kurumo caste, 249
 — arrows of Kāma, beauties of women, colours of flowers, emblems of royalty, great sacrifices, jewels, etc., 201n¹
 "Five brothers," the five ingredients of a betel-"chew" in Sumatra, 202n¹, 265
 Five dates, cocoanuts, betel leaves, areca-nuts, etc., used at dedication of *basvīs*, 160, 161
 "Five flavours," *pañcasuṣāṇḍhikam*, 200
 "Five fruits, The," 199-202
 "Five" Gods of Mexico, 63
 Five leaves of trees, nectars, products of the cow, sacred flowers, trees of paradise, etc., 201n²
 — Pāṇḍava brothers, 243
 — products of the cow, 162, 201n²
 — senses of mankind, aspects of Śiva, divine foods, etc., etc., 160n¹
 — supplementary days in the Egyptian calendar, 84
 Fleas, plague-carrying, 12
 Flesh of Maabar temple girls is very firm, 148
 Floral head-dresses of the *harām* ladies at Medinet Habu, 85
 Flow of oil from woman's navel determines sex of child, 246, 247
 — of saliva caused by betel-chewing, 213
 Flowers, the five colours of, 201n²
 Flute-playing summons camphor spirit, 196
Fly-palangan, 237
 Fly-whisk made from yak's tail, *chovris* or *chovry*, 153n¹
 Food, water, grass, etc., poisoned, 3, 7, 11n¹
 Forehead of *basvīs* marked with *kunkum*, or red powder, 161
 Foreword to Vol. VIII of the *Ocean of Story*, W. R. Halliday, 107n²
 Fortified Gate at Medinet Habu, dice-playing scene on the, 84, 85
 —, H. H. Nelson on the, 84, 85, 179n²
 —, —, —, reliefs on the, 85, 179
 Four *pān* leaves—one *gandā* and twenty *gandās*—one *bra*, 242
 "Frame" story of the *Book of Sindibād*, 98
 Free pardon granted to master-thief, 80
 Fried wafers, *gājaka* (108 in number) eaten at pregnancy of *kasbi* girl, 142
 Funeral ceremonies of dancing-girls in Travancore, 168
 — proceedings in China, custom observed at, 275, 276
 Game of draughts between the king and Isis, 85
 — — — depicted on reliefs in private Egyptian tombs, 85
 Garden of poisonous plants, 28
 Garlic juice dangerous to poisonous animals, 27
 Gas attack by Germans at Langemarck, 12
 Girl only able to hiss like a snake, 25
 — rubbed with ointment of juice of aconite, 67
 Girl's poisonous breath pollutes the air, 24
 Glance from women who have double pupils in one eye is injurious, 38
 God of the day, Ollin, 62, 63
 —, the ithyphallic, Min, 179
 — of Pleasure, Macuilcochitl, 63
 —, self-dedications to Temple, 179
 —, Sobek the crocodile, 179
 — of Syphilis, Nanahuatzin the so-called, 62, 63, 64
 "God's Wife" at Medinet Habu, 178
 Goddess of Music, Sārasvatī, 143
 — of sexual love, 176
 — of Wealth, Lakṣmī, 244
 Gods with "five" in their names, 63
 Gold betel bowls in the Perak regalia, 207
 — casing used by Sumatra "great men" for their teeth, 292
 — coin, the *pagoda* (*varāha* or *hūn*), 154, 154n¹
 "Gold flower," *Chin hua*, the possible Chinese origin of *Camoca*, 159
 Gold leaf used to wrap up "chew," 196
 — *tālī*, silver bangle and two silver toe-rings used in dedication of *basvīs*, 160
 Golden betel-box encrusted with sapphires and rubies, 207
 — betel-carrier (*Betelero*) at Arakan, 207
 — betel set of the King of Siam, 257
 — napkin from Hades, Rhampsinitus brings, 84
 — pitcher held by prostitutes at the Court of Chandragupta, 133
 Gourd lime-boxes, 270n², 284, 285
 Grass, the "Cuisse" or *khat-khas* used for covering litters, 231
 —, food, fuel and water poisoned, 3
 "Grateful Dead" *mutif*, 41

- Great Pyramid, concealed entrance to the, 88
 — sacrifices, the five, 201n²
 Green tree-snake (*Ular puchok*), 33, 34
 — water-frog, 34
 — saliva produced by the combination of
 betel-leaf and areca-nut, 296
 Grove at Lebadea, 92
 Guaiacum or *Lignum vitae*, 50, 52, 55
 — as cure for syphilis, 50, 52, 54, 55, 56, 57,
 58, 59
 Guaiac treatment brought from West Indies
 to Spain, 55
 Guards stupefied by drugged sweetmeats or
 wine, 77, 114
 Gums tightened by tannins of areca-nut and
 catechu, 294, 295
 Guvacine, alkaloid of the areca-nut, 291
- Hades, (Sheol), 177
 —, descent of Rhampsinitus alive into, 84
 —, playing dice in, 84
 —, Rhampsinitus brings golden napkin
 from, 84
 Hair of women substituted for their person,
 181
 Half a seer (Anjali-measure), 4
 Hammock-litter of cloth, the *dandy*, used in
 Himalayas, 234
 — known as the *deling*, *delingo* or *delingeg*,
 233
 — as the *nuncheel*, etc., 232, 233
 "Handmaids of the God," *Déca-déris*, 131
 Handsome-cab modelled on the sedan-chair,
 234
Harém ladies at Medinet Habu, 85
 Harim scenes at Medinet Habu, 179
 Harlots on the roof, 175
 Harpist, poisonous, tempts Alexander, 24
 Hazel branch, circle traced by young, 27
 Head, body without a, 79
 —, the speaking, 8
 — of trapped thief cut off by brother, or son,
 78, 81, 92, 119, 126
 Head-dress of lotus and papyrus, 85
 Health, rules for preserving, *Regimen
 Sanitatis*, chapters of the *Secretum
 Secretorum*, 19
 Heart-wood of the *Acacia catechu* yields
 tannin, 194
 Heavenly Twins, 93n¹, 94
 Hemp or *bhang*, Indian, 10
 Herb as a protection against a poison-darnel,
 24
 Hidden chambers in Egyptian buildings con-
 cealed by movable stones, 88-90
 "Hidden pocket," *hara payiya*, division of a
 betel-bag, 205
 High priest, or *guru*, 161
 — priests of the Bhatta caste, 142n¹
 Hissing like a snake, girl, 25
 Historical Section of the War Office, 11
 Home of the *Areca catechu* and *Piper betle*
 possibly the East Indian Archipelago, 203
 Honey, betel-leaves preserved in, 211
- "Honoured guest"—*pin-lang*, 276, 276n¹
 Horse sacrifice, great, 243
 Horns and dogs die by touch of poison-
 darnel, 25
 Hospital at Goa, 157
 House of Fugger in Augsburg, 52, 55
 House-god of Kurumo caste represented by
 five areca-nuts, 249
 "Huasiacum" or "Guaiacum," 52. See
 under Guaiacum
 Human saliva dangerous to poisonous
 animals, 27
 Hymen artificially broken, 36, 36n⁴
 Hymn addressed to the Sun-god by Horus
 and Set, 94
- Identification of Rhampsinitus with Ramesses
 III, 82-84
 Idol of Krishna, dancing-girl married to an,
 143
 Idols entertained and given food by temple
 girls, 147
 Ignorance of Alexander of the existence of
 the Ganges, probable, 13
 Illicit unions of Portuguese priests and
 Hindu women, possible, 144
 Illustrations of de Bry showing betel-
 chewing requisites, 207
 Immunity from cobra- or viper-venom, 69,
 69n¹
 Imperial Institute library, 299
 Incidents common to the tales of *Ali Baba*
 and Rhampsinitus, 107-109
 Inconsistency of the current accounts of the
 disease which struck Europe about 1500,
 Dr Charles Singer on the, 45
 Incunabula and manuscripts dealing with
 syphilis, 48, 48n¹
 Ingredients for betel-chewing sold on street-
 stalls in Southern China, 277
 — of a "chew" include camphor, 192, 195, 196
 Inigo López de Mendoza, Conde de
 Tendilla, 49
 Inoculation by poison, 31, 32
 — of snake-charmer, 69
 Insects, *India-Gopa*, 4
 Instituted Law of Nations, 5
 Insult by shaving cheeks of sentinels, 79,
 81
 — by throwing or spitting out betel "chew"
 in face, 33, 214
 Intercalary days of the Mayans, "Uayeb," 84
 International Law, Grotius' work the
 foundation of present day, 6
 Intercourse considered dangerous, sexual,
 36, 43
 — during fast offends the God, 63
 —, fear of castration during, 36n¹
 — of Nasamonian bride with all men guests,
 39
 —, poison by, 35-41
 Introduction of syphilis into Europe by
 Columbus' men, possible, 47
 — — — — India by the Portuguese, 47, 64

- Invaders of Northern India, Mohammedan, 131
- Inventory of Charles V (1380), 158
- of Marco Polo's goods, 158
- from Rheims cathedral (1622), 158
- Islands and lands of camphor, 195
- of Wak, 195
- iso-guvacine, alkaloid of the areca-nut, 291
- Ithyphallic God, Min, 179
- Jaggery, crude sugar, used at puberty ceremony, 245, 246, 251
- Jew, Garcia da Orta was a Spanish, 190n
- , Spanish, converted to Christianity, Johannes Hispaniensis or Hispanensis, 20
- Jewels, the five, 201n²
- Jug or vessel for water, *kalasam*, 162
- Juggernaut, corruption of Jagunnātha, "Lord of the World," 141
- Juice of aconite, girl rubbed with ointment of, 67
- of betel in a person's face, insult of spitting, 33
- — "chew" squeezed against the teeth, 256, 290
- of *Datura* mixed with sweetmeats, 76
- of garlic dangerous to poisonous animals, 27
- produced in chewing betel, red, 216, 220, 221, 226, 238, 249, 269, 272, 286, 296, 297, 298
- Jungle-crow, 34
- Killed by suddenly applied antidote, poison-damsel, 28
- Killing by their glance, snakes, 29
- with poisoned spittle, 32
- "King of Diseases"—fever, 65
- Kiss by poison-damsel causes death, 24
- Kissing the neck of favourite concubine, 28
- Krait, fatal sting of the, 68
- Krater found at Samos, fragments of a, 97
- presented by King Polyxenus to Odysseus, 96
- Lacquers used to turn teeth jet black, 292, 293
- Lands and Islands of Camphor, 195
- Language, artificial, spoken when search is made for camphor, 196
- Law of Nations, Instituted, 5
- , Natural, 5
- Laws of Nations, 5
- "Leaf called tambur," 214
- Leaf of the *Piper betle*, Linn, known as *pān* or *tāmbuli*, 187
- "Leaves of the betel," *Nāgavalli*, 188
- Leaves of "chew" tied with silk thread, or fastened by a clove, 225, 240
- Leaves of tree above Tansen's grave impart melody to the voice, 137
- of trees, the five, 102n²
- Left hand, the unclean, 273, 273n¹
- Legend of the death of King Ladislao of Naples, 67
- — — — — Wenceslaus II, 67
- of the poison-damsel in Europe, 23-29
- Legends, Alexandrian, 13, 14, 18, 19, 22
- Legs of courtesans painted to represent material of pyjamas, 158
- Lign-aloes, *Agallochum*, "Eaglewood," or Calambac, the fragrant diseased wood of the *Aquilaria agallocha*, 192n², 193n
- of Assam, Bhutan and Burma, 193n
- , Ibn Batuta on, 193n
- Light tenth of Aswin (*Āśvin*), i.e. October, 144, 144n¹
- Lime (fruit) or lemon on point of sword represents bridegroom, 161
- , prepared. *Chunām*, Hind. *chūnā*, Lat. *calcem*, Sans. *sudhā*, *Chīrva*, used in "chew," 33, 188, 201, 211, 214, 217n², 254, 255, 263, 271, 272, 277, 278, 286
- , often made from pounded shells, 32, 33, 188, 215, 217, 253
- added to the yellow of the root of *Morinda citrifolia* becomes red, 296
- in Assam (*shirā*, *īrānī*) used in a betel "chew," 253
- Lime-box (*killōjaya*), 203, 205, 208
- Lime-boxes made from gourds, 208
- Lime, the chief factor in turning saliva red in betel-chewing, 297
- of mussel- or oyster-shells, 32, 33, 192, 215, 217
- neutralises the hyper-acidity of the stomach, 291
- in Siam, Turmeric root used to powder and colour burnt stone, 259
- spatule, 203, 204, 206, 208, 259, 285, 285n²
- stick in the gourd, significance of the rattle of the, 285, 286
- Lobes of ears and crown of head of Malay child smeared with red betel juice, 262
- Look, The Fatal, 29-31
- of poisonous girl causes death, 24, 29
- Louvre, the—stele from a temple of Khonsu at Thebes, 39, 40, 40n¹
- Love charm of seed and blood, 9
- of a Princess for a thief, 75, 81
- Lucky number, five, 201, 201n²
- Maiden fed on poison, beautiful, 22
- Maidenhead (*Maydenhode*) taken by another than the husband, 37
- Maidens, deflorator of, 36, 36n⁴
- with serpents in their bodies, 38
- Markets of the Philippines—Parians, 272
- "Marking the culprit" motif, 106, 117, 125
- Marriage ceremonies, use of betel at, 246, 250, 251, 252

- Marriage chamber, successive bridegrooms die in the 40
 — stanza, *Mangalashtaka*, 143
 Marriages, betel at Malay, 260
 —, Indian to a dagger or idol, 141, 143, 144
 Mask of god acts as bridegroom to *bhātin* girl, 145
 Master of the temple prostitutes, *Baldor*, 151
 Master-builders, Agarnedes and Trophonius, the two—sons of Erginus, 91-97
 "Means of recognition," *motif*, 127n¹
 Medieval versions of the Tale of Rhampsinitus, 97-109
 Meeting of the Kotwal of Calicut with Vasco da Gama, 215, 234
 Men in air-tight armour, 30
 Mendicant caste of Vaishnavas, *Dāsuri*, 246
 Mendicants, Mur(a)li and Vāghe (or Wāghya) orders of, 146
 Menstrual blood, toxic character of, 43
 — customs among the Kallān caste, 247
 Mercury (*Sutāra*), 4
 — as remedy for syphilis, 54, 56, 59
 —, bathing in the healing spring of, 56
 "Messenger of certain death," 16
 Method of obtaining catechu by the Kudu-bis, 247-249
 Microbial warfare, 12
 Military law, writers on, condemn the use of poison, 5
 Mirrors, serpents stare themselves to death in, 30
 Miscounting *motif*, fatal, 107, 107n³
 Mistress of Francis I, "La belle Ferronnière," 68
 — of Ladislao innocently kills self and king by aconite ointment, 67
 — of Wenceslaus II kills him by poisonous embrace, 67
 Molasses, catching the thief with a cask of, 119
 Monk's-hood, or aconite, *g.v.*, 10, 11, 67
 Moon, dice played by Hermes (Thoth) and the, 84
 Mortar, pestle and, for crushing areca-nuts, 204, 256, 258, 266, 269, 270n²
 — and pestle used to pound areca-nuts among the Dusun peoples of Borneo, 269
 — — — — — in Siam, 256
 Moschus deer, 197
Motif of "fatal mis-counting," 107, 107n³
 — of "Grateful Dead," 41, 41n¹
 — of "marking the culprit," 106, 117, 125
 — of "means of recognition" or "paternity," 127n¹
 — of "Open Sesame!" 107, 107n³
 — of "paternity" or "means of recognition," 127n¹
 — of the Penis Aculeatus, 43, 43n¹
 — of poison-damsel originated in India, 70
 — of the Umbilicus Elongatus, 43n¹
 — of Vaginal Snakes, 43n¹
 —, "woman whose love is scorned," 98n¹
 Mouth, pleasant smell after betel-chewing in the, 290
 Movable stone built into treasury, 78, 92, 111
 — stones conceal Egyptian secret chambers, 88-90
 Music, the burial of, 138
 —, Sārasvati the Goddess of, 143
 Musical instruments and dancing-dresses worshipped, 143, 144
 Musicians, *nattuvams*, 164
 — of Coimbatore, *kaiholan*, 164, 165
 — of Madras, *mēlakkārans*, professional, 164
 Musk, the Portuguese *almuscar*, the *almisquere*, etc., of Garcia da Orta, 197
 Mussel- or oyster-shells used in betel-chewing, pounded, 32, 33, 215, 217, 220
 Musk, Marco Polo on, 197
 Muzzled, sheep have to be, because of poisonous aconite, 10
 Mystic wheel and flag of Vishnu, 141
 Mystical number, 108, 142, 142n¹
 Mythical ruler, Phageus, 13
 Nail of thumb left long to remove veins from betel leaf, 192, 221
 — — — smeared with arsenic powder, 7
 Naked, Marco Polo describes temple-girls as practically, 148
 Names given to various kinds of Malay betel boxes and baskets, 207
 — used in Central and South America for syphilis, 46
 Napkin from Hades, Rhampsinitus brings golden, 84
 Nations, Laws of, 5
 Nectars, the five, 201n²
 Neck of concubine rubbed with poison, 28
 Negroes employed in the mines of Hispaniola, 46
 Night-dress of Victorian days superseded by pyjamas, 157
 Nocturnal assassins hired to kill Chandragupta, 15
 — — sent to the enemy's camp, 3
 Nose cut off as punishment for adultery, 43
 Nose-ring removed after *misri* rite, 139
 Number of beads in Tibetan and Burmese rosaries (108), 142n¹
 — of Brāhmins at Gautama's birth (108), 142n¹
 —, five, a lucky, 201
 —, 108 a mystical, 142, 142n¹
 "Nut" or, more correctly, seed of the *Areca catechu* (areca-nut palm), 187
 Nutmeg, *Jatiphalā*, 201, 201n¹
 — tree, the, *Myristica fragrans*, 201n¹
 "Nuts of India," 190
 Oath, exchange of betel constitutes a binding, 252
 Objections to the Egyptian origin of the Tale of Rhampsinitus, 85-90
 Objects and clothing containing poison, 8-10
 Odour in mouth after betel-chewing, pleasant, 290

- Official use of poisons by the Venetian Council of Ten, 7n¹
- Oil bath at Paraiyan marriage ceremonies, 250
- in *hemu* (puberty) ceremony of the *basivi*, 161
- flowing from woman's navel determines sex of child, 246, 247
- and turmeric rubbed on girl's body before "marriage," 141
- Ointment of juice of aconite, girl rubbed with 67
- Opium introduced into China and India by Mohammedans, 34
- mentioned by Barbosa, 34
- partly responsible for degeneration of the Rājput, 35, 35n²
- spread from the Levant to Asia Minor, 34
- unknown in time of Somadeva, 35
- used for mental exaltation, 35
- for suicide by Indian women, 32
- welcomed by ascetics, 35
- Oracle at Delphi consulted by Erginus, 91
- of Trophonius, 91, 92
- Origin of sacred prostitution, theories as to the, 171, 172
- of syphilis, different schools of thought on the, 44, 45
- — — — —, uncertainty as to the, 47
- of the tale of *Ali Baba*, 105-107
- — — — — Rhampsinitus, "Cyreniac" theory of the, 96
- — — — —, Sir G. Maspero on the, 82, 86, 91
- — — — —, Minyan; suggested, 95
- Oyster- or mussel-shells used in betel-chewing, pounded, 32, 33, 192, 215, 217, 220
- Palace school at the Spanish court, 48, 49
- Palankeen, diversion on the, 229-238
- Palm, areca-nut, *Areca catechu*, 187
- Papers on betel-chewing—Colonial Museum at Haarlem, 289, 289n¹
- Papyri from the temple of Sobek, 179
- Papyrus and lotus head-dresses, 85
- Parasol-bearers, etc., hold shares in Tanjore temple, 147
- Pardon granted to master-thief, free, 80
- "Paternity" or "means of recognition" motif, 127n¹
- "Paternity Test," E. W. Voegelin *Diet. of Folklore, Mythology and Legend*, 127n¹
- Patron of dancing-girls and author of music—Ganeśa, 139, 140, 167
- saint of dancing-girls, Tansen, 137
- Patroness of betel cultivation worshipped, 240
- Pattern of pyjama silk painted direct on the skin, 158
- Patterns embroidered on betel-bags, 205, 206
- Peace between Heracles (Hercules) and Erginus, 91
- Pearl ashes used in "chew," 211
- Peninsular War, French poison wells in the, 12
- Penis *Aculeatus motif*, 43, 43n¹
- Pepper garden, Peter Mundy's description of a, 228
- Pestle and mortar for crushing areca-nuts, 204
- Phenol contained in the volatile oil of the betel leaf, 298
- Pike's dried head used as a Vagina Dentata, 42
- Pilgrimages made to Tansen's grave, 137
- Pilgrims to Mecca, camel-litters used by, 230
- Pitcher, golden. Royal umbrella and fan held by prostitutes, 133
- "Pitcher and Pot," the equivalent of Ghaṭa and Karpas, 76n¹
- Plague-carrying fleas, 12
- Plant containing deadly poison—*el-bis* (the Arabic form of the Sansk. *visha*), 70
- Plantain leaf and rice in *basivi* dedication ceremony, 160, 162
- Plants, garden of poisonous, 28
- Plasters of anti-poisonous compounds, 4
- Playing dice in Hades, Rhampsinitus, 84
- Pledge of betrothal, betel as a, 260
- of courtesy, betel as a, 261
- Poison from the bile of the green tree-snake, 33, 34
- of the bile of the green tree snake, green water-frog and jungle crow, 34
- , beautiful maiden fed on, 22, 23
- by intercourse, 35-41
- conveyed on the thumb nail, 7
- in a betel "chew," 33, 228
- given to child by Romans to kill Emperor, 67
- grass and water, 3, 11n³
- "Poison in a glance," *Drig-vila* or *driti-vila*, 29
- Poison in objects and clothing, 7, 8
- , inoculation by, 31, 32
- introduced into food and drink, 7
- , Mithradates able to eat, 31
- , neck of concubine rubbed with, 28
- neutralised by potion, 28
- — by ring, 32
- , the Pontic duck lives on, 31
- put in *bayas* (betel "chew") in the Philippines, 271
- in wells during the Sudan Campaign and the Peninsular War, 12
- , queen's daughter nourished on, 23
- transferred through the perspiration, 10, 17, 22, 23, 36, 36n²
- in warfare, 5, 11
- water and grass, 3, 11n³
- Poison-damsel, herb used as a protection against a, 24
- in India, 12-71
- killed by suddenly applied antidote, 28
- in the Middle Ages, 18-29, 67
- motif originated in India, 70

- Poison-myth to be explained partly by the sting of the cobra, 68-71
 —, spread in Europe of the legend of the, 23-29
 Poison-damsel's fatal bite, 36, 36n¹
 Poison-damsels, 3-71
 — as dancing-girls, 3
 — and venereal disease, 44, 66
 Poison-gases used in World War I, 12
 Poisoned arrow-heads, 10, 10n²
 — betel "chew" given to Nazerkan by Shāhjahān, 228
 — book, the story of the, 8
 — brandy given to soldiers, 11
 — hay or fodder, 4
 — dress of honour given by Aurangzēb to Prithi Singh, 9
 — by the Florentines, Ladiālah, 67
 — road in Armenia, 30
 — robe or shirt, 8-10
 — rum used in Tasmania, 11
 — spittle, killing with, 32, 217
 — water, etc., 3-5
 — wedding robe, 9
 — wells in warfare, 11, 12
 "Poisoned words," 23
 Poisoner, the secret, 7
 Poisoning of Australians, 11
 — by coffee, unusual method of, 7
 — of Tasmanian aborigines, 11
 Poisonings by the Borgias, 7
 Poisonous aconite in the Sikkim Terai, 10
 — animals conquered by juice of garlic or human saliva, 27
 — breath, the, 23, 24, 30-34
 — of girl pollutes the air, 24
 — embrace, killing by, 22, 67
 —, touch and perspiration, 10, 17, 22, 23, 67
 — kiss causes death, 24, 28
 — look of snakes, belief in the, 29
 — plant, *el-bis* (the Arabic form of the Sanskrit *tithi*), 70
 — plants, garden of, 28
 — saliva, 36
 — snake hiding in the vagina or belly, 41, 43
 Poisons, arrow, 10, 10n²
 — officially used by the Venetian Council of Ten, 7n¹
 Police, Egyptian, recruited from Nubian or Sūdānī tribe, 86
 — at Vijayanagar paid by proceeds of prostitution of dancing-girls, 149
 Pollution of the air by dragons, 30
 — of air by girl's poisonous breath, 24
 Polian MSS. described by Benedetto, 213
 — texts described by N. M. Penzer, 212n²
 Porters disguised in friars' hoods, 111
 Potion neutralises poison, 28
 Pounded mussel- or oyster-shells used in betel-chewing, 32, 33
 — shells, lime (*chunām*) for chewing often made from, 188, 215
 Pounder, areca-nut, 256, 258, 269
 Powder made of turmeric, lime-juice and borax—*kunkum*, 161
 Power that lies in fasting, 27
 "Pox-houses" or "Wood-houses" of the Fuggers at Augsburg, 52, 55
 Pre-Columbian syphilitic bones found in North and South America, 61
 Precious stones, chapter on, from the *Secretum Secretorum*, 19, 20
 — in their eyes, worn with, 37
 —, valley full of, 30
 Pregnancy ceremonies among the Izhavs or Ilava castes of Malabar, etc., 246, 247
 — rites among the Kaibi caste, 142
 Preparation of cutch by the Kudubi caste, 247-249
 — in South Canara (Kanara), 297
 Princess falls in love with a thief, 75, 81
 — placed in a brothel, 80, 86, 87
 — possessed by a demon, Egyptian story of a, 39, 40
 Promise ratified by chewing *pān-supāi*, 247
 Prostitute dancing-girls in the time of Akbar, rules issued for, 137
 Prostitutes who accompanied Alexander's army, skeletons of, 61
 —, *Dāraghah*, superintendent of, 137, 140
 — (*ganikān*) at the Court of Chandragupta, 133, 134
 — hold the royal umbrella, fan and golden pitcher, 133
 —, wealth of, 132, 133, 149, 150
 Prostitutes' quarter, Shaitānpūrah, or Devilsville, 137
 Prostitution of the Babylonian women at the temple of Mylitta, 91, 175
 — in Ancient Egypt, sacred, 87, 178-180
 — in Cambodia, sacred, mentioned by Chau Ju-Kun, 140
 — of the daughter of Cheops, 87
 — in Ptolemaic times, sacred, 179, 180
 —, sacred. See under Sacred
 Protection against a poison-damsel given by a herb, 24
 Proxies for husbands, professional—known as Cadeberiz, 37, 39
 Proxy for the first night of marriage, 36
 Puberty ceremonies among the Toreya caste, 252
 — ceremony among the Baṭṭa of South Canara, 245
 — rite at the Temple of Mylitta, possible, 175
 Public women in Golconda, 140
 Pulque, drink made from the agave or maguey, 63, 63n¹
 Purest form of cutch or catechu is *hark*, 194
 Pyjama of Keemkab (darnasked silk), 158, 159
 Pyjamas, *pojamas*, *pejammahs*, etc., 156-159
 — adopted by the Portuguese, 157
 — denote the Mohammedan woman, 157
 —, legs of courtesans painted to represent material of, 158
 — of Sikh men, 156
 — supersede Victorian night-dress, 157

- Quetzal feathers, 62, 62n²
 Quicklime (*calcina viva*), 200, 214, 215, 271, 272
- Rattle of the lime stick in the gourd, significance of the, 286
 "Recognition, means of" motif, 127n¹
 Red lime and *srīth* leaf at Siamese wedding, 257
 — powder, *hunkam*, *hunkum*, etc., made of turmeric, lime-juice and borax, 144, 161
 — saliva caused by betel-chewing mistaken for blood, 296
 — produced by betel-chewing, 216, 220, 221, 226, 238, 249, 269, 272, 286, 296, 297, 298
 — produced when chewing betel, Dr T. E. Wallis on the, 297, 298
 Red-haired counsellor to be avoided, 29
 References to betel-chewing found in the Jain scriptures, 209
 — in Pali works, 209
 Regalia, gold betel bowls in the Perak, 207
 Relief probably hid door to treasury at Medinet Habu, 83
 Reliefs depicting the story of Trophonius and Agamedes, 96
 — on the Fortified Gate at Medinet Habu, 85
 Religious cult under Hittite domination, 180
 — duties of a *basivi*, 162
 — female mendicants (so-called) of the Vaishnavi or Bairāgi community, 142
 — festivals in Travancore, 166, 167
 "Religious" mendicants in Bengal, 142
 Remarriage of widows in Betul, 243
 Removal of the ear-pendants (*tāḍu*), 166
 Resignation of Karmājan official effected by laying betel leaf and areca-nut before superior, 247
 Résumé of Garcia da Orta's work on the drugs of India made by Clusius, 33n¹, 189n²
 Rewards for essays on betel-chewing—Colonial Museum at Haarlem, 289, 289n¹
 Rice at *basiv* dedication ceremony, 160, 161, 162
 — offered to the Great, *Kong-ta-jen-mi*, 210
 Ring that neutralises poison, 32
 Rite at the Temple of Mylitta, 173
 Rites of *Basivis*, dedication, 160-162
 — connected with training of the *javāḍis*, 139
 Robe, poisoned shirt or, 8-10
 Roof, Harlots on, 175
 Root, China, *milax china*, Linn., 57
 Rosaries in Tibet and Burma usually have 108 beads, 142n¹
 Route of gypsies from India, 118
 Royal umbrella, fan and golden pitcher held by prostitutes, 133
 Royalty, the five emblems of, 201n²
 — heavily bearded in Babylon and Assyria, 86
 Rubbed with ointment of juice of aconite to cause death, girl, 67
 Rubbing neck of concubine with poison, 28
 Rule of Health chapters of the *Secretum Secretorum* ascribed in part to Diocles Carystius, 21
 Rules for preserving health, *Regimen Sanitatis*, chapters of the *Secretum Secretorum*, 19
 — for prostitute dancing-girls issued in the time of Akbar, 137
 Rum, poisoned, used in Tasmania, 11
- Sack of Mathurā by Aḥmad Shāh, Aurangzēb, Shāh Jahān, Sikander Lodi and Sultan Mahmud of Ghazni, 131
 Sacred Books of the East, *Hymns of the Atharva-veda*, 64n²
 — *Laws of Manu*, 3n¹
 — enclosure of Zeus Belus, 175
 — flowers, the five, 201n²
 — prostitution, 131-184
 — in ancient Egypt, 87, 178-180
 — in ancient India, 132, 133
 — in Arabia, 181
 — in Babylonia, 87, 91, 172-178
 — and Assyria, Morris Jastrow on the, 87
 — in the Buddhist age, 132, 140
 — in Cambodia mentioned by Chau Ju-Kua, 140
 — in Central India, 140-146
 — in the Christian era, 133-137, 169
 — in the cult of Ishtar, 174-178
 — in Egypt, 87, 178-180
 — in Northern India, 137-140
 — in Ptolemaic times, 179, 180
 — in Southern India, 146-169
 — in Syria, Phoenicia, Canaan, etc., 180-182
 — at Tanjore, costume of, 151
 — theories as to the explanation of, 171, 172
 — in Vedic times, 132, 169
 — in West Africa, 182, 183
 "Sacred servants," or *hierodouloi*, 172, 173
 "Sacred women," or *Dēva-dāsīs*, 131
 "Sacred woman," *kāḍishti*, 174
 "Sacred wood"—guaiacum, 56
 Sacrifice of chastity at Byblos, 180, 181
 — of goats by the Kudubis after successful production of balls of catechu, 248
 — of rice, buffaloes and human beings before search for camphor, 196
 Sacrifices, the five great, 201n²
 Sage Duban and King Yunan, story of, 8
 Saliva turned red by betel-chewing, 216, 220, 221, 226, 238, 249, 269, 272, 286, 296, 297, 298
 — circle of human, 27
 — human, dangerous to poisonous animals, 27
 —, poisonous, 36

- Salt and almond shell charcoal used for cleaning teeth, 294
- Sandal, 164
- , vermillion, 190, 191
- Schools of thought on the origin of syphilis, different, 44, 45
- Science of Erotica, the, 133
- Scurvy, Schorbuscke, 221, 221n²
- Secret agent of Rākhasa, Virādhagupta, 15
- chambers in Egyptian buildings, 88–90
- communications sent by Aristotle to Alexander the Great, 18
- crypts in Egyptian temples, 89, 90
- in the Temple of Hathor at Dendera, twelve, 89
- entrance into treasury, 78, 92
- passages in temple at Kom Ombo, 90
- poisoner, the, 7
- Sedan-chair the progenitor of the hansom-cab, 234
- Seed or "nut" of the *Areca catechu* (Areca-nut palm), 187
- "Seed-producing," Zer-banit, 175n¹
- "Seed-purifying," *Zermashitu*, 174
- Seeds of *Arbus precatorius* used for killing animals, 10
- of the *Areca catechu*, i.e. the areca-nuts, produce *kusta*, 194, 195
- Seer, denomination of weight equal to a kilogramme or 2.2 lb. av. in districts formerly under British rule, 160, 161
- Self-dedications to Temple-God, 179
- Semang tribes of Malaya, betel only sparingly used among, 259
- Semitic divinity, Ishtar a primitive, 175
- Orient wrongly considered place of origin of the tale of Rhampinitus, 91
- Sentinels made drunk by thief, 79
- "Serpent," and "serpents," See chiefly under "Snake" and "Snakes"
- Serpents stare themselves to death in mirrors, 30
- in their bodies, maidens with, 38
- "Servants of the gods," 143
- Seven classes of *devā-dāsīs*, 134
- Sex of child determined by flow of oil from woman's navel, 246, 247
- Sexual intercourse considered dangerous, 36, 43
- Shaving cheeks of sentinels, insult by, 79, 81
- in Egypt and the East, 86
- heads of women as alternative for prostitution, 180
- stopped on death of Nāyar taratād, 250
- Sheep have to be muzzled because of poisonous aconite, 10
- Shell (*shank* or *chanh*) an emblem of Vishnu, 161, 161n¹, 162
- Shells, lime often made from pounded, 188
- Shepherd Syphilus, the, 36, 36n¹
- Shirt, poisoned robe or, 8–10
- Siam, areca-palm grown throughout, 256
- , golden betel set of the King of, 257
- Siam, mortar and pestle used to pound areca-nuts in, 258
- , turmeric root used to powder and colour burnt stone lime in, 259
- Siamese wedding, *Kan mah*, "a basin of areca-nut," 257
- , red lime and *sirh* leaf at, 257
- Sign of the female sex, the *nāman*, 161n
- Significance of the rattle of the lime stick in the gourd, 286
- Silk mentioned in the *Mahāvamsa*, 206
- purses of betel given as passport, 224
- thread ties leaves of "chew," 225, 240
- Similarity of effects of betel-chewing and smoking tobacco, 291
- Simultaneous death of brothers (? twins), 93
- Skeletons of prostitutes who accompanied Alexander's army, 61
- Skins of wine given to sentinels, 79
- Slaked lime, *chaux éteinte*, used in betel-chewing, 215, 227, 263
- Slave-raids on coast of West Africa, 50
- Slung litter—the *dandy* and *rete*, 234
- Smallpox communicated by caravan traders to American Indian tribes, 11
- introduced into the New World, 57
- Smoke reveals loose stone in treasury, 100, 111, 121
- Smoking tobacco, similarity of effects of, and of betel-chewing, 291
- Snail-shells or egg-shells used for lime in Assam, 253
- Snake-bite, 68–71
- Snake cannot poison one of its own species, 69
- (*Dibya*, heavenly) that poisons by its breath and sight, 29
- Festival (*Nāgaśāhamī*) at Nāgpur, 44
- , girl only able to hiss like a, 25
- , the green tree- (*ular puchok*), 33, 34
- hiding in the vagina or belly, poisonous, 41, 43
- mountains of Turkestan, 29
- nature acquired by girl, 22
- venom digestible, 69
- Snake-bite, statistics of deaths from, 68, 69
- Snake-charmer's inoculation, 69
- Snakes and Alexander the Great, deadly, 29
- , baby girl put in snake's egg and brought up by, 25
- , belief in the poisonous look of, 29
- connected with the *linga*, 43, 44
- , deadly glance of, 29
- and intercourse, connection between, 44
- issuing from woman's mouth, etc., 41
- , swallowing powers of, 25, 26
- unable to escape from magic circle, 26
- Snakes' eggs as big as bushel baskets, 25
- Soldiers given poisoned brandy, 11
- Spatula for applying lime to betel leaves, 203, 204, 206, 259, 288
- Spatula from the Anchorite Islands, 208
- Speaking head, the, 8
- Spitter of betel juice betrays individual characteristics in Yap, 279

- Spitting broken areca-nut up vagina of expectant Malay mother, 262
- of betel "chew" on eyes and neck of corpse (Malabar), 249
- betel juice on public and private buildings, disgusting habit of, 290
- of betel juice in Yap, 279
- or throwing betel in a person's face, insult of, 33, 214
- out of first juice caused by betel-chewing (Garcia da Orta), 192, 221, 290
- Spittle, killing with poisoned, 32, 217
- Spittoons, *pique-dans*, i.e. *pikdān*, or *pigdam*, 229
- Squeezing of betel juice against the teeth, 256, 290
- Spread of the legend of the poison-damsel in Europe, 23-29
- of syphilis throughout Europe, 47
- Statistics of deaths from snake-bite, 68, 69
- Stele from a Temple of Khonsu at Thebes, 39, 40
- Sting of cobra a clue to the poison-damsel myth, 68
- of the knit, fatal, 68
- of Russell's viper, deaths from, 68
- Stomach, hyper-acidity of, neutralised by lime, 291
- Stone-masons and builders, twins regarded as, 93, 94
- Stones conceal Egyptian secret chambers, movable, 88-90
- Story of Ghaṭa and Karpura, 75-77
- of the Sage Duban and King Yunan, 8
- "Story of Three Eyes, The," Sakellarios, 107n
- Story of Trophonius and Agamemnon depicted on a krater, 97
- Strengthening effect of betel-chewing on the teeth and gums, 213, 216, 226
- String, band or tape used to hold up drawers or trousers in India, etc., 157
- drawers (*pyjamas*) of dancing-girls, 154
- Subterranean crypts, 84, 89, 90
- Successful bridegrooms die in the marriage chamber, 40
- Sugar and coconut offered to god by *bhāṭin* girl, 162
- Supplemental works on betel-chewing, list of, 299, 300
- Superintendent of prostitutes (*gavīhār*), 133
- Swallowing powers of snakes, 25, 26
- Sweetmeats drugged with juice of *Datura*, 76
- Sweets offered at mosque by dancing-girls, 139
- "Swinging cradle," *sareh*, 235
- Sword (with lemon or lime on point) represents bridegroom, 161, 163
- Symbolic castration, 41
- Syphilis, China root as a cure for, 57, 58
- cures for, as described by Ruiz Diaz de Isla, 54
- as compared with yaws, 45, 45n³, 3
- , different schools of thought on the origin of, 44, 45
- Syphilis, early names current in Central and South America for, 46
- into Europe by Columbus' men, possible introduction of, 47
- , *Guaiacum* as a cure for, 50, 52, 54, 55, 56, 57, 58
- and Hispaniola [Española, Haiti, etc.], 46, 50, 51, 53-57, 60
- introduced into India by the Portuguese in 1498, 47, 64, 65
- , manuscripts and incunabula dealing with, 48, 48n¹
- may have entered India by two distinct routes, 65
- , mercury as a cure for, 54, 56, 59
- , *Nanahuatzin*, the so-called God of, 62, 63
- , Oviedo's description of the origin and spread of, 51
- , Oviedo the first to proclaim the American origin of, 52
- as a sign of greatness among the Quichos-Maya, 64
- spreads throughout Europe, 47
- "Syphilis of the lords," *tecpilnāhuatl*, 63
- unknown in early India, 65, 66
- and yaws, correspondence in the *Lancet* on, 45n³
- Taboo against Brāhman entering *pān* garden, 242
- "Taking-off of the nose-ring, the," *nathni utārā*, 139
- Tannin, astringency in areca-nuts due to, 291
- obtained from heart-wood of the *Acacia catechu*, 194
- Tanning, chief use of catechu is for, 194
- Tannins of areca-nut and catechu tightening to the gums, 294, 295
- Tape, string or band used to hold up drawers or trousers in India, etc., 157
- Tassel on betel-bags, *pohoffura*, 205
- Tatties, frames fitted with *khar-khas* (*kuss-kuss* or *euscuss*) grass fixed to *pulanqueens*, 231n³, 237
- Teeth go black with betel-chewing—often considered beautiful, 217, 220, 255, 261, 272, 292, 293
- , bad effects of betel-chewing on the, 255, 266
- in Bali, colour of, amongst betel-chewers, 293
- , beneficial effects of betel-chewing on the, 213, 216, 219, 226
- of betel-chewers covered with calcium carbonate—"tooth-stone," 291
- "Teeth, blackening of the," rite of *missi*, 139
- Teeth cleaned in the Philippines by areca-nut shells, 293
- with almond shell, charcoal and salt, 294
- and digestion, Marco Polo on the effects of betel-chewing on the, 213
- or fangs hidden in the vagina, 41

- Teeth filing considered beautiful, 292
 — squeezing of betel juice against the, 256, 290
 — of Sumatra "great men" set in gold, 292
 — — women filed and blackened, 292
 — of *javôis* blackened, the *mini* rite, 139
 Tests to discover the father of child, 127n¹
 Texts of *Marco Polo*, the various, 212, 213
 Theories as to the explanation of "sacred" prostitution, 171, 172
 Theory of the constitution of the human body, 193, 194
 Thief caught by use of a cask of molasses, 119
 — disguised as a Pâsupata ascetic, 76
 — enters women's apartments, 75
 — granted free pardon, 80
 — makes sentinels drunk, 79
 — Princess falls in love with a, 75, 81
 Thief's body hung from wall, 79, 81, 120, 126
 — removed from wall by trick, 79, 121
 — head cut off by brother, trapped, 78, 81, 92
 Thieves, Tale of the Two, 75-128
 —, Kallin, a caste of, 247
 —, traps laid in treasury to catch, 78, 81, 92, 119, 126
 Thieving, Indian method of, 75, 75n¹, 81
 Third work ever printed in India—Garcia da Orta's *Coloquios dos simples*, 189n²
 Thread, *kankanam* a yellow, 160
 Three fragments of areca-nut used in divorce among the Achinese, 264
 Throwing or spitting out betel in a person's face, insult of, 33, 214
 Thumb nail left long to remove veins from betel leaf, 192, 221
 — smeared with arsenic powder, 7
 Tightness of pyjamas leads to painting pattern directly on the skin, 158
 Time and distance computed by chewing of an areca-nut (Mikirs and Khais), 254
 "Tip" of betel "chew" given at wedding ceremonies, 252
 Tobacco, known as "Vadacan" used in chew helps to cause oral cancer, 298
 —, similarity of effects of betel-chewing and smoking, 291
 — used in a betel "chew," 253, 255, 256, 259, 265, 269
 Toddy-drawers, Izhava or Ilava, caste of Malayalam, 246
 Toe-rings worn by *banis* at initiation, 160, 161
 Tombs of Macedonian soldiers of Alexander the Great, 61
 Tooth-powder of areca-nut, 295
 Tooth-stick used to clean teeth, 294
 "Tooth-stone," a crust on the teeth of betel-chewers, 291
 Toothless gums of old *pohn-gyee*, or Buddhist monk due to betel-chewing, 256, 294
 Touch and perspiration poisonous, 23
 — of poison-blame kills horses and dogs, 25
 Toxic character of menstrual blood, 43
 Translations of the *Secretum Secretorum*, 19-23
 Trapped thief's head cut off by brother, 78, 81, 92
 Traps laid in treasury to catch thieves, 78, 81, 92
 "Travelling-throne," *takht-ravân*, 229
 Treasury built for Hyrieus, King of Hyria in Boeotia, 91
 — for King Auges at Elis, 92
 — by Rhampsinitus, 78
 — to catch thieves, traps laid in, 78, 92
 — of Hyrieus robbed, 92
 — at Medinet Habu probably entered through concealed door, 83
 —, movable stone built into, 78, 92
 — of Rameses III at Medinet Habu, 83-84
 —, secret entrance into, 78, 92
 —, smoke reveals loose stone in, 100, 111, 121
 Tree of Fate, the, 196
 —, *pâpal*, married by *pâtor* girls, 139
 Tree-snake, the green (ular puchok), 33, 34
 Trees, flowering creepers, water and grass poisoned, 3
 —, the five leaves of, 201n²
 — of paradise, the five, 201n²
 Trial by ordeal among the Bonthuks, 245
 Trident, *trifol*, mark worn on the forehead by Vaishnavas, 160n³
 Tunic smeared with supposed love charms, 9
 Tunnels, breaking through walls and digging
 — Indian method of thieving, 75n¹
 Turmeric at dedication of *basins*, 160, 160n², 161
 — paste, Parniyan girl smeared with at wedding, 250
 — powder at dancing-girl's funeral, 168
 — and oil rubbed on girl's body before "marriage," 141
 — root used to powder and colour burnt stone lime in Siam, 259
 — spat out at seven places as protection for Malay children, 262
 — used to redden lime among the Shans, 255
 Turmeric-dyed thread, 246
 Turmeric-water in marriage ceremony, 246
 Twig of the Neem, or Nim-tree (*Melia indica*, Brandia) used as tooth-stick, 294
 Twins as builders, 93, 94
 —, death simultaneous with, 93
 —, dread of, 93
 — exiled to deserts or islands, 93, 94
 — as givers of rain and heroes of fertility, 94
 — regarded as stone-masons and builders, 93
 Two recensions of the *Secretum Secretorum*, 19
 — Thieves, Tale of the, 75-128
 Umbrella, Royal, fan and golden pitcher held by prostitutes, 133

- Umbilicus Elongatus *motif*, 42n¹
 Unclean left hand, the, 273, 273n¹
 Urinates on real father, child, 127n¹
 Use of camphor in betel-chewing, 192, 193, 195, 196, 214
 — of catechu is for tanning, chief, 194
 — of poisons by the Venetian Council of Ten, official, 7n¹

 Vagina or belly, poisonous snake hiding in, 43
 — *Dentata motif*, 41-44
 — —, dried pike's head used as a, 42
 — — *motif* found in Siberia, Japan and American aboriginal tribes, 42
 — old woman spits areca-nut up, to assist in difficult labour, 262
 —, teeth or fangs hidden in the, 41
 Valentine, betel as a, 261
 Valley full of precious stones, 30
 Variants of the "means of recognition" or "paternity" *motif* supplied by A. H. Kruppe, 127n¹
 Veneration of the beard, 86
 Venereal disease, 44-68
 — —, bibliographies on, 44n³
 — — and the poison-damsel tales, 44, 66
 — — regarded as magic poisoning in the Middle Ages, 67
 Venom of snakes digestible, 69
 Vermilion, forehead of *kasbi* girl marked with, 141
 — sandal, 190, 191
 Vermillion [*sic*] coloured lime paste, 258, 259
 Vest poisoned by a perfumed powder, 10
 Victories of Ramesses III against Levantine peoples, 84
 Vine, the betel, *Piper betle*, Linn., leaves of the, known as *pān* or *tāmūli*, 187, 188, 242, 260
 Viper, deaths from sting of Russell's, 68, 69
 Volatile oil in the betel leaf contains phenol, 298

 Wafers, 108 fried, eaten by *kasbi* woman, 142
 Walls, breaking through, and digging tunnels, Indian method of thieving, 75n¹
 Water, grass, food, etc., poisoned, 3
 — jug or vessel (*kalasyam*), 162
 Wealth of prostitutes noted, 132, 133, 149, 150
 Weavers, *Kakutias*, sect of, 162
 Wedding in Siam—*Kan mak*, 257
 — robe, poisoned, 9

 Wells poisoned with crushed aconite in the Nepalese war, 11
 — — by the French in the Peninsular War, 12
 — — in General Botha's campaign, 11
 — — by orders of Sir Evelyn Wood, 12
 White arsenic mixed with lime, 34
 Widowhood unknown among *dāris*, 144, 162, 165, 170
 Widows among the Malabar spit betel over eyes and neck of corpses, 249
 — must not use betel, 245, 253
 Wife's nose cut off as punishment for adultery, 43
 Woman bribed to poison king, 67
 Women disguised as vivandières, 11
 — with double pupils in one eye give injurious glance, 38
 —, the five beauties of, 201n²
 — of the Lampong country of Sumatra file and blacken teeth, 292
 "Women whose love is scorned" *motif*, 98n¹
 Women of Scythia, evil eye possessed by, 29n³, 38
 — with precious stones in their eyes, 37
 Women's apartments entered by thief, 75
 Wood of the *pāla* tree, 246
 Wood-ash used in preparation of catechu balls, 249
 Wooden trough, *marige*, used in the preparation of cutch, 248
 "Wood-houses" or "Pox-houses" of the Fuggers, 52, 55
 Worm found in heart of a Prince, 27

 Yak's tail, fly-whisk made from *chouria* or *choury*, 153n³
 Yaws as compared with syphilis, 45, 46
 — brought from West Africa to Central America, 46
 —, *buba*, of Central America, 46
 — and syphilis, correspondence in the *Lancet* on, 45n³
 —, a non-venereal children's disease, 45
 — (*pouba*) of West Africa, 46
 Yellow, erotic significance of, 160n²
 — produced by decoction of root of *Morinda citrifolia*, turning red when lime is added, 296
 — rice at *baici* ceremony, 160
 — thread, *Kankunam*, 160, 251
 — wax, cotton, pearls, tortoise-shell, etc., from the Philippine Islands, 271



572.04

Anthropology - Studies

Prison Girls - "

Betal Champ - "

~~Good~~ Prostitution - "

Issue Record 12250
 Catalogue No = 398.04/Pen.
 Author Penzeq, N. M.

Title— Poison Bamsels

Borrower No.	Date of Issue	Date of Return
30 NY. K. K. Sankar	12/12/52	2-1-53
" H. G. G. G.	22/11	25/11
K. S. Rangaswami	22/11	27/11

"A book that is shut is but a block"

CENTRAL ARCHAEOLOGICAL LIBRARY
 GOVT. OF INDIA
 Department of Archaeology
 NEW DELHI.

Please help us to keep the book
 clean and moving.