NEW ILLUSTRATED MANUAL

OF THE

CURRENT GOLD & SILVER COINS

OF

ALL CIVILIZED NATIONS OF THE GLOBE:

GIVING THEIR

WEIGHT, STANDARD, & VALUE,

TOGETHER WITH THE SYSTEMS OF

MONEY, WEIGHTS, & MEASURES,

AND

STATISTICS, COMMERCIAL GEOGRAPHY, & INDUSTRY

OF THE DIFFERENT COUNTRIES.

BY

H. P. SKELTON.

PART I. TEXT.

LONDON.
JAMES HAGGER,
67, PATERNOSTER ROW.

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EUROPE:—

EUROPE.

BELGIUM.

GEOGRAPHY, GOVERNMENT, &c.

The kingdom of Belgium (*Fr.* Belgique) has a superficies of 12,102 square miles, with 4,731,000 inhabitants, being, on an average, about 380 souls per square mile.

The *population* is composed of 2,625,000 Flemings, 2,057,000 Wallons, 38,600 Germans and from 9000 to 10,000 of other nationalities. The Flemings are more numerous in the country, the Wallons in the towns. The province of Antwerp is more exclusively Flemish, Namur Wallonish. In the province of Luxemburg alone there are upwards of 27,000 Germans.

Belgium is divided into nine provinces, viz: Antwerp, Brabant, East Flanders, West Flanders, Hainaut, Liege, Limburg, Luxemburg, and Namur. The province of Luxemburg is the largest, but, at the same time, the least populous; while East Flanders, the sixth in point of size, has the largest number of inhabitants per square mile.

The *form of government* is a constitutional monarchy, the rights of legislating and the levying of taxes being under the control of two chambers—the house of senators and the house of representatives; while the executive power rests in the hands of the sovereign. There are at present about 54 senators and 108 deputies, or representatives. Of the former one-half are renewed every four years, of the latter every two years, unless a dissolution of the parliament takes place. The thickly populated provinces of Brabant, East and West Flanders, and Hainaut, send one deputy per 10,000 souls; less populous Antwerp and Liege one per 7500; while Limburg, Luxemburg and Namur send one per 5000

The crown is hereditary in the male line, and according to the law of primogeniture.

The *predominant religion* is the Roman Catholic, which is also the professed religion of the royal family.

The country is divided into six dioceses, viz., the archbishopric of Mechlin, with the two provinces of Antwerp and Brabant: and the bishoprics of—Bruges, with West Flanders; Ghent, with East Flanders; Tournai, with Hainault; Liege, with the provinces of Liege and Limburg; Namur, with the provinces of Namur and Luxemburg.

The *financial condition* of the country may be considered favourable. The national debt stands thus:—It is divided into two categories, the first comprising the charges resulting from treaty stipulations with Holland, the purchase of certain collections and other property from the city of Brussels, the organization of the country in 1830—32, and the extraordinary expenses incurred in 1848. The annual interest on this portion of the debt amounts to 16,223,105 frs., the sinking fund to 1,580,746 frs., and the cost of management to about 33,000 frs. The second category of debt consists of loans raised for the construction of public works of utility, the interest of which is 10,299,665 frs., and the sum set apart for the sinking fund 1,816,696 frs.; while the expenses of management amount to 51,011 frs. annually.

The principal of the entire debt was originally 884,988,563 frs., of which sum 246,920,616 frs. have been paid off, leaving a debt of 638,058,947 frs. To this must be added a loan of 45,000,000 frs. contracted for extending the fortifications of Antwerp and carrying out several other public works: so that at present the national debt of Belgium amounts to 728,058,947 frs., causing an expense for the year of 40,616,724 frs. for interest, &c.

The budget for 1861 was thus calculated:—income 149,029,190 frs., expenditure 145,948,085 frs.; leaving a surplus of 3,081,105 frs.

The *post-office system* in Belgium is excellent, and the results of its good administration are gratifying. Letters are transported to every hamlet and obscure nook of the kingdom for 10 centimes (=1*d.*), a newspaper for 1 centime.

Military. Although the neutrality of Belgium for all time, in all European quarrels and differences, has been guaranteed by the European powers, yet the kingdom is in the best state of defence. The military force consists of:—Infantry 56,550 men; cavalry and gendarmerie 8202 men, with 7585 horses; artillery 6700 men, with 3105 horses and 152 guns; train, &c., 576 men; engineers 1690. The total is 73,718 men and 10,690 horses. In time of war this force can easily be raised to an effective of 100,000 men. The army is recruited by lot, but substitutes may be procured. The time of service is from the age of nineteen to twenty-six.

The *naval force* of Belgium is very insignificant indeed.

FEATURES OF THE COUNTRY.

With the exception of the southern provinces, Liege, Namur, and Luxemburg, the predominant feature of the country is its flatness; and even in the south, and not excepting the western side of the Ardennes, it is rather hilly than mountainous. The greatest elevation, 2231 feet, is near Malmedy, on the ridge separating the province of Liege from Prussia; another of the highest points, 2191 feet, is in the province of Luxemburg, near Wardins; and a third, 2132 feet, near the spot where the Liege-Souffaliz and Laroche-Vieilsalm roads cross.

The inclemency and rawness of the climate in the more elevated parts of the country, together with the quantities of quarz and slate, are not favourable to vegetation. The side of the hills, however, are wooded and grassy. Immediately bordering on these hill-sides are immense marshy and unhealthy steppes, showing only here and there feeble signs of cultivation; but they serve as excellent pasture land for large herds of cattle. Beyond these steppes come vast tracts of cultivated country, mostly of rye, oat, and potatoe fields. Towards the west and north the land forms a series of flats, falling gradually away to the sea-coast; and on the shores of the North Sea it is so low that large dams are necessary to protect it from the inroads of the waves. These flats are called *polter;* they occupy upwards of 200 square miles, and are very fruitful. In this western and north-western direction lie the most fertile regions of Belgium: of a rich soil and well watered, they resemble one immense garden, studded with large and comfortable-looking homesteads, with their pretty gardens and shrubberies, and surrounded by well-cultivated fields and beautiful meadows; the whole giving unmistakeable evidence of the well-to-do character of the inhabitants. But even in these parts of the country steppes are met with here and there—in the provinces of Antwerp and Limburg, for instance; but they are gradually yielding to the untiring industry of the people.

The *climate* of Belgium is, in accordance with its geographical position, damp and rather cold. The most frequent wind is the S.W., and the rarest the E.S.E.; then the S.E., and S.S.E.

MEANS OF COMMUNICATION.

Of all continental states Belgium is best provided with means of communication—both by land and water—by roads, railways, canals, and navigable rivers.

Highroads.—Of these there were in 1856 upwards of 6200 miles.

Railroads.—Of these there are 366 miles of government lines and 970 miles of private railways. The former were the most expensive in their construction, but pay better than the private lines. Those in the hands of the government yield 6 per cent, the others only $3^1/_2$.

Navigable Rivers.—The Scheldt (*Fr.* Escaut, *Ger.* Schelde) is navigable for its whole length in Belgium, viz., 110 miles, and its tributaries 234 miles; the Meuse (*Ger.* Maass) is also navigable for its whole length in Belgium, $117^1/_2$ miles, and its tributaries for 145; the Yzer is navigable from Rousbrugge to the sea, a distance of 25 miles, and its tributaries ten miles only. On the Scheldt there is steam navigation, the stations being Antwerp, Liege, Namur, Dinant, Mastricht, Venlo, Rotterdam and Rörmonde.

Canals.—Of these there are 14, of a total length of nearly 300 miles, the principal being: Antwerp to Venlo, connecting the Scheldt with the Meuse; Charleroi to Brussels; Mons to Condé; Brussels and Antwerp; Ghent and Ostende; the Ter-Neuse canal from Holland.

The *telegraph* has attained such an extension of its lines that it brings in the state a revenue of 500,000 frs. or £20,000.

SHIPPING AND NAVIGATION.

Belgium's seaboard extends about 45 miles, all on the North Sea

The *movement* in the ports of Belgium in general increased in the years 1836—1857 from 138,000 tons to 220,000 tons for Belgian traders, or about 59 per cent.; from 329,000 tons to 960,000 tons for foreign traders, being about 194 per cent. Average in crease 152 per cent. In 1860 the number of vessels entering Belgian ports was 3780, clearing out 3959; the real measurement of the former was 667,287 tons, with an aggregate of crews amounting to 39,272 men and boys; of the latter 694,225 tons, with 40,414 men and boys. The Belgian flag has gradually taken less and less part in the trade of the country: in 1855 the number of Belgian vessels amounted to $15._3$ per cent. of the total entering, $15._1$ in 1857, and to only $12._2$ in 1860. The decline is the same with regard to vessels clearing out.

The merchant navy numbers 108 sailing vessels and 8 steamers, the former with an aggregate of 28,857 tons, the latter of 4254. Of these 116 vessels 67, of 23,645 tons, belong to Antwerp; 32, of 6319 tons, to Ostende.

The port of Antwerp is by far the largest in the kingdom. The number of vessels entering the same in 1860 amounted to 2568, of 546,444 tons. The only other important port is Ostende.

COMMERCE AND INDUSTRY.

The countries with which Belgium stands in the closest commercial relations are France, England, Holland, the Zollverein, the United States, and the La Plata States.

The principal *articles imported* are: cereals, oleaginous seeds, raw wool, raw hides, coffee, raw cotton, flax and other fibres, manures, raw sugar, and woollen goods.

The chief *articles of export* are: coals, woollen goods, flax, linen goods, refined sugar, cotton goods, cattle, sheep, and pigs, hides, glass of all sorts, and arms.

The *imports from England* are: raw wool, raw cotton, raw hides, woollen goods, oleaginous seeds, resin and bitumen, rice, cotton yarns, and coffee.

The *exports to England* are: worsted yarns, flax, butter, woollen goods, raw wool, and refined sugar.

The gross foreign commercial transactions of Belgium—the *commerce général*, including the goods in transit—amounted in 1860 to 1,803,250,000 frs., or 8 per cent. more than the average of the five preceding years. The *commerce spécial*—that is, comprising articles imported for home consumption and exports which are *bona-fide* products of the country—represented a value of 987,000,000 frs. or £39,480,000, being 15 per cent. more than the preceding year, and 21 per cent. more than the average of the five preceding years. The above figure of 1,803,250,000 frs., or £72,120,000, for the aggregate commercial movement of this small country in one year is, indeed, prodigious. That year was one of hitherto unexampled activity, but the year 1861 was still more prosperous.

The import trade for home consumption attained in 1860 the figure of 516,000,000 frs., being an increase of 20 per cent. on the five years' average, which was 429,000,000 frs., and of 12 per cent. on the returns of the year 1859, which were 451,000,000 frs.

The total exports of 1860 amounted in "actual" values (*i. e.* those most nearly approaching to the market value of the time) to 470,000,000 frs., but in the "permanent" values (those settled in 1833) to 545,000,000 frs. This great discrepancy between the two valuations, amounting to a fall of 75,000,000 frs., or 14 per cent., reveals an interesting fact which would hardly be expected, viz., that notwithstanding the general rise of prices throughout Europe, Belgian staples have in twenty-seven years lost 14 per cent. in value, weight for weight. This seems quite contrary to the general tendency of prices of late years; but the depreciation may probably be attributable to improved

methods of production. The most remarkable instance is the exports of glass, which are quoted at 13,330,000 frs. "actual" value, and 38,750,000 in "permanent" value for the same quantity.

The exports of (nominally) Belgian produce in 1860 amounted to a sum of 470,000,000 frs., being an increase of $13^3/_4$ per cent. above the preceding year, and of 22 per cent. above the quinquennial average. Of 1861 it is known that this advance has received a slight check, as the exports have fallen off 4 per cent. from those of 1860.

The transit trade fell from 424,000,000 frs., the previous average, to 409,000,000 frs. in 1860—a difference of $3^1/_2$ per cent. It is still, however, very large, and will no doubt be materially encouraged by the reduction made in the transport tariff on goods forwarded by the state from Antwerp to the Prussian frontier.

The rich and flourishing population of Belgium, numbering 4,731,000 souls, close to our own shores, actually consumes much less of our produce than the poor and distant population of continental Portugal, numbering but 3,568,000 souls.

The *industry* of a nation depends principally upon four great factors: coals, iron, steam-engines and machines, and means of communication.

In 1858 the *coal mines* of Belgium yielded 9,000,000 tons of coals, valued at 100,000,000 frs.; and gave employment to 74,000 persons. Some 3,140,000 tons of coal were exported in this year.

In 1858 there were in Belgium 4335 steam-machines, of 142,000 horse-power: of these 3794 stationary and 511 locomotives.

In 1858 the iron mines of Belgium yielded 280,000 tons of raw metal, valued at 25,000,000 frs. Of this quantity some 71,320 tons were exported; while the year following only 36,711 tons were exported. The export of hammered and rolled iron has steadily increased from 9452 tons in 1849 to 60,776 in 1859.

The fabrication and export of machines of all kinds has greatly increased of late years; as also that of nails.

The fabrication of fire-arms at Liege has also made most rapid progress. In 1859 no less than 481,700 pieces (a pair of pistols reckoned as one piece) were submitted for proof, and the exportation amounted in value to 10,092,000 frs.

The company entitled *La Vieille Montagne* is the largest producer of *zinc* in Belgium and perhaps in the world: it produced in 1858, from its establishments in Belgium alone 200,000,000 kilogr., or nearly 20,000 tons of raw zinc. In 1860 the export of raw zinc was 16,778,420 kilog., or about 16,500 tons; of rolled zinc 9,024,966 kilogr., or nearly 9000 tons.

Up to the time of the American troubles the *cotton* industry was very flourishing. In 1859 the import of raw cotton for home consumption was 12,823,000 kilog., or 28,274,715lbs. Of cotton manufactures Belgium exported in 1860 3,016,826 kilog., or 6,652,101lbs., of the estimated value of 16,409,000 frs.

The growth and manufacture of *flax* was formerly the great staple trade of the Low Countries; but in later years the trade had diminished very much in importance, in spite of the excellence of the flax produced in the Flanders. Linen and linen yarns and thread are excellent. Large quantities of stockings, cotton and woollen, are manufactured. The silk industry has declined of late. Articles of fashion—dresses, bonnets, hats, gloves, &c.—are of acknowledged excellence.

Brussels point lace was formerly the most celebrated, but of late years *Valenciennes point* has equalled if not surpassed it in excellence. *Brussels point* is made at Brussels; *Mechlin point* at Mechlin, Antwerp, Lierre and Turnhout; and that called *Valenciennes point* at Bruges, Menin, Ypres, Courtrai, Ghent, Alost, and St. Nicholas. Large quantities are exported.

The manufacture of cloth is in a flourishing condition, having its seat at Verviers, Dison, and the neighbourhood. Much is exported.

Of window-glass and mirrors the value of the exports amounted in 1860 to 13,363,000 frs.

The production of beet-root sugar is large, amounting to 17,115,000 kilog., or nearly 337,000 Cwt. There exist about sixty manufactories. A great quantity of refined sugar is exported.

Of beer and spirits enough are made to satisfy the wants of the country: little is either exported or imported.

AGRICULTURE, &c.

The landed proprietors and farmers of Belgium are an intelligent, enterprising, and industrious race, and the results of their skill and industry we see in the flourishing condition of agriculture. It is calculated that one-half of the population are engaged in the cultivation of the soil; and by their unremitting care and labour, combined with the adoption of all the latest improvements, the land is rendered capable of yielding every year considerably more and more.

Area of the kingdom of Belgium 7,745,280 acres, of which—arable land 3,715,247; meadow and pasture land 950,140; nurseries, orchards, hopyards, vineyards, and gardens 291,910; woods and forests 1,331,076; heaths 771,417.

Wheat occupies 2,223,000 acres, fodder 395,200, plants used for industrial purposes 203,020, and potatoes 286,520.

Horses—indigenous and of mixed races—strong, well-shaped, and of great endurance and speed; the Flemish breed is well-known. Much has been done, and is still doing, for improving this noble animal. The *horned cattle* are excellent; but with the view of improving the existing race, the government makes purchases every year in England of Durham bulls and others of acknowledged excellence, which are then distributed over the different parts of the kingdom.

MINERAL PRODUCTIONS, &c.

There are two principal *coal-fields*, the more considerable one running through the province of Namur and the valley of the Sambre towards Valenciennes and Douai, its extent in Belgium being estimated at 250,000 acres. The other extends eastward through the valley of the Meuse beyond Liege and the duchy of Limburg, in the Netherlands, and as far as Prussia. The mines of iron, lead, zinc, and copper ores are chiefly in the provinces of Hainaut, Namur, Luxemburg, and Liege. The best *marble* is obtained at Dinant and Gochenée; the most considerable *slate quarries* are those in the provinces of Namur, Luxemburg, and Liege.

The *acetose* and *ferruginous waters* of Spa and the *warm springs* of Chaudefontaine are celebrated; the *ferruginous springs* of Grand-Hallet are remarkable as owing their *début* on the earth's surface to the earthquake of the 23. Feb. 1828. Salt *springs* are to be found in the neighbourhood of Arlon. Yvoix is the only *intermitting spring* in Belgium.

PRINCIPAL TOWNS AND THEIR TRADE, INDUSTRY, &c.

Brussels (Fr. *Bruxelles*) is the capital of the kingdom and seat of government, and has a population of about 170,000 souls; with its two large suburbs 263,481.—Many branches of industry are carried on here with skill and activity, producing lace, blond, point, woollen stuffs, calico, excellent hats, paper, playing cards, carriages, philosophical and other instruments, braid, fringe, and tassels, articles of gold and silver, articles of fashion, porcelaine, stoneware, glass, crystal, sugar, soap, tobacco, chemicals, &c. There are also upwards of 50 large printing and lithographic establishments, excellent photographic *ateliers*, and a great number of booksellers. French works are reprinted here cheaply, and sent to all parts of the continent. The trade of Brussels is considerable, and is encouraged and promoted by the railways and canals which centre here. Brussels has large suburbs, of which Schaarbeck and Namur are the finest and most important.

Antwerp (Fr. *Anvers*, Ger. *Antwerpen*) — by far the most considerable port of Belgium, on the Scheldt, with 109,000 inhabitants. Here are large docks and entrepôts; cotton and silk factories; embroidery, lace, cloth, thread, ribbons, hats, tobacco, sugar; as also chemicals, carriages, and philosophical and surveying instruments.

Ghent (Fr. *Gand*, Ger. *Gent*)—with 105,000 inhabitants; important port at the junction of the Lys and the Scheldt, and of many large canals. Here are also spinning factories of silk, flax, and cotton; leather articles; linen, cotton, and woollen stuffs; lace, printed calicoes; articles of gold and silver; establishment for polishing marble, sugar refineries, chemicals, carved wooden articles, embroidery, fringe and tassels. In the cultivation of flowers Ghent is only surpassed by Haarlem.

Liege (Flem. *Luik*, Fr. *Liége*, Ger. *Lüttich*)—with 94,657 inhabitants; celebrated weapon manufactories, establishment for polishing marble, a flax-spinning factory; large glass works; all sorts of metal goods, cloth, leather, cartouche boxes, chemicals, chicory, and starch.

Bruges (Ger. *Brügge*)—with 52,000 inhabitants; important port, at the junction of many canals; with two annual fairs. It has a free entrepôt; linen, woollen, and cotton stuffs, lace, leather, and sabots.

Louvain (Ger. *Löwen*)—on the Dyle, with a population of 32,000; considerable quantities of embroidery and lace; cloth, fringe and tassels, and beer.

Mechlin (Fr. *Malines*, Ger. *Mecheln*)—pop. 31,000; seat of the archbishop, primate of Belgium; celebrated lace, hats, woollen coverlets, large breweries and vinegar works.

Tournay (Fr. *Tournai*, Ger. *Dornick* or *Doornik*)—pop. upwards of 30,000; carpets, room papers, camelot, linen, and porcelaine.

Namur (Flem. and Dutch *Namen*)—with 25,000 inhabitants; cutlery, brass and copper wares, glass, porcelaine, and tabacco; good trade in oil and flax.

Mons (Ger. *Bergen*)—with 25,000 inhabitants; lace, cotton, iron, coals; important trade in coals, corn, hops, flax, hemp, and veneer.

Verviers — on the Weze, with a population of 24,000; cloth, casimir, silk, stucco; zinc, calamine, and lead are obtained close by.

Courtrai (Ger. *Cortryk*) — pop. 20,900; manufactories of excellent linen, damask, lace, and lace thread; celebrated bleaching establishment; tobacco, leather, soap, and chemicals, especially mineral colours; considerable trade.

Ostende—pop. 15,000; sea-port on the North Sea; considerable trade; renowned bathing place.

EXCHANGE.

The *usance* is 30 days after date.

A *time bill* is payable the day after it is due, so that but one day of grace is allowed.

A *bill at sight* is payable on presentation; if not, the protest must follow forthwith.

The *laws of exchange* are essentially those of the French "*Code de Commerce.*"

Brussels, Antwerp, and Ghent have each an exchange.

MONEY.

Throughout Belgium accounts are kept in *francs* and *centimes,* of the same value as those of France.

The 1-franc silver piece weighs $3._2$ dwts. (5 grammes), of which $^9/_{10}$ are fine silver, and is 23 millimètres in diameter. Its current value in English money differs according to the exchange on English sovereigns; but the average is $9._6$ d.; or $8._{08}$ *silber-groschen* Prussian current, $1._{193}$ Tuscan *lire,* $0._{195}$ Spanish *duro,* and $0._{25}$ Russian *silber-rubel.*

The franc has 100 centimes, and all accounts are kept in these two denominations. Silver coins of 5frs., $2^1/_2$frs., 2frs., 50c., 25c., and 20c., are also current; as well as copper coins of 1, 3, 5, and 10 centimes, weighing respectively $1._{28}$ dwt., $2._{558}$ dwts., $3._2$ dwts., and $6._4$ dwts.

Belgium has now no gold coins of its own, but there circulate instead the French pieces of 20frs. and 10frs., &c.

MEASURES.

The measures of the country are the same as those of the present French metrical system.

Measures of Length. — The integer, or standard, is the *mètre,* the ten-millionth part of the distance from the equator to the pole.

1 *mètre* = $1._{09363}$ English yards.
" = $1._{49939}$ Prussian ells.
" = $1._{71336}$ Tuscan bracce.
" = $1._{28335}$ Vienna ells.
" = $1._{68085}$ Milan bracce.
" = $1._{19631}$ Spanish varas.
" = $1._{40609}$ Russian arschin.

The multiples of the *mètre* are formed by prefixing to the word *mètre* the Greek numerals — *deca* (ten), *hecto* (hundred), *kilo* (thousand),

and *myria* (ten thousand); and the decimal divisions of the *mètre* by the Latin numerals *deci* (ten), *centi* (hundred), and *milli* (thousand). Accordingly —

1 *décamètre*	= 10 mètres.	1 *décimètre*	= $^1/_{10}$ of a mètre.
1 *hectomètre*	= 100 „	1 *centimètre*	= $^1/_{100}$ „
1 *kilomètre*	= 1000 „	1 *millimètre*	= $^1/_{1000}$ „
1 *myriamètre*	= 10000 „		

Yarns are measured by the *écheveau* of 10 *échevettes* of 100 *mètres*, so that the *écheveau* is 1000 *mètres*. The number of the yarn shows how many *écheveaux* weigh *half a kilogramme* = $1._1$ lb.; *e. g.*, of No. 18 yarn 18 *écheveaux* (skeins) go to the *half-kilogramme*. Therefore the higher the number the finer the yarn. This is the legal measure for yarns, but it is not yet adopted every where.

The *mille marin* is exactly the same length as the English and Italian *sea mile*, 60 of which make a degree: 27 *milles marins* are just 5 *myriamètres*.

Square and Land Measure.—The measures for superficies are only the measures of length squared; but the denomination *square décamètre, square hectomètre*, &c., are little used, it being customary to say —10 square mètres, 100 square mètres, 3000 square mètres, &c. The square *myriamètre* has 100 square *kilomètre* of 100 square *hectomètres* of 100 square *décamètres* of 100 square *mètres*, and therefore 100,000,000 square mètres. The square *mètre* has 100 square *décimètres* of 100 square *centimètres* of 100 square *millimètres*.

1 *square mètre* = $10._{7643}$ English square feet.
„ = $10._{1519}$ Prussian „
„ = $10._{7643}$ Russian „
„ = $12._{9083}$ Castilian „

For *land* the integer, or standard, is the *are*, of 10 *mètres* square, = 100 square *mètres*, called *centiares*. The *hectare* = 100 *ares*. The denominations *décare* (10 ares), *kilare* (1000 ares), and *myriare* (10,000 ares), are not in use: the special measure for land being the *hectare*.

1 *hectare* = $2._{47114}$ English acres.
„ = $1._{80694}$ Saxon acker.
„ = $3._{91662}$ Prussian morgen.
„ = $1._{73739}$ Vienna joch.
„ = $2._{7778}$ Swiss juchart.

The denominations *décamètre* and *hectomètre* are little used; people say rather 10 mètres, 100 mètres.

The surveyor's chain is 10 *mètres* in length, and consists of 50 links, each 2 *décimètres* including the connecting ring.

Cubic Measure. — 1 cubic *mètre* has 1000 cubic *décimètres* of 1000 cubic *millimètres.*

1 *cubic mètre*	$= 35._{3166}$	English cubic feet.
"	$= 32._{3459}$	Prussian "
"	$= 35._{4166}$	Russian "
"	$= 46._{3772}$	Castilian "

For Wood. The *stère* = 1 cubic mètre, and has 10 *décistères.* Large quantities of firewood are measured by the *double stère* and *décastère,* the latter being equivalent to 10 cubic mètres. In measuring timber for building purposes the terms 1 *cubic mètre* and 10 *cubic mètres* are mostly used instead of *stère* and *décastère.*

Charcoal is sold retail by the *hectolitre,* in larger quantities by the *voie.* The present *voie* = $^1/_5$ cubic mètre.

Coals are either measured or weighed; in the former case the common measures of capacity are used, and in the latter the kilogramme. Large pieces are always weighed.

Gyps is sold by the *muid* of 36 *sacs* = 9 hectolitres.

Measures of Capacity. — The *litre* has 10 *décilitres* of 10 *centilitres* of 10 *millilitres,* and = 1 cubic décimètre = $0._{88038}$ quarts. The *décalitre* = 10 litres, the *hectolitre* = 100 litres = $22._{0097}$ gallons, and the *kilolitre* = 1000 litres. This latter denomination is seldom used.

100 *hectolitres*	$= 34._{390}$	Eng. imp. quarters.
"	$= 181._{946}$	Prussian scheffel.
"	$= 136._{820}$	Tuscan sacchi.
"	$= 182._{482}$	Castilian fanegas.
"	$= 47._{643}$	Russian tschetwert.

For *fruit, potatoes,* &c., the measure is heaped, but in almost all other cases the strike is employed.

WEIGHTS.

The decimal system of weights used in France has also been adopted in Belgium; it is intimately connected with the measures.

The integer, or standard, is the *kilogramme,* which is equal to the weight of that quantity of distilled water which, weighed in a vacuum at its greatest density, viz., by 4° of the centigrade thermometer, $3^1/_5$° Réaumur, or about $39^1/_4$° Fahr., will fill a *litre,* or *cubic décimètre.*

1 *kilogramme*	$= 2._{20463}$	English pounds avoirdupois.
"	$= 2._{67924}$	" " troy.
"	$= 2._{13807}$	Prussian pounds.
"	$= 3._{11761}$	Neapolitan libbre.
"	$= 2._{44194}$	Russian pounds.
"	$= 2._{17328}$	Castilian libras.

The multiples and decimal divisions of the kilogramme bear the following denominations: =

10 kilog. = 1 myriagramme.	$^1/_{10}$ kilogramme=1 hectogramme, or 100 grammes.
100 „ = 1 quintal métrique.	$^1/_{100}$ kilogramme=1 décagramme, or 10 grammes.
1000 „ = 1 millier métrique.	$^1/_{1000}$ kilogramme = 1 gramme.

The *millier métrique* is the shipping ton, and bears also the name of *tonneau;* but for merchandise 1000 kilog. make a *tonne.*

The *gramme* = $15_{.432}$ Eng. troy grains, or $18_{.827}$ old French grains.

The amount of pure gold or silver in coins, jewelry, &c., is expressed by *millièmes,* or thousand-parts, of a kilogramme. There are three qualities of gold allowed by law for jewelry, &c., of the respective fineness of $^{920}/_{1000}$, $^{840}/_{1000}$, and $^{750}/_{1000}$. And two of silver, viz., $^{950}/_{1000}$, and $^{800}/_{1000}$.

The weight for *precious stones, pearls,* &c., is the *carat* of 4 *grains.* The carat = $0_{.2059}$ grammes, $3_{.177}$ Eng. troy grains; or $1_{.0028}$ Eng. jewel carat, $0_{.9999}$ Dutch carat, $0_{.9990}$ Austrian carat, or $1_{.001}$ Prussian carat.

DENMARK.

GEOGRAPHY, GOVERNMENT, &c.

The kingdom of Denmark consists of the peninsula of Jutland and Schleswig, the islands of Zealand, Funen, Langeland, Laaland, Falster, Bornholm, and Moen, and the duchies of Holstein and Lauenburg; its other dependencies are Iceland, the Faröe Islands, a settlement in Greenland, and the islands of St. Thomas, St. John, and Santa Cruz, in the West-Indies.

Denmark Proper with Schleswig covers an area of 18,261 square miles, with a population of about 2,000,000; the duchies of Holstein and Lauenburg 3682, with 590,000 inhabitants; the settlement in Greenland about 4000, with from 8000 to 10,000 Europeans and 15,000 or 16,000 Esquimaux; the West-India islands about 175, with between 30,000 and 40,000 inhabitants.

The inhabitants of the Danish states are (with the exception of 7800 Jews) of Teutonic origin. Danish is spoken in the different dialects of Zealand, Funen, Jutland and Schleswig; and also high and low German.

The inhabitants of Iceland are descended from different tribes of the Northmen from Norway.

Form of Government. Denmark is at present a constitutional monarchy, hereditary in the male line. In 1660 Frederic III., the then reigning king, was invested by his people with absolute power, and this form of government continued in force till 1849; for the system of states-general introduced in 1831 and 1834 was no essential alteration, as they conceded only the rights of advising and petitioning. In 1848 Frederic VII. was persuaded to grant to the inhabitants of Denmark Proper a constitution, consisting of a parliament with two chambers. In 1855 this was extended to the duchies, but withdrawn again by a royal decree of the 6th. Nov. 1858. The king of Denmark, as duke of Holstein and Lauenburg, is a member of the German Confederation, with one general vote, and three in the *plenum*, or full session.

The *predominant religion* is the Lutheran, which must also be the professed religion of the chief of the state. The number of dissenters from this faith amounted, in 1855, to between 13,000 and 14,000, of which 7809 Jews, 1693 of the reformed church, 2233 catholics, and 2000 Mormons. The Jews cannot be elected members of the states-general; and in Schleswig and Holstein they are allowed to settle only in particular towns, viz. Friedrichsstadt, Altona, Glückstadt, Rendsburg, Elmshorn, and Wandsbeck.

There are 11 bishoprics, viz. Zealand, Funen, Laaland-Falster, Aalborg, Wiborg, Aarhuus, Ribe, Alsen-Aeröe, Schleswig, Holstein, and Iceland: the Faröe Islands, Greenland, and the other foreign possessions belong to the diocese of Zealand. Iceland and the Faröe Islands excepted, Denmark is divided into 2156 parishes. In Iceland all is Lutheran, and there are said to be 321 churches, a great part, it is true, built of wood and turf; the number of ministers is 154.

There is a university at Copenhagen, and one at Kiel; 7 teachers' institutions, 19 polytechnic schools, 38 large schools, or colleges.

Finance. The *normal* budget for the whole monarchy for the financial period of the two years from April 1st. 1860 to March 31st. 1862 was—Revenue 33,269,364 rix-dollars; Expenditure 33,686,216 rix-dollars. The supplementary budget for 1860-62 was—Revenue 6,483,134; Expenditure 5,416,687 rix-dollars.

The contributions to the common expenditure by the different portions of the monarchy are supplied in the following proportions:—Denmark Proper $^{62}/_{100}$, Schleswig $16^{\cdot 36}/_{100}$, and Holstein $21^{\cdot 64}/_{100}$.

The national debt amounted in 1854 to 118,313,430 rix-dollars, or £13,310,262; in 1860 to 103,159,000, or £11,605,387.

Military. The effective force of the Danish army consists of an

artillery brigade, a body of pioneers, 25 squadrons of cavalry and 23 battalions of infantry; a total of 35,000 men. In time of war the number could be easily raised to 100,000 well-disciplined soldiers. The confederation contingent for Holstein-Lauenburg is fixed at 4200, with a reserve of 1200.

The *navy* consists of 19 sailing vessels with an aggregate of 634 guns; 24 steamships, with 326 guns in all; 67 row gunboats, with 134 guns: total 1094 guns. There are besides 9 transport-vessels, and 4 more building.

FEATURES OF THE COUNTRY.

Denmark is very flat, not possessing even a hill worthy of mention the most elevated point being the so-called Himmelsberg, in Jutland, 1200 feet high. The bays and creeks (Dan. *fjorde*) are numerous. The Elbe flows by Holstein, but with this exception there are no rivers of any importance. The Eider is the boundary between Denmark Proper and Holstein. In Holstein and Lauenburg there are a great many lakes. The subsoil is mostly either chalk or peat, covered in three-fifths of the country by what is called the *rullesteens-formation*, that is, rolling stones or lumps of all sizes composed of clay and sand. In those parts where the clay predominates are to be found the most fertile regions of Denmark, ornamented here and there by magnificent forests of beeches. The other two-fifths may be divided into ferruginous sand, quicksand, and marsh. The marshes, protected by dykes against the inroads of the sea, afford rich pasture land for large herds of cattle. The whole surface of the country may be classed as follows:—arable land 12,964 square miles, meadow-land 740, marsh and bog 1480, forests 870, heaths 2578, quicksands 274, roads, habitations, and sea-coast 1201 square miles.

The *climate* of Denmark is very mild, when its latitude is considered; this is owing to the tempering influence of the sea around; and although fogs are frequent, they appear to act in no way prejudicial to the health. Copenhagen has a mean temperature 3° warmer than Moscow, although in the same latitude; 7° colder than Edinburgh, but only 5° colder than Padua, in the middle of Italy.

The island of Iceland is of volcanic origin, and at present there are no less than 19 more or less active; among these the great Krabla and Hecla are the most remarkable. Hecla is 5210 feet high, Eyjafialle-Jökul 5794, and Oeraefe-Jökul 6420 feet. The climate is very mild in proportion to the latitude.

The Faröe or Faaröe Islands (*i. e.* sheep islands), more generally Färöe Islands (*i. e.* feather islands), lie between the Shetlands and

Iceland. Seventeen of these islands are inhabited. The characteristic features are high and steep rocks, innumerable little lakes, wild glens, and lofty picturesque waterfalls. In some places corn is grown and yields comparatively well, and grass grows luxuriantly. The climate is mild.

In the settlement on the coast of Greenland it is only in summer that the snows melt and give place to a scanty herbage.

MEANS OF COMMUNICATION.

Besides the existing railways the concession for two new lines has been granted, one to extend from Aarhuus to Flensborg, and thus connect Jutland with the duchies of Schleswig and Holstein; the second from the Island of Zealand over the Belt to the Island of Funen, and thence across the straits to the duchy of Schleswig, to join the present line between the towns of Flensborg and Schleswig. These two lines, when completed, will no doubt prove of very great importance to commerce, and will probably be the means of considerably extending the trade with England.

A plan is at present under contemplation for the construction of a canal through the duchy of Holstein, and thus connecting the North and Baltic Seas for large vessels. Such a canal would save much time and much diminish the danger of the passage from the one of these seas to the other.

SHIPPING AND NAVIGATION.

The number of merchant vessels—sailing and steam—belonging to Denmark Proper in 1859 were 2790, of 145,697 tons; to Schleswig 1544, of 61,748 tons, to Holstein 1326 of 44,973. The proportion of Danish ships engaged in the inland trade was 99¼ per cent., and in the foreign trade 58 per cent.

The number of vessels that entered Danish ports in 1859 was 66,883, of 1,577,216 tons; cleared out, 66,717, of 1,604,978 tons. Of these 256, of 35,895 tons, were under British flag.

FOREIGN COMMERCE.

The imports of Denmark in 1859 were as follows: —

Denmark Proper	35,115,310 rix-dollars,	or	£3,950,473
Holstein	15,286,631 ,,	,,	,, 1,719,746
Schleswig	8,934,124 ,,	,,	,, 1,005,088
Total	59,336,074 rix-dollars,	or	£6,675,307

The exports for the same year were:—

Denmark Proper	19,007,071 rix-dollars,	or	£2,138,295
Holstein	15,809,446 „	„	„ 1,778,562
Schleswig	4,910,125 „	„	„ 552,389
Total	39,726,642 rix-dollars,	or	£4,469,246

The trade with England was—value in rix-dollars—as follows:—

	Imports from	Exports to
Denmark Proper	8,807,023	8,742,698
Holstein	745,878	1,407,535
Schleswig	1,030,192	2,315,860
Total	10,583,093	12,466,093

The small amount of the imports of Holstein from England is accounted for by the fact that large quantities of goods really imported from England enter Holstein *viâ* Hamburg.

Although the effects of the monetary crisis of 1857, which affected in such a material manner the Danish trade during that and the following year have not been entirely effaced, nevertheless, a sensible progress has been made, and a considerable increase in almost every point has taken place during the year 1859.

In that year the total value of the trade amounted, according of the official returns, to 99,717,000 rix-dollars (about 11,000,000*l.* sterling); of this 59,752,000 rix-dollars for import and 39,965,000 rix-dollars for export trade.

In comparison with the year 1858 this shows an increase in the importation of 9,035,000 rix-dollars, and in exportation 5,927,000 rix-dollars. The total increase amounting to 14,962,000 rix-dollars.

It must here be remarked that the market prices in 1859 were much higher than the official value, consequently the statistical returns will hardly give a just idea of the whole value of the exports. Thus it may be calculated that the actual value of the exports of corn was 6,205,000 rix-dollars, of horned cattle 1,000,000 rix-dollars, horses 1,000,000 rix-dollars, butter 1,823,100 rix-dollars more than the official value.

The increase in the amount of importation is principally due to eight articles, viz., cotton, coal, sugar, tobacco, wood for construction, woollen and cotton manufactured goods, and wine. On these objects alone there was in 1859 an increase of 5,500,000 rix-dollars over the preceding year.

The principal articles of exportation on which a considerable increase has taken place, are horned cattle, horses, sheep, pigs, oil, oilcake, and corn.

As in former years England and Hamburg have played by far the greatest part as markets of export and import

Of the whole value of the trade of 1859 23 per cent. falls to the share of England, and 31 per cent. to that of Hamburg.

The total value of the trade with England in the above year was 23,049,186 rix-dollars (about 2,500,000*l.* sterling), which is more by 3,500,000 rix-dollars than in the preceding year.

With Hamburg the value of the trade was 30,853,415 rix-dollars, which is also about 3,500,000 rix-dollars more than in 1858.

Imports. The principal articles of import are cotton yarn, cotton and woollen manufactured goods, linen goods, iron and iron wares, carpenters' wood, coal, tobacco, and sugar.

The articles imported from England are principally iron and iron wares, cotton yarn and goods, and woollen manufactures.

Exports. The chief articles of export are:—grain, hides and skins; butter, horned cattle, horses, bacon, and rapeseed. These are also the principal exports to England.

AGRICULTURE, &c.

A great proportion of the people of Denmark are tillers of the soil, cattle breeders, &c., and with satisfactory results. The branches of agriculture to which they principally turn their attention are: the raising of corn, the breeding of cattle and horses, and the production of wool. The first and second items figure most conspicuously on the list of exports, the third is to a great extent worked up in the country itself. On the excellent pastures are raised large numbers of horses, horned cattle, and sheep; and a great deal of butter is made for export. Large herds of swine are bred and fattened in Jutland, and then exported.

In the middle ages Iceland was very fertile and produced rich crops of corn, owing no doubt to the volcanic heat of the soil; but since that found vent in numerous and terrible eruptions, and since the collecting of icebergs round the island, both soil and climate have changed for the worse, and corn is no longer cultivated. The meadows however are covered in summer with a rich vegetation, yielding summer and winter food for large numbers of horses, cattle, and sheep.

On the Faröe Islands there is little corn grown, but the pasturages are good, and sheep are bred on them. Some of the islands yield tolerable coals.

Bornholm has coal-pits, and other minerals are found there.

St. Thomas, Santa Cruz, and St. Jean yield sugar, cotton, a little coffee, and some other West-Indian productions.

INDUSTRY.

The productions of Denmark are rather those of the soil than of the factory. They of course manufacture a great many articles for home trade, but very few are exported in any quantity. Such articles are: mirrors, porcelaine, earthenware; cloth, woollen and cotton goods, sail-cloth; silk, ribbons; paper, playing cards, salpetre, colcothar of vitriol, aquafortis, leather, shoes, Danish gloves, tobacco, buttons, flax-combs, and linen. There are also numerous ship-building yards, large distilleries, sugar refineries, copper and brass works, salt works tan-yards, iron foundries, and establishments for weaving damask, printing calico, bleaching wax, and dyeing. Numbers of Danes get their living on the waters—by the carrying trade, and by the whale, oyster, herring, and other fisheries.

PRINCIPAL TOWNS.

Copenhagen (Dan. *Kjöbenhaven*), the capital of the kingdom, has a population of 155,143. Its original name was *Axelhuus*, and it was first raised to the dignity of a town in 1254; in 1443 royalty first took up its residence here. The port is the centre of Danish trade, and there is regular steam communication with Kiel, St. Petersburg, and the principal places on the Baltic. Here are fine docks and wharves. The principal articles of manufacture are—mirrors, cloth, silk, paper, sailcloth, ribbons, calico, porcelaine, and tobacco.

Altona—capital of Holstein, pop. 39,000; with a bishop's seat and a mint; it is a free port, visited by upwards of 5000 vessels in the year; silk, wool, and cotton goods; tobacco, leather, sugar, soap, candles, &c.; ship-building yards, manufactories of patent leather, tobacco, fringe, tassels, &c., and woollen yarn; and many dyeing establishments. It fits out a number of whalers and herring boats.

Flensburg, the present capital of Schleswig, with a population of 18,900; important port on the Fjord of Flensburg; seat of a bishop. It has a good foreign trade. Here are excellent wharves, large manufactories, and copper and brass works.

Kiel, the best and surest port of the Baltic, with 16,000 inhabitants, good wharves, lively transit trade, much shipping, an important fair, and large iron works; steam communication with Copenhagen, Aalborg, Flensburg, Snoghoi, Wordinburg, and the ports of the Baltic.

Rendsburg—pop. 11,000; with arsenal, bell foundry, and different manufactories, shipping, and transit trade.

Schleswig 9900 inhabitants; much shipping and important fisheries. It lies on an estuary formed by the river Schlei, about 20 miles from the sea. The castle of Gottorp was formerly the residence of the dukes

of Schleswig. For six centuries the town has flourished as a commercial port.

Odensee—pop. 9500; a very ancient town, founded by Odin. Seat of a bishop, and has different manufactories, especially of the noted Danish gloves. Here is spoken the most melodious Danish.

Aalborg—pop. 8300; manufactories of leather and tobacco, and sugar refineries; trade in corn and herrings.

Exchange Customs and Usages.

There is no legal *usance,* and therefore all bills on Copenhagen must be at sight, or bear the date of their maturity.

Bills at sight must be paid within 24 hours after presentation.

Time bills enjoy 8 days' grace, to which the possessor of the bill may add 2.

In cases of Sundays and holidays, the acceptance of a bill takes place the day after, the payment of one the day before.

Most of the Copenhagen bills are on Hamburg, either at 14 days' sight and under (short), or at 2 months (long); for bills on other places people generally reckon according to the Hamburg course in marks banco, and then reduce the amount into rigsdalers according to the day's course.

Bills payable in paper money can be made payable not longer than 8 days after sight or date; bills payable in coin not longer than 3 months after date. Those from the colonies are excepted. Cost of protest 2 rigsdaler, or 4*s.* 6*d.*

In Altona the German exchange regulations are in force, with some little variations caused by its proximity to Hamburg.

Exchange Prices of Paper Money.

191 rigsdaler	more or less	for		250 gulden Dutch current in Amsterdam.
200 do.	"	"		300 marks banco in Hamburg and Altona.
202 do.	"	"		100 species-daler in silver.
180 do.	"	"		100 species-daler in notes in Norway.
8 rigsd. 70sk.	"	"		1 pound sterling.
47 skillings	"	"		1 riksdaler in notes in Sweden.
34 do.	"	"		1 franc in Paris.

MONEY.

In Denmark accounts are kept in rigsdaler of 6 marks of 16 skillings. A rigsdaler is worth 2*s.* 3*d.*; or fl. $1._8$ Austrian currency, fl. 1 $19._6$ kr. South German currency, $23._{16}$ silber-groschen of the 30-thaler standard, and fr. 2 85 c. Fren and Belgian money.

The *gold coins* in circulation are the single and double Frederik-d'or and Christian-d'or, the former being worth about 16*s.* 3*d.* These gold coins are not legal tender for any regulated amount of Danish silver money.

The *silver coins* are pieces of one and two rigsdalers (the latter =1 species-daler, $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{8}$, $\frac{1}{12}$ rigsdaler; with 4 and 3-skilling pieces.

Of *copper coins* there are pieces of 2 skillings, 1, $\frac{1}{2}$, and $\frac{1}{3}$ skilling.

Older coins than the above, and still in partial circulation are: in gold—the species-ducat (=9*s.* 4*d.*), the current-ducat (7*s.* 5*d.*), and the Christian-d'or (16*s.* 5½*d.*); in silver—the $\frac{2}{3}$ species-daler (=3*s.*), $\frac{1}{2}$ do., $\frac{1}{3}$ do., and $\frac{1}{5}$ do.; together with pieces of 24 skillings Danish current, 16 sk. (since reduced to 15 sk.), 12 sk. (reduced to 10 sk.), $\frac{1}{6}$ thaler (mark), and 8-sk. piece.

In Lauenburg there are a small number of pieces of $\frac{2}{3}$ thaler, legal since 1830, and worth about 2*s.* 3*d.*; but Prussian thaler circulate largely in the duchy. The accounts are kept in Lauenburg thaler (=3*s.* 5*d.*) of 48 shillings. The Prussian thaler is taken for 42 of these shillings.

In Altona the largent merchants and wholesale dealers reckon in Hamburg marks banco.

MEASURES.

Long Measure:—

1 *fod* has 12 *tommer* of 12 *linier*, $=1_{.02972}$ Eng. foot, or $0_{.31385}$ mètre, and is of exactly the same length as the Prussian foot.

1 *alen* is 2 *fod* $=1_{.0985}$ Hamburg ell.

1 *rode* has 10 *fod*; 1 *favn* (fathom) has 6 *fod*.

The Danish mile is of the same length as the Prussian mile, viz. $4_{.46}$ Eng. miles, or $7532_{.485}$ mètres.

100 Danish *alen*, or ells, are equal to—

$68_{.648}$ English yards.	$62_{.771}$ French mètres.
$94_{.118}$ Prussian ells.	$75_{.354}$ Bavarian ells.
$111_{.099}$ Leipzig ells.	$88_{.262}$ Russian arschin.

Square and Land Measure:—

1 *rode* has 100 *fod* of 144 *tommer* $=106_{.031}$ Eng. square feet, or $9_{.8504}$ mètres.

1 *tönde* of land has 8 *skjaepper*, or 14,000 square *alen*—$1_{.363}$ Eng. acres, $55_{.162}$ French ares, or $2_{.7239}$ Prussian morgen.

Cubic Measure:—

1 *rode* has 1000 *fod* of 1728 *tommer* $=1091_{.336}$ Eng. cubic feet, or $30_{.92}$ mètres.

WOOD FOR BURNING:—

The *favn* is 6 *fod* long, and 6 *fod* high, and the logs 2 *fod* long; it contains therefore 72 Danish cubic *fod*=$76._{3427}$ Eng. cubic feet, or $2._{2259}$ cubic mètres.

CORN, SEED, &c.: —

The *last* has 22 *tonder* of 8 *skjaepper*=$673._{618}$ Eng. gallons, or $3061._{914}$ litres. A skjaepper is divided into quarters, eighths, and sixteenths.

The *tonde* contains exactly $4^1/_2$ Danish cubic feet, and is equal to $0._{47844}$ Eng. quarter, $139._{12}$ French litres, $2._{5312}$ Prussian scheffel, $2._{262}$ Vienna metzen, or $0._{6628}$ Russian tschetwert.

FLUID MEASURE:—

1 *fuder* has 6 *ohm*, 24 *anker*, 465 *kannen*, 930 *pott* of 4 *paegel*, and contains $197._{6832}$ Eng. gallons, or $898._{56}$ litres.

32 *pott*=1 Danish cubic foot; 1 *pott*=$0._{212564}$ Eng. gallon, or. $0._{9962}$ litres.

Wine is measured by the cask of $7\frac{1}{2}$ *ohm*, or 30 *ankers*; or by the *fuder* of 2 *pipen* of 2 *oxehoved* (hogshead) of $1\frac{1}{2}$ *tierzen* of 4 *anker*; 1 *tierze*=1 *ohm*=$32._{9472}$ Eng. gallons, or $149._{16}$ litres. Wholesale the *oxehoved* is reckoned at 240 pott. 28 Danish *anker* =29 Hamburg anker.

The *tonde* of beer has 136 *pott*.

The tonde is not used exclusively for beer, but also for measuring butter, fat, flour, soap, whale-oil, &c.

WEIGHTS.

TRADE WEIGHT:—

1 *Pund* has 16 *unzer* of 2 *lod* of 4 *quintin* of 4 *ort* of 16 *es* of 8 *grän*. The pund is the same as the Zollverein pound, viz. 500 grammes =$1._{10232}$ Eng. pound avoirdupois.

skippund has 20 *liespund* of 16 *pund*.

vog has 3 *bismarpund* of 12 *pund*.

1 *centner* has 100 *pund*=$110._{232}$ Eng. pounds avoirdupois.

1 *commercelaest* has 52 *centner*, or 5200 *pund*.

APOTHECARIES' WEIGHT:—

The *pund* has 12 *unzer* of 8 *drachmen* of 3 *skrupel* of 20 *grän*, and =$11._{5}$ oz. apoth., or $357._{8538}$ Fr. grammes.

GOLD, SILVER, &c.:—

1 *Pund* has 2 *marks* of 16 *lod* of 4 *quintin* of 4 *ort*; 1 *mark*=$7._{564}$ oz. troy, or $235._{294}$ French grammes.

For assaying purposes the *mark* has 24 *karats* of 12 *grän* for gold, and 16 *lod* of 18 *grän* for silver.

For coining purposes the *Cologne mark* is used, divided into 8 *unzer* of 2 *lod* of 4 *quintin* of 4 *ort* of 17 *eschen*, and $=7._{518}$ oz. troy, or $233._{85489}$ French grammes.

Standard silver for plate, &c. contains $13\frac{1}{3}$ parts fine out of 16, and bears the mark of three towers.

FRANCE.

GEOGRAPHY, POPULATION, GOVERNMENT, &c.

According to official measurement France (including Corsica) occupies an area of 55,061,125 *hectares*, equal to 136,061,748 English acres, or 212,600 square miles; and is thus about $2^1/_3$ times the size of Great Britain.

The population of France in 1856 was 36,039,364 souls: at present it numbers (including of course the newly acquired territories of Savoy and Nice, with 669,100 souls), 37,383,000 being, about 176 souls to the square mile. This is without reckoning the soldiers absent in Algeria, Rome, and other foreign countries. Since the last census in 1856 there has been an increase in 57 departments, a decrease in 29: average increase, including addition of Savoy and Nice, $1._{36}$ per cent. The increase in the department of the Seine was 13 per cent., and 7 per cent. in those of the Nord and Bouches-du-Rhone.

Besides the French properly so called, there are upwards of $1\frac{1}{2}$ millions of Germans (principally in Alsacia, Lothringen and Bar), 180,000 Flemings (in French Flanders); 600,000 to 700,000 Savoyards; the inhabitants of Corsica are almost all Italians; the number of Bretons (or *Breyzards*), whose ancestors immigrated from Britain in the fifth century, amounts to about 1,200,000; and that of the Basques, in Gascony, to some 150,000; the cretins, or *cagots*, to the number of 8000, inhabit the Pyrenees; the Gipsies are said to be 9000 strong, mostly in the frontier departments of the Pyrenees.

French Algeria has a superficies of 39,000,000 *hectares*, or 150,585 Eng. square miles. The population numbers some 2,700,000, of which 203,000 are Europeans.

The other foreign possessions of France are:—

	Hectares.	Population.
Asia: Pondichery, Karrikal, Yannaon, Mahé, Chandernagor	48,962	215,993
Africa: Senegal and dependencies	25,000,000	20,804
Réunion, or Ile de Bourbon	231,550	161,321
Ste. Marie (Madagascar)	90,975	5,700
Mayotte and its dependencies	53,000	24,304
America: Martinique	98,782	137,513
Guadeloupe and dependencies	342,513	133,092
Guyane	15,000,000	17,143
St. Pierre and Miquelon	21,023	2,190
Australasia: Isles Marquises	130,000	12,000
New Caledonia, &c.	2,000,000	60,000
Isles Pomotou and Toubouai	200,000	18,400
Society Islands, Tahiti, &c.	150,000	9,000
Total	43,366,805	817,527

The total area of these colonies is thus 43,366,805 *hectares,* equal to 167,446 Eng. square miles. This added to Algeria gives for the French colonial possessions an aggregate of 318,031 square miles, with a population of 3,517,520 souls. The superficies of the newly-acquired territory of Saigon, in Annam, has not yet been ascertained, but it is supposed to have in round numbers 100,000 inhabitants.

France is divided into 89 departments (the island of Corsica forming one), and these again into 373 districts, 2938 cantons, and 37,510 communes. Algeria is divided into three provinces, Alger, Constantine, and Oran.

Paris, on the Seine, is the capital and seat of government, with 1,526,000 inhabitants, including 150,000 strangers and the numerous garrison.

Form of Government.—France is at present an empire. The emperor is assisted by a council of state, the members of which are nominated by himself. The *sénat,* or upper house, consists of persons also appointed by the emperor; the *corps législatif,* or lower house, is composed of about 267 members elected by the people. The upper house proposes what modifications of the laws of the land it may think proper; the lower house discusses it, and either simply accepts it or rejects it. The ministers are responsible to the emperor alone, and the executive power is entirely in the hands of this latter. The highest court of justice is the *cour de cassation* at Paris. Each department is governed by a prefect, each district by a sub-prefect, and each canton and commune by a mayor.

The *predominant religion* is the Roman catholic; of protestants there are about 2,500,000—some say 4,000,000—who are Lutherans, members of the so-called reformed church, Wesleyans, quakers, &c. Of Jews there are upwards of 70,000. All religions are *theoretically* equal in the eyes of the law, but in *reality* they are not so.

FINANCES.

Notwithstanding the development of manufacturing industry, notwithstanding the imposition or augmentation of certain taxes, and notwithstanding that the second war tenth ("second décime de guerre"), which had been originally voted for the purposes of the Crimean war, has been made permanent, the income of France has not been found to keep pace with the expenditure. In comparison with the period of ten years 1841-50, the yearly average of the ordinary receipts had only increased during the period 1851-60 by 268,000,000 francs, whereas the average of the yearly expenditure shows a far higher figure. The following tabular returns give in round numbers the income and the expenditure for the two periods just mentioned, namely, 1841-50 and 1851-60:—

Income.				Expenditure (Ordinary and Extraordinary).			
Years.	Francs.	Yrs.	Francs.	Years.	Francs.	Yrs.	Francs.
1841	1,198,000,000	1851	1,273,000,000	1841	1,425,000,000	1851	1,461,000,000
1842	1,256,000,000	1852	1,336,000,000	1842	1,441,000,000	1852	1,513,000,000
1843	1,270,000,000	1853	1,391,000,000	1843	1,445,000,000	1853	1,548,000,000
1844	1,289,000,000	1854	1,418,000,000	1844	1,428,000,000	1854	1,988,000,000
1845	1,330,000,000	1855	1,536,000,000	1845	1,489,000,000	1855	2,399,000,000
1846	1,352,000,000	1856	1,638,000,000	1846	1,567,000,000	1856	2,196,000,000
1847	1,343,000,000	1857	1,683,000,000	1847	1,630,000,000	1857	1,893,000,000
1848	1,207,000,000	1858	1,748,000,000	1848	1,771,000,000	1858	1,859,000,000
1849	1,257,000,000	1859	1,728,000,000	1849	1,646,000,000	1859	2,208,000,000
1850	1,296,000,000	1860	1,741,000,000	1850	1,473,000,000	1860	2,148,000,000
Total	12,807,000,000		15,492,000,000	Total	15,315,000,000		19,213,000,000
Average	1,280,000,000		1,549,000,000	Average	1,531,000,000		1,921,000,000

The principal fact which we gather from the above returns is, that in the course of the ten years 1851-60, inclusive, the annual expenditure, as compared with that of the preceding ten years 1841-50, increased by about 400,000,000 frs., and that the country has spent 3 "milliards" and 721,000,000 frs. beyond the amount which her ordinary income authorized! The greater part of this enormous difference was covered partly by direct loans, such as the loans of 250,000,000, 500,000,000, and 750,000,000 frs., contracted during the Crimean war, and partly by indirect loans, such as the absorption by the treasury of the 100,000,000 frs. by which the capital of the Bank of France was augmented in 1857, the appropriation of sums belonging to the fund of the "Dotation de l'armée," and again the recent emission of trentenary bonds. The result of these various operations has been to considerably increase the consolidated debt, which since 1852 has been nearly doubled, as appears

from the following tabular return of its state on the 1st of January of each year from 1852 to 1861:—

Years.	No. of Inscriptions of "Rente."	Nominal Capital of the Debt.	Yearly Rente.
		Francs.	Francs.
1852	810,901	5,516,194,600	239,304,527
1853	725,190	5,577,504,587	219,929,486
1854	785,243	5,669,655,012	222,686,243
1855	835,157	6,082,877,853	236,242,772
1856	1,020,338	7,558,040,822	284,668,525
1857	1,028,284	8,031,992,466	299,099,242
1858	1,008,682	8,422,096,778	310,880,953
1859	937,711	8,593,288,155	315,993,646
1860	1,073,801	9,334,012,005	346,168,645
1861	988,465	9,718,276,913	349,884,166

To this we must add the floating debt, which in M. Fould's last report is estimated at over 1,000,000,000 francs.

Indirect Taxes and Revenue in France, in millions of francs.

Years.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
1852	185.3	204.2	197.2	217.6	804.3
1853	199.6	212.2	214.2	220.8	846.8
1854	196.2	208.6	213.8	228.6	847.3
1855	211.1	231.9	256.8	259.2	950.0
1856	242.2	257.5	254.5	272.0	1,026.2
1857	256.4	269.6	255.1	271.6	1,052.7
1858	261.1	278.9	272.2	279.5	1,091.7
1859	259.1	273.9	265.7	295.4	1,094.6

In the budget for 1862 the indirect contributions are calculated to amount to 1,485,221,859 francs, and the direct taxes to 488,848,169 francs: this gives the revenue at 1,974,070,028 francs; while the expenses were calculated at 1,969,769,031 francs. This budget has, however, already been deranged by the demand for and granting of supplementary credits.

MEANS OF OFFENCE AND DEFENCE.

The *military force* of France in 1862 consists of 446,548 regulars embodied and 170,000 reserve; then 265,417 national guards. The contingent of 1862 is above 70,000 men.

The strength of the *navy* is as follows: 319 steamers and 119 sailing-vessels afloat, of which 43 ships of the line and 71 frigates; then 44 vessels building: 6 iron-plated frigates and 12 iron-plated batteries afloat, 10 iron-plated frigates and 9 iron-plated batteries building. Number of men 46,381. Marine budget £8,428,249, exclusive of the expenses for the colonies.

FEATURES OF THE COUNTRY.

More than nine-tenths of the whole area of France is comprised in the valleys of the three rivers Garonne, Loire, and Seine, which all have

their origin in a great watershed lying close to the eastern border of the country, the basins being separated one from the other by three well-marked elevations of the surface connected with this watershed, and declining towards the shores of the Atlantic. A fourth basin is that of the Rhone. The basin of the Garonne, the richest and most fertile portion of the empire, is bounded on the south by the Pyrenees, and separated from the Loire by the mountains of La Margeride and Auvergne, given off from the Cevennes, and running west and north-west to the mouth of the Loire. The basin of the Loire is separated from that of the Seine by a series of hills and plateaux extending from the Côte-d'Or Mountains into Bretagne, and terminating in the Armorican range; the eastern portion of this chain is called the plateau of Morvan, the middle the plateau of Orleans; Vézelay, the capital of the Morvan forest tract is 2000 feet above the sea-level. The basin of the Seine is separated from the Moselle, Meuse, and Scheldt by the Ardennes. The basin of the Rhone is defined throughout—the Alps and Jura on the east, the Cevennes and branches on the west. By the annexation of Savoy the king of European mountains, Mont Blanc, became French.

The natural position of France is very fine: she sits on three seas, and has 1500 miles of sea-board. On the English Channel the coast is irregular, with deep indentations and generally low and shelving till we pass the promontory of Cotentin, where it becomes more rugged and rockly. The western shores are lofty and preciptous as far as L'Orient, where we meet low muddy flats, and occasional rocky headlands. South of the Loire the coast is low and marshy as far as the Gironde, where begins a range of sand-dunes stretching away to the Pyrenees. The Mediterranean coast has numerous lagoons till it approaches Italy, it then assumes a bolder aspect.

INTERNAL COMMUNICATION.

France has not less than 6000 rivers and streams; but none of them are easily navigable, and none of them admit large vessels; although steamers now ply on most of them, as on the Saône, Rhone, Garonne, Loire, Seine, &c. The different basins are also connected one with the other by means of canals, the construction of which exhibits very great engineering skill. There is a canal tunnel near St. Quentin three miles long, with several ventilators. The number of canals is 86, with a total length of 2350 miles: but they now suffer greatly from the competition of the railways.

The annnexed tables give the length of lines of railway in working order, their receipts, &c.

I.—Old "Reseau" (Network).

Name of Railway.	Average open.	Receipts in		Increase in 1861.
		1861.	1860.	
	Kilomètres.	Francs.	Francs.	Francs.
Northern	956	45,980,301	24,305,481	1,674,840
Eastern	959	36,482,275	33,777,297	2,705,076
Western	900	37,287,878	35,344,004	1,943,874
Orleans	1,476	52,567,816	48,740,537	3,827,279
Paris to Mediterranean	1,411	86,531,102	72,374,024	14,157,078
Lyon and Geneva	237	5,492,384	5,040,051	452,333
Southern	796	20,951,650	16,724,010	4,207,640
Others	252	4,479,880	3,716,398	794,372
Total	6,987	289,753,284	260,021,702	29,755,472

II.—New "Reseau."

Name of Railway.	Average open.	Receipts in		Increase in 1861.
		1861.	1860.	
	Kilomètres.	Francs.	Francs.	Francs.
Northern	41	248,809	37,928	210,881
Eastern	741	14,894,091	13,150,982	1,743,109
Ardennes	165	2,894,600	2,642,673	251,927
Western	312	3,335,597	3,166,815	168,782
Orleans	474	4,381,297	3,228,117	1,153,180
Paris to Mediterranean	536	15,297,647	13,173,327	2,124,320
Dauphiné	133	2,241,530	1,983,386	258,144
Southern	99	664,709	557,605	107,104
Total	2,506	43,940,833	37,940,833	6,017,447

FOREIGN TRADE AND COMMERCE.

The countries with which France carries on the greatest part of her commerce are—Great Britain, Switzerland, the United States of America, the German Zollverein, Belgium, Turkey, Sardinia, the English colonies, Spain, and Russia.

The business transacted with these countries and with French colonies in 1859 was as follows, expressed in francs:—

	Imports		Exports	
	Official Value.	Actual Value.	Official Value.	Actual Value.
Great Britain	368,500,000	406,700,000	223,100,000	278,200,000
United States	217,100,000	219,800,000	195,900,000	198,500,000
Switzerland	269,900,000	261,300,000	39,100,000	52,300,000
German Zollverein	194,700,000	219,900,000	72,500,000	106,800,000
Belgium	183,700,000	203,700,000	130,400,000	160,200,000
Turkey	97,300,000	111,400,000	73,300,000	80,300,000
Sardinia	94,400,000	104,000,000	69,300,000	83,300,000
English Colonies	81,900,000	79,100,000	81,900,000	77,600,000
Spain	71,800,000	77,200,000	52,100,000	54,300,000
Russia	61,500,000	64,300,000	53,800,000	54,600,000
Algeria	45,800,000	36,500,000	40,700,000	34,200,000
Other French Colonies	112,400,000	110,100,000	97,900,000	96,100,000

With respect to the articles imported into France and exported therefrom we cannot do better that give the two tables following:—

COMPARATIVE RETURN of Importations in 1859, 1860 and 1861.

	Quantities.	1859.	1860.	1861.
Cattle	Head	567,303	604,348	709,419
Wines of all kinds	Hectolitres	128,828	183,211	254,421
Brandy (Pure)	"	37,408	44,537	94,113
Spirits (3/6)	"	9,392	44,112	74,566
Cocoa	Metrical Quintals	40,944	47,166	51,077
Coffee	"	303,364	343,565	375,654
Cotton and wool from—				
United States	"	750,327	1,148,034	1,094,434
Egypt	"	30,877	33,617	53,679
Other countries	"	35,447	55,370	89.250
Total		816,651	1,237,021	1,237,363
Cotton yarns	"	528	410	8,914
Woollen and hempen yarns	"	7,075	16,160	17,267
Coal from—				
Belgium	"	28,265,371	30,031,665	29,341,872
England	"	11,822,543	11,836,619	13,057,306
Germany	"	6,350,839	7,334,762	7,886,075
Other countries	"	21,592	34,819	22,088
Total		46,460,345	49,234,855	50,307,341
Coke from—				
Germany	"	1,902,283	2,191,652	2,463,812
Belgium	"	2,596,326	3,085,037	3,164,402
Other countries	"	42,559	48,293	53,107
Total		4,541,168	5,324,982	5,681,321
Wool in masses from—				
England	"	87,972	121,765	150,292
Turkey	"	37,673	55,917	75,755
Algeria	"	27,777	65,873	65,829
Other countries	"	241,626	274,352	269,924
Total		395,048	517,907	561,800
Machinery and mechanical instruments	Francs	4,066,354	3,552,959	9,428,653
Pig and cast iron from—				
England	Metrical Quintals	265,640	211,315	981,981
Belgium	"	140,166	55,052	168,073
Other countries	"	24,433	23,044	25,525
Total		430,239	289,411	1,175,579
Bar iron	"	15,201	4,452	112,280
Steel	"	7,731	3,242	11,482
Copper	"	123,312	132,396	158,194
Zinc	"	238,018	304,930	376,321
Metal wares	"	—	—	59,204
Silks	"	32,518	38,193	36,230
Sulphur	"	515,346	475,455	600,158
Sugar from French colonies	"	932,896	1,151,862	1,132,058
" Foreign colonies	"	596,490	466,795	852,293
Tissues of cotton	"	—	—	3,621,446
" wool	"	—	—	16,384,634
" flax and hemp	"	10,043	14,822	21,764

COMPARATIVE RETURN of Exports from France 1861, 1860 and 1859.

Articles.	Quantities.	1859.	1860.	1861.
Cattle	Heads	98,734	106,927	88,042
Common wines				
England	Hectolitres	48,939	110,469	94,852
Italy	"	646,494	350,592	270,664
Switzerland	"	217,839	182,599	270,928
Other countries	"	1,638,311	1,306,319	1,138,847
Total		2,452,033	1,949,979	1,775,291
Liqueurs	"	76,006	70,807	76,527
Spirits of wine	"	267,352	147,736	141,029
Brandy (pure)	"	8,824	8,802	6,867
Spirits (3/6)	"	36,928	16,830	18,040
Cotton wool	Metrical Quintals	326	89,635	133,420
Wool, raw, in masses	"	12,020	45,235	49,411
Hackled hemp and tow	"	11,295	15,725	21,240
Books, engravings and lithographs	"	19,987	22,176	20,235
Machinery and mechanical instruments	Francs	6,791,018	8,281,261	7,059,764
Furniture	"	7,474,325	6,899,608	6,481,297
Millinery	"	6,417,540	5,533,317	3,964,862
Metal wares	Metrical Quintals	129,751	125,760	115,982
Porcelain, fine and common	"	57,232	58,382	40,092
Soap (not perfumed)	"	2,472	2,611	20,122
Salt	"	1,157,192	916,933	1,039,547
Silk	"	7,657	6,518	7,729
Refined Sugar	"	1,129	1,342	134
Tissues of cotton	"	8,160	38,042	91,973
" wool	"	11,542	28,056	75,804
" flax or hemp	"	20,040	22,930	24,061
" silk	"	35,699	36,795	27,739

The commerce of France with foreign countries is, in official language, classed under two heads, namely, "general" and "special." The latter applies only to the importations for home use and the *bonâ-fide* home-made exportations to foreign countries; while the former comprehends not only the "commerce spécial," but also goods entered for transit, re-exportation, &c.

The value of the imports and exports, &c., is likewise classed under two heads; namely, the "official" and the "real" or "cctual" value. The official value is based upon an official standard fixed in 1826, while the actual value in determined every year by a special Commission.

The relative proportion of "general" and "special" commerce for the five years 1856-60 are as follows:—

Imports.

In millions of francs.

	1856	1857	1858	1859	1860
General Commerce	$2267._5$	$2235._8$	$2034._9$	$2148._2$	2392
Special do.	1521	1450	$1383._7$	1404	1585

Exports.

	1856	1857	1858	1859	1860
General commerce	$2139._8$	$2356._7$	$2441._9$	$2755._6$	2949
Special do.	$1626._9$	$1640._2$	$1777._5$	1998	2091

It may here be remarked with respect to the exports, that their value is often exaggerated on account of the drawback, or *prime à l'exportation,* allowed by the French government on a large number of articles, which said articles become suddenly reduced in value on arriving at their destination *where they have to pay an import duty!* For instance, the exports from France to the United States figure on the *import* lists of the latter country for 20,000,000 dollars less than the declared worth of the same articles noted in France as *exports!*

The following figures show the flux and reflux of gold and silver in 1861 as compared with 1860:—

SILVER.

	1860.	1861.
Imports	6,567,516 hectogrammes	8,728,642 hectogrammes
Exports	14,410,370 "	11,694,244 "
Excess of Exports	7,482,854 hectogrammes	2,965,602 hectogrammes

GOLD.

	1860.	1861.
Imports	1,568,686 hectogrammes	813,230 hectogrammes
Exports	530,329 "	912,688 "
Difference	+ 1,038,357 hectogrammes	—99,458 hectogrammes.

It appears from these figures that the drain of silver, which had been so heavy during ten years as nearly to cause silver coins to disappear from circulation in France, had, in 1861, considerably diminished. For the excess of the exports over imports of silver in 1861 was reduced to 2,965,602 hectogrammes, whereas, in the preceding year, it amounted to 7,842,854 hectogrammes. With regard to gold the change to be observed is far greater in the reverse sense, for while during the last ten years the stock of gold had been constantly increasing in France, in 1861 she exported more gold than she imported.

INDUSTRY.

The industry of France is of great importance, and although the importation of many natural productions is necessary, yet, on the other hand, there are very many articles of art, taste, and fashion, which the foreigner can find nowhere else so good and comparatively so cheap as in France.

The principle articles manufactured are: silk, cotton, and woollen goods, steel instruments, jewellery, glass, and toilet articles; besides arms, musical instruments, paper, chemicals, and iron and brass wares.

The table of exports given under "Foreign Trade and Commerce," will give a pretty good idea of the articles in which France excels. We only mention a few:—

French cachemire shawls are of acknowledged excellence, as are also—the porcelaine of Sèvres (a government establishment), the tapestry of the Gobelins at Paris (also a government affair), and that of Beauvais; the carpets of the Savonnerie at Paris, Aubusson, Felletin, and Abbeville; the silks of Lyons, Nismes, Avignon, Annonay, and Tours; the cloth of Elbœuf, Louviers, Lodève, Sedan, Carcassonne, Abbeville, &c.; the cambrics, lawn, gauze, and tulle of Cambrai, Valenciennes, St. Quentin, and Douai; the lace of Alençon, Caen, and Bayeux; the gloves of Paris, Vendôme, Blois, and Grenoble; the printed calicoes of Mühlhausen and Colmar; the stockings of Falaise, Paris, Troyes, and Nismes; the carriages and saddlery of Paris; the basket-work of Origny, and Bougiers; the soap of Marseilles; the cutlery of Châtellerault, Langres, Chaumont, and Paris; the jewellery—real and imitated—of Paris, and its mantel-piece clocks. The manufactures of Paris alone are estimated at little less than £6,000,000 annually, of which for about £180,000 are children's toys.

SHIPPING AND NAVIGATION.

Compared with the other branches of the national industry the merchant navy of France has been a very laggard in its movements, and in spite of the sun of imperial favour and the material advantages accorded to it, seems to refuse to take part in the general progress. In 1827-36 the tonnage of the French vessels engaged in the foreign trade of the country figured for 43 per cent. of the whole, while in the period 1847-56 it amounted to but $41._7$ per cent. In 1827 the imports and exports by sea amounted in official value to 811 millions of francs, of which $465._2$ millions, or 57½ per cent., were transported under French flag; in 1856 they amounted to 3296 millions, of which but $1428._4$, or 43½ per cent., were carried by French vessels.

The aggregate of voyages made by ships of all sorts and of all flags between France on the one hand and its colonies and foreign countries on the other, in 1859, amounted to 45,475: the tonnage of the vessels employed was 7,039,966 tons. Of this the French part was 44 per cent.: separating sailing vessels from steamers, it was 47 per cent. of the former, and 36½ per cent. of the latter.

In January 1860 the commercial navy of France consisted of 15,032

vessels, of 1,025,942 tons: viz. belonging to Atlantic ports 11,145 sailing vessels, of 749,712 tons, and 181 steamers, of 20,561 tons; belonging to Mediterranean harbours 3,563 sailing-vessels, of 211,224 tons, and 143 steamers of 44,445 tons. Of the aggregate of vessels about 60 are of 700 tons and upwards, 740 of 300 to 700 tons, 2300 of 100 to 300, and the remainder, including some 7000 fishing-boats, and numbering altogether about 12,000 vessels, are of less than 100 tons.

RETURN of Number of Vessels Entering and Clearing out from French Ports in 1861, 1860 and 1859.

Name of Port.	Vessels Entered.				Vessels Cleared out.			
	Total.		French.		Total.		French.	
	Number of ships.	Tonnage.	Number of ships.	Tonnage.	Number of ships.	Tonnage.	Number of ships.	Tonnage.
Marseilles . .	5,247	1,314,983	2,174	590,127	3,824	952,893	1,860	541,314
Havre	2,963	969,414	753	224,067	1,165	377,743	484	150,080
Bordeaux . . .	1,947	370,269	1,207	180,061	1,067	246,536	595	139,270
Nantes	1,505	194,902	1,308	158,290	316	68,850	281	64,344
Rouen	1,003	125,086	255	31,858	368	42,170	121	16,421
Dunkerque . .	2,276	283,287	553	72,863	622	86,823	199	25,325
Boulogne . . .	1,672	251,753	18	2,010	1,046	173,555	16	1,653
Calais.	1,497	217,726	480	56,482	997	131,721	441	53,961
Cette	984	128,453	416	64,536	794	98,818	319	51,485
Dieppe	1,409	240,465	115	18,373	534	89,606	44	10,936
Other Ports .	9,514	838,286	4,367	364,956	6,496	411,704	2,482	191,041
Total 1861	30,017	4,934,624	11,646	1,763,623	17,229	2,680,419	6,842	1,245,831
do. 1860	25,081	4,017,293	10,681	1,667,093	11,456	2,845,730	8,013	1,342,714
do. 1859	25,013	3,997,504	10,384	1,621,727	20,450	3,038,638	8,782	1,475,181

One-third of the whole number of foreign vessels which entered or cleared out from French ports in 1861 were under the British flag. During that year 9077 British vessels, of an aggregate tonnage of 1,256,000 tons, entered French ports, and the number which cleared out was 9039 vessels, of 1,261,045 tons. The amount of tonnage dues levied on British ships upon their entrance into France, was 1,470,338 francs, out of a total amount of 4,531,682 francs levied upon the vessels of all other foreign nations.

The *coasting trade* of France in 1857 may be thus summed up: 25,73,265 tons of merchandise were transported from one port to another. Of this quantity 1,877,299 left Antlantic ports, 695,966 Mediterranean ports. The so-called *grand voyage*, from Atlantic to Mediterranean ports and *vice versâ*, was performed with 118,950 tons of merchandise; 1,846,240 tons were transported from one port on the Atlantic to another, and 87,891 tons between the different ports on the Mediterranean. The principal articles transported were—corn and flour 384,833 tons, wood 319,322, salt 268,148, wine 130,780, coals 119,888, iron 108,334 tons.

The principal commercial ports are: Marseilles, Bordeaux, Nantes, Havre, Brest, Rouen, Calais, Boulogne, Dunkerque, Cette, Honfleur, Toulon, Cherbourg, St. Malo, Dieppe, Rochefort, Caen, Fécamp, La Rochelle, Granville, Paimbœuf, and Port Vendres.

AGRICULTURE, &c.

With respect to its vegetable productions France may be divided into four zones. The first lies north of a line drawn from the extreme northern point of the mouth of the Loire to the town of Laon, and passing north of Mezières. The temperature and general character of the vegetation of this region are very similar to those of England; wheat, barley, rye, and oats, hemp, rape-seed, and flax, apples, pears, and cherries, are the principal objects of cultivation; the pastures are rich and extensive, and the same forest trees prevail. The second zone lies between the line above mentioned and one running from the mouth of the Gironde to a point between Nancy and Strasburg. Here the vine is extensively cultivated, and wheat is the chief cereal. The third zone is bounded on the south by a line drawn from the Pyrenees through Carcassonne to a point a little south of Grenoble. This part of France is very favourable to the vine and to the growing of maize. South of this line, the fourth zone, we find the olive, the orange, the mulberry-tree, and the American fig, which latter harbours the cochineal insect.

The system of farming in France is allowed on all hands to be considerably behind those practised in Belgium, Germany, or England. This is due in a very great measure to the law of succession, which, dividing the property of an individual equally between all the children, causes the farms to become every day smaller; so that at present there are upwards of 11,000,000 "landed proprietors," each possessing on an average about five acres. The owner of such a "lot" is evidently not able to procure agricultural implements involving any considerable outlay; nor can he afford to make any experiments with his land. He goes on, therefore, as his father before him did on a larger scale, and when he dies his children divide the inheritance, and each one does, on a still smaller scale, the same as the father did. In this way, also, meadow lands are gradually disappearing, and being converted into corn land; but, sown with corn too often, they are soon exhausted, and then, with the limited number of cattle, where is the manure to come from? And accordingly we find from official statistics that, while in England the net produce of corn is nine-fold, in France it is but six-fold. Under such circumstances it cannot be expected that in general the rearing of cattle should make much progress, nor that of horses. Of both large

quantities are imported. There are of course exceptional cases, where intelligent and enterprising men of property are doing their best to improve the system of agriculture: but on the whole the above is a pretty true picture of the present state of things.

The vine may be considered the chief production of France, and is cultivated on about 4,900,000 acres. No other country in Europe produces so much wine as France. Expressed in figures the proportions are as 40 in France to $33^1/_2$ in Austria, $8^1/_2$ in Spain. and $4^1/_2$ in Germany. French wines are divided into three principal sorts:—Bordeaux, made in the neighbourhood of Bordeaux or higher up the banks of the Gironde, and also that exported viâ Bordeaux; Burgundy, of which the best is produced on the sides of the Côte-d'Or; Champagne, produced in the ancient province of Champagne, the best coming from the department of the Marne.

The number of persons—men, women, and children—employed in the cultivation of the soil has been reckoned at about 18 millions, and the amount of wages paid in the course of the year at about 3016 millions of francs, so that the average yearly earnings of a family of three workpeople would be about 500 francs, or £20.

Till lately the breeding of horses was little attended to, but now races have been established, and the different government studs provided with entire horses of great excellence. The best fattening oxen are those of Auvergne and Gascony. Dairy produce is of superior quality in Normandy, Picardy, and Brittany. Sheep-breeding has made great progress within the last 40 years.

The beet-root is largely cultivated for the purpose of making sugar. There are altogether 344 establishments in work; and these manufactured in 1860-61 some 100,876,286 kilog. of sugar, or about 2,000,000 Cwt.

MINERALS, &c.

Coals and *iron* are both found in France, but of both the one and the other large quantities are imported.

The coals obtained in 1859 amounted to 74,825,718 metrical quintals —(one metrical quintal $= 220_{,459}$ lbs.)—at fr. 1 $26._9$ cent. per quintal. The two great coal-fields are those of the Loire and of Valenciennes, producing each more than 20,000,000 metrical quintals.

In 1858 the different iron mines yielded an aggregate of 34,277,455 metrical quintals of iron ore; herein the department of the Cher takes the lead, with 7,172,400 metrical quintals, followed by Haute Marne and Haute Saône.

A great deal of turf is also cut in France, especially in the depart-

ment of the Somme (1,270,000 met. quint.): the whole quantity cut in France amounting in 1859 to 2,800,179 met. quint.

There is a silver mine in Dauphiné, and lead ores containing silver are also found in Lyonnais, Dauphiné, Brittany and Alsacia.

Mineral springs—cold and warm—exist to the number of 700. The two hottest are those of Olette (Dep. Pyrénées orientales) and Chaudes-Aigues (*Calentes Aquæ*); in the first the thermometer stands at 70° Réaumur (=about 190° Fahr.), the latter is almost boiling. The intermitting spring of Fonsange (Dep. du Gard) is remarkable, flowing for seven hours and a half and then ceasing for five hours, giving each time sufficient water for forty baths.

PRINCIPAL TOWNS.

Paris, on the Seine, capital of the empire and seat of government. Including a numerous garrison and 100,000 to 150,000 foreign residents, the city contains 1,526,000 inhabitants. The town and suburbs are surrounded by fortifications on the Vauban style, strengthened by thirteen detached forts of considerable importance. Paris is the seat of an archbishop. The industry of Paris consists principally of—tapestry of the Gobelins, carpets of the Savonnerie; woollen, cotton, and silk goods; shawls; furniture, musical instruments; toys; clocks and watches; jewellery; blonde, lace, and gauze, artificial flowers; porcelaine; gloves, stockings; carriages and saddlery. The present annual value of the manufactures of Paris is estimated at not less than £6,000,000, of which for about £180,000 are children's toys.

Lyons (Fr. *Lyon*), at the junction of the Rhone and Saône. Population, inclusive of the suburbs, 379,000. This is the seat of the silk trade; there are from 70,000 to 80,000 looms, giving employment to upwards of 120,000 persons. There are also many dyeing establishments; a great deal of jewellery, and quantities of liqueurs are made here.

Marseilles (Fr. *Marseille*), the chief commercial city and sea-port of France, on the Mediterranean; with nearly 252,000 inhabitants; soaps, perfumery, olive oil, liqueurs; tan-yards, tobacco-works, and refineries of sugar, salt, sulphur, &c.; sheet lead, glass, and pottery; trade in wine, brandy, corn, flour, dried fruits, oranges, tobacco, anchovies, iron; cork, dye-stuffs, &c. Good and commodious wet and dry docks.

Bordeaux, on the left bank of the Garonne, 60 miles from the sea; pop. 150,000. Seat of an archbishop. The principal exports are—wines (chiefly red), brandy, fruits (chiefly plums and almonds), grain, hemp, flax, tar, rosin; and of its own manufactures, viz., cotton, linen, and woollen goods, chemicals, liqueurs, iron wares.

Nantes, on the Loire, with 108,500 inhabitants. Cotton and cotton yarn, muslin, woollen goods; shipyards and cannon foundries. It has a large trade.

Rouen, on the Seine; pop. 104,000. The staple manufactures are cotton goods of various descriptions known by the name of *Rouenneries*. Other articles of importance are—woollen goods, ribbons, lace, hosiery, glue, soap, paper, refined wax, leather, and colours. Trade in the above articles and in grain, flour, wine, spirits, salt, and provisions.

Toulouse, on the Garonne; pop. 104,000. Woollen and cotton goods, articles of copper, cutlery, agricultural implements, starch, candles, stoneware; cannon foundry, tobacco factory, dyeing works, extensives tanneries; trade in wine, brandy, grain, and iron wares.

St. Etienne—pop. 95,000; arms, silks, and ribbons. Annual value of manufactures between £2,000,000 and £3,000,000.

Toulon, second naval sea-port of France, on the Mediterranean. Pop. 83,000. Extensive trade in wine, brandy, grain, timber, salt, provisions, oil, and fruit. Vessels entering annually, 300 to 400; the same number leaving.

Lille (Flem. *Ryssel*)—on the canal uniting the Scarpe and Lys. It is a strongly fortified town, with a population of 79,000. Calicoes, cotton yarn, stockings; linen, lace, fine woollen goods, leather, soap, ribbons, and tulles; bleaching grounds, oil-mills, beet-root plantations, tobacco and saltpetre factories.

Strasbourg (Ger. *Strassburg*)—on the Rhine; with upwards of 77,000 inhabitants. The cathedral has the highest spire in Europe. The manufactures consist principally of woollen and cotton caps, other cotton goods, gloves, hosiery, velvets, iron and steel wares, watches, buttons, chemicals, artificial flowers, musical instruments, tobacco, and chocolate; and an extensive trade is carried on in these articles inland and with Germany, Switzerland, and Italy.

Metz—a strongly foatified town, with 65,000 inhabitants: seat of an archbishop. Woollen goods, cottons, muslins, hats, hosiery, thread, paper, leather, musical instruments; trade in wine, spirits, beer, confections, foreign and colonial merchandise.

Le Havre, or *Le Havre-de-Grace*—on the estuary of the Seine; pop. 64,500; sugar refineries, roperies, breweries, tobacco-works, vitriol and other chemical works, iron foundries, potteries, paper mills, brick and tile works. Between 1000 and 2000 vessels enter the port annually, and the same number leave it.

Amiens—pop. 57,000; cotton velvets, cotton, woollen, and linen yarns; muslin, tapestry, kerseymeres; dyeing works, bleaching works,

beet-root sugar works, paper-mills; the *patés de canards* are largely exported.

Nismes, or *Nimes*—pop. 54,000, one-half protestants; silk and cotton fabrics, taffetas, gloves, hosiery, printing and dyeing works; trade in swine and other agricultural produce.

Brest—the chief naval fortress of France, on the Atlantic; pop. 54,000; a first-class naval arsenal.

Rheims, or *Reims*—pop. 51,000; one of the principal marts for the wines of Champagne; extensive trade also in woollen stuffs, carpets, cordage, candles, soap; bleaching fields, tan-yards, dyeing works, breweries.

Montpellier—pop. 50,000; woollens, cottons, muslins, verdigris, paper-hangings, surgical instruments, liqueurs, hats, leather, chemicals. Trade in wool, wine, spirits, oils, and fruits.

Orleans—on the Loire, with about 47,000 inhabitants. Manufactures of woollen and cotton goods, bonnets, hosiery, and earthenware; sugar refineries, distilleries, and breweries; besides a lively trade in wine brandy, vinegar, timber, salt, and iron.

Limoges—pop. 47,000; glass, earthenware, broad-cloths, calicoes, cotton yarn.

Rennes—pop. 46,000; sail-cloth; trade in agricultural produce.

Caen—pop. 44,000; crape, blond, cotton, cutlery; dyeing works, bleaching works, shipyards. It exports grain, wine, cider, and brandy, chiefly for America; and fruit, butter, and eggs for the London market.

Besançon—pop. 43,000; its principal manufacture is that of watches, and it does a good trade with Switzerland in brandy, agricultural produce, &c.

Cherbourg—pop. 38,000; a fortified sea-port on the English Channel. Export of cattle, butter, lard, and eggs to England.

Tours—pop. 38,000; silks, ribbons, lace, hosiery, broad-cloths, canvas, earthenware, chemicals; iron-works, spinning factories, dyeing-works, and tanneries: trade in wine, brandy, hemp, and leather.

Avignon—pop. 37,000; silk, velvet, taffeta, cotton and woollen goods, paper, hats, jewellery, iron; and a steadily increasing trade.

Boulogne-sur-Mer—a sea-port on the English Channel; pop. 36,000, of whom one-fourth are permanent English residents. Lively trade.

Dijon—at the confluence of the Ouche and Suzon; pop. 36,000. Woollen, cotton, and linen fabrics; brass and iron works. It is the centre of the Burgundy wine trade.

Troyes—pop. 33,000; it is the centre of a large agricutural district, and has besides manufactories of cotton stuffs and hosiery.

Grenoble—pop. 30,000; linen and cotton goods, leather, hats, and liqueurs; trade in gloves, skins, &c.

Mühlhausen—pop. 29,000; the most important cotton factories in France. Foundries, tanneries; soap, leather, straw-plait.

L'Orient—naval establishment for ship-building, and good commercial port. Hats, gold lace, and linens. Pop. 29,000.

St. Quentin—pop. 25,000; cotton, lace, hats; dyeing-works; trade in corn, cider, fruit, and flax.

Le Mans—pop. 24,000; linen and woollen goods.

Valenciennes—pop. 24,000; lace, linen, printed muslins, jewellery; dyeing and bleaching works.

Colmar—pop. 22,000; silks, ribbons, cotton goods, hosiery; active trade also in iron, cutlery, hardware, colonial produce, grain, wine, and madder.

Cambrai—pop. 19,000; cambrics, lace, linen, thread; trade in the above and in wool, flax, butter, and hops. It is the seat of an archbishop.

REGULATIONS FOR BILLS OF EXCHANGE.

A bill presented must be accepted within 24 hours; if not, immediate protest must follow.

The *usance* is 30 days.

Is a bill due on a Sunday or holiday, it must be presented the day before.

Protest is made at latest the following day; or if this be a Sunday or holiday, the day after.

There are no days of grace.

The stamp amounts to $\frac{1}{2}$ per 1000. Those not stamped immediately upon being made out pay treble the sum.

Ricambio for bills on foreign places is $\frac{3}{4}$ per cent.

MONEY.

Since 1803 all accounts are kept in *francs* and *centimes*.

The franc has 100 centimes. Its current value in English money differs according to the exchange on English sovereigns; but the average is $9._6 d.$; or $8._1$ *silber-groschen* Prussian current, $40._5$ Austrian *kreuzer*, $28._{35}$ South-German *kreuzer*, $0._{25}$ Russian *silber-rubel*, 1_{193} Tuscan *lire*, and $0._{195}$ Spanish *duro*.

This is the worth of a *silver* franc; that of a franc in *gold* is rather less.

Of gold coins there are pieces of 5, 10, 20, 50, and 100 francs: 40-franc pieces are no longer coined. The 20-franc piece contains legally $5\frac{55}{81}$ French grammes of fine gold; and as the English sovereign contains $7\frac{322}{100}$ grammes, the worth of a 20-franc piece is 15*s.* 10*d.* (A gramme $= 15._{43243}$ troy grains.) The other gold coins are in proportion.

The silver coins are pieces of 1, 2, and 5 francs, as well as of 20 and 50 centimes. The franc silver piece weighs 5 grammes ($=3._2$ dwts.), $\frac{9}{10}$ fine; and is 23 millimètres in diameter.

In bronze there are pieces of 10 centimes, called *décimes;* of 5 centimes, *sous;* and of one centime. They weigh respectively 10, 5, and 1 gramme. The metal is composed of 95 per cent. copper, 4 per cent. tin, and 1 per cent. zinc.

MEASURES.

Before the revolution of 1789 nearly every town in France had its peculiar weights and measures, and no government had ventured to reform such a crying grievance; till in the stirring times of the Convention, &c., petitions were made to the government, praying for the introduction of one system of weights and measures for all France. Accordingly a scientific commission was appointed to determine as near as possible the distance from the equator to the pole; the ten-millionth part of this distance was denominated the *mètre,* from the Greek word *metron,* a measure. On this base was constructed the present excellent decimal system of weights and measures.

Measures of Length:—

The integer, or standard, is the *mètre,* the ten-millionth part of the distance from the equator to the pole.

1 *mètre*	$=3._{28090}$ English feet	$=1._{0363}$	English yards.
"	$=3._{28090}$ Russian do.	$=1._{49939}$	Prussian ells.
"	$=3._{18620}$ Prussian do.	$=1._{71336}$	Tuscan bracce.
"	$=3._{18620}$ Danish do.	$=1._{28335}$	Vienna ells.
"	$=3._{03030}$ Portug. do.	$=1._{68085}$	Milan bracce.
"	$=3._{78000}$ Neap. palmi	$=1._{19631}$	Spanish varas.
"	$=3._{33333}$ Swiss feet	$=1._{45818}$	Turkish pik.
"	$=3._{36813}$ Swedish do.	$=1._{40609}$	Russian arschin.

The multiples of the *mètre* are formed by prefixing to the word *mètre* the Greek numerals—*deca* (ten), *hecto* (hundred), *kilo* (thousand), and *myria* (ten thousand); and the decimal divisions of the *mètre* by the Latin numerals *deci* (ten), *centi* (hundred), and *milli* (thousand). Accordingly—

1 *décamètre*	= 10 mètres.	1 *décimètre*	$= {}^1/_{10}$ of a mètre.
1 *hectomètre*	= 100 "	1 *centimètre*	$= {}^1/_{100}$ "
1 *kilomètre*	= 1000 "	1 *millimètre*	$= {}^1/_{1000}$ "
1 *myriamètre*	= 10000 "		

Yarns are measured by the *écheveau* of 10 *échevettes* of 100 *mètres,* so that the *écheveau* is 1000 *mètres.* The number of the yarn shows

how many *écheveaux* weigh *half a kilogramme* = $1._4$lb.; *e. g.*, of No. 18 yarn 18 *écheveaux* (skeins) go to the *half-kilogramme*. Therefore the higher the number the finer the yarn.

The *mille marin* is exactly the same length as the English and Italian *sea mile*, 60 of which make a degree: 27 *milles marins* are just 5 *myriamètres*.

SQUARE AND LAND MEASURE:—

The measures for superficies are only the measures of length squared; but the denomination *square décamètre, square hectomètre*, &c., are little used, it being customary to say—10 square mètres, 100 square mètres, 3000 square mètres, &c. The square *myriamètre* has 100 square *kilomètres* of 10 square *hectomètres* of 100 square *décamètres* of 100 square *mètres*, and therefore 100,000,000 square mètres. The square *mètre* has 100 square *décimètres* of 100 square *centimètres* of 100 square *millimètres*.

1 *square mètre* = $10._{7643}$ English square feet.
" = $10._{1519}$ Prussian "
" = $10._{7643}$ Russian "
" = $12._{9083}$ Castilian "

For *land* the integer, or standard, is the *are*, of 10 *mètres* square, = 100 square *mètres*, called *centiares*. The *hectare* = 100 *ares*. The denominations *décare* (10 ares), *kilare* (1000 ares), and *myriare* (10,000 ares), are not in use: the especial measure for land being the *hectare*.

1 *hectare* = $2._{47114}$ English acres.
" = $1._{80694}$ Saxon acker.
" = $3._{91662}$ Prussian morgen.
" = $1._{73739}$ Vienna joch.
" = $2._{7778}$ Swiss juchart.

The denominations *décamètre* and *hectomètre* are little used; people say rather 10 mètres, 100 mètres.

The surveyor's chain is 10 *mètres* in length, and consists of 50 links, each 2 *décimètres* including the connecting ring.

CUBIC MEASURE:—

1 cubic *mètre* has 1000 cubic *décimètres* of 1000 cubic *millimètres*.

1 *cubic mètre* = $35._{3166}$ English cubic feet.
" = $32._{3459}$ Prussian "
" = $35._{3166}$ Russian "
" = $46._{3772}$ Castilian "

For Wood. The *stère* = 1 cubic mètre, and has 10 *décistères*. Large quantities of firewood are measured by the *double stère* and *décastère*, the latter being equivalent to 10 cubic mètres. In measuring

timber for building purposes the terms 1 *cubic mètre* and 10 *cubic mètres* are mostly used instead of *stère* and *décastère*.

Charcoal is sold retail by the *hectolitre*, in larger quantities by the *voie*. The present *voie* = $\frac{1}{3}$ cubic mètre.

Coals are either measured or weighed; in the former case the common measures of capacity are used, and in the latter the kilogramme. Large pieces are always weighed.

Gyps is sold by the *muid* of 36 *sacs* = 9 hectolitres.

Measures of Capacity:—

The *litre* has 10 *décilitres* of 10 *centilitres* of 10 *millilitres*, and = 1 cubic décimètre = $0._{88038}$ quarts. The *décalitre* = 10 litres, the *hectolitre* = 100 litres = $22._{0097}$ gallons, and the *kilolitre* = 1000 litres. This latter denomination is seldom used.

100 *hectolitres* =	$34._{390}$	Eng. imp. quarters.
" =	$181._{946}$	Prussian scheffel.
" =	$136._{820}$	Tuscan sacchi.
" =	$182._{482}$	Castilian fanegas.
" =	$47._{643}$	Russian tschetwert.

For *fruit, potatoes*, &c., the measure is heaped, but in almost all other cases the strike is employed.

WEIGHTS.

The integer, or standard, is the *kilogramme*, which is equal to the weight of that quantity of distilled water which, weighed in a vacuum at its greatest density, viz., by 4° of the centigrade thermometer, $3\frac{1}{5}$° Réaumur, or about $39\frac{1}{4}$° Fahr., will fill a *litre*, or *cubic décimètre*.

1 *kilogramme* =	$2._{20463}$	English pounds avoirdupois.
" =	$2._{67924}$	" " troy.
" =	$2._{13807}$	Prussian pounds.
" =	$3._{11761}$	Neapolitan libbre.
" =	$2._{44194}$	Russian pounds.
" =	$2._{17328}$	Castilian libras.

The multiples and decimal divisions of the kilogramme bear the following denominations:—

10 kilog. = 1 myriagramme.	$\frac{1}{10}$ kilogramme = 1 hectogramme, or 100 grammes.
100 " = 1 quintal métrique.	$\frac{1}{100}$ kilogramme = 1 décagramme, or 10 grammes.
1000 " = 1 millier métrique.	$\frac{1}{1000}$ kilogramme = 1 gramme.

The *millier métrique* is the shipping ton, and bears also the name of *tonneau;* but for merchandise 1000 kilog. make a *tonne*.

The *gramme* = $15._{432}$ Eng. troy grains, or $18._{827}$ old French grains.

The amount of pure gold or silver in coins, jewelry, &c., is expressed by *millièmes*, or thousand-parts, of a kilogramme. There are three qualities of gold allowed by law for jewelry, &c., of the respective fineness of $\frac{900}{1000}$, $\frac{840}{1000}$, and $\frac{750}{1000}$. And two of silver, viz., $\frac{950}{1000}$, and $\frac{800}{1000}$.

The weight for *precious stones, pearls*, &c., is the *carat* of 4 *grains*. The carat = $0._{2058}$ grammes, $3._{177}$ Eng. troy grains; or $1._{0028}$ Eng. jewel carat, $0._{9999}$ Dutch carat, $0._{9990}$ Austrian carat, or $1._{001}$ Prussian carat.

GERMANY.

Germany (Ger. *Deutschland*), *i. e.* the Germanic Confederation, lies in the middle of Europe, and is bounded on the north by the North Sea, Denmark, and the Baltic; on the east by the Prussian provinces of Ost-Preussen and Posen, Poland, Gallicia, Hungary, and Croatia; on the south by the Adriatic, Lombardo-Venetia, Switzerland, and a part of France; and on the west by France, Belgium, and the Netherlands.

It extends from 55° to 45° north latitude, consequently 10 degrees, or 695 English miles; and from Cracow to Luxemburg, east and west, 609 miles; with an area of 250,900 square miles.

The population of Germany is about 44,000,000, being 176 souls to the square mile; of these about six-sevenths are of Teutonic origin, between 6,000,000 and 7,000,000 of Slavish origin, 500,000 Jews, and 200,000 Italiens.*

The German states are:—The empire of Austria; the kingdoms of Prussia, Bavaria, Saxony, Hanover, and Wirtemberg; the grand-duchies of Baden, Hesse, Luxemburg-Limburg, Mecklenburg-Schwerin, Saxe-Weimar, Mecklenburg-Strelitz, and Oldenburg; the electorate of Hesse; the duchies of Holstein-Lauenburg, Brunswick, Nassau, Saxe-Coburg-Gotha, Saxe-Meiningen, Saxe-Altenburg, Anhalt-Dessau-Coethen, and Anhalt-Bernburg; the principalities of Schwarzburg-Sondershausen, Schwarzburg-Rudolstadt, Liechtenstein, Waldeck, Reuss of the elder line, Reuss of the younger line, Schaumburg-Lippe, and Lippe-Detmold; and the free towns of Hamburg, Bremen, Lübeck, and Frankfurt-on-the-Main.

Some of the provinces of Austria and Prussia do not belong to the

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* The population of *all* the states belonging to Germany is 70,000,000.

Confederation; they are, in Austria—Gallicia, Bukowina, Hungary, Croatia, Slavonia, Transylvania (*Ger.* Siebenbürgen), the Military Frontier, Dalmatia, Venetia, the Wojwodschaft Servia, the Temeser Banat, and 14 districts in Istria; in Prussia—the provinces Preussen and Posen.

The German empire may be said to have been founded by Charlemagne, who was crowned *Roman Emperor* by Pope Leo III. It bore the several names of—*Holy Roman Empire* (on account of its connexion with the church), *Roman German Empire, Roman Empire of German Nations, Sacrum Imperium Romano-Germanicum.* Later we find it composed of 376 states, or, reckoning the 1400 independent knightly estates, of 1776 distinct parts, each with its own peculiar form of government, and independent of the others, and acknowledging but the common band of union—the empire. Maximilian I. formed of these states ten circles, viz., Austria, Burgundy, Electoral-Rhein, Upper-Rhein, Franken, Bavaria, Suabia, Westphalia, Upper-Saxony, and Nether-Saxony. This political union of states was dissolved in 1806, and in 1815 the present Germanic Confederation was formed, the deputies of the different states forming a diet, which holds its sittings at Frankfort-on-the-Main.

The catholic religion is predominant in the south of Germany, numbering between 22 and 23 millions of souls; the protestant faith prevails in the north, and its followers may be reckoned at about 19 millions.

In the excellence of its systems of education, its schools, universities, &c., Germany stands indisputably at the head of all European states. There are 22 universities:—Prague (founded in 1348), Vienna (1365), Grätz (1486), Innsbruck (1672), Greifswald (1456), Halle (1694), Breslau (1702), Berlin (1810), Bonn (1818), Würzburg (1403), Erlangen (1743), Munich (1826), Heidelberg (1386), Freiburg (1457), Leipzig (1409), Rostock (1419), Tübingen (1477), Marburg (1527), Jena (1557), Giessen (1607), Kiel (1665), and Göttingen (1737).

The most celebrated libraries of Germany are those of Munich (one of 600,000 volumes, and one of 160,000), Berlin (500,000), Vienna (350,000), Göttingen (300,000), and Dresden (220,000).

The principal seats of science and art are Berlin, Munich, Dresden, Vienna, and Göttingen. The observatories of Berlin, Göttingen, Vienna, Prague, Leipzig, Munich, and the one near Gotha, are the most celebrated.

The land forces of Germany amount, in time of peace, to 562,735 men of all arms; viz., 395,897 infantry, 31,000 chasseurs, 72,975 cavalry, 48,846 artillery, 11,530 pioneers, 2,487 general staff; with 1356 guns, 56 racket and siege pieces. In time of war this number can be easily brought up to 1,500,000 well-disciplined troops. There is no national fleet.

In the southern part of Germany are the high mountain ranges of the Central and East Alps, running through Bavaria, Tyrol, Carinthia,

and Styria. Northward from these mountainous regions extends an elevated table-land, 1000 to 1600 feet above the level of the sea, and mostly very fertile; this is bounded on the west, north-west, and north, by the mountains of Central Germany. North of these, again, is a comparatively low plateau stretching away to the shores of the North Sea and the Baltic, and extending west and east from the Netherlands to the Ural Mountains. The most elevated summits are the peaks of the Ortles (13,065 feet, or, as some say, only 12,060) and the Gross-Glockner (12,980 feet, or, as others will have it, only 12,000).

Germany is washed by three seas—the North Sea, the Baltic, and the Adriatic. The lakes are—the Kammer or Atter, Gmunden, Chiem, Ammer, Kochel, Madüe, Schwerin, and Ratzeburg lakes, and part of the Lake of Constance. The principal rivers are—the Danube, Rhine, Oder, Elbe, Weser, and Ems; with their tributaries, the Lech, Isar, Inn, Mosel, Main, Warthe Saale, Havel, Aller, &c.

Although of the many rivers no less than sixty are navigable, and an artificial communication between them would be easy of execution, yet Germany is much behind England, France, the Netherlands, Russia, and Sweden in the number and importance of its canals. The most worthy of mention are:—The Neustadt Canal, from Wiener-Neustadt to Vienna; the Mühlrose Canal, uniting the Spree with the Oder; the Finow Canal, uniting the Oder with the Havel; the Plaue Canal, uniting the Elbe and Havel; the Holstein Canal, effecting a junction between the North Sea and the Baltic; the Steckenitz Canal, uniting the Elbe and the Trave; and the Ludwig Canal, which unites the Main with the Danube, and is at present the most important of all German Canals.

The net of railways is pretty complete in every part of Germany except Austria.

The principal sea-ports of Germany are:—Hamburg, Triest, Bremen, Altona, Lübeck, Stettin, Emden, Kiel, Stralsund, Rostock, and Wismar. The German merchant navy consists of about 15,000 vessels, of 800,000 tons.

The chief articles of import of natural productions and raw material are—cotton, tobacco, silk, iron, furs, rice, tea, coffee, sugar, spices, olive oil, potash, fruits, wine, &c.; of manufacture—silk and cotton goods, yarn, iron and steel wares, arms, &c. Exported of natural productions and raw material—wool, corn, oleaginous seeds, other seeds (clover and such crops), oakbark, ship-timber, bones, rags, horses, cattle, &c.; of manufactures—cloth, cotton and woollen goods, linen, ribbons, schnaps, porcelaine, fur articles, &c.

The products of the soil are numerous: on its surface are raised all sorts of corn; cattle, sheep, and horses are bred; and wine produced. In the bowels of the earth are found—silver, copper, some little gold,

iron, tin, lead, zinc, calamine, bismuth, antimony, salt, alum, cobalt, arsenic; coals and peat; marble, granite, porphyry, sandstone, slate, &c.; the agate, ruby, and opal. Germany produces about $12_{.38}$ per cent. of the iron obtained in Europe.

The manufacture of linen forms one of the chief branches of German industry, producing excellent damask, lace, vails, cambrics, ticking, &c. The best linen goods are made in Silesia, Saxony, Bohemia, and Westphalia. In Moravia, Silesia, Brandenburg, and Saxony, one finds excellent cloth. The best cotton goods are produced in Saxony; then at Berlin, Elberfeld, Barmen, and in Bohemia and Lower Austria. Krefeld, Elberfeld, Berlin, Vienna, and Southern Tyrol, rival France in silk goods; Krefeld, makes silk velvets. Woollen goods are made in Prussia, Saxony, Bohemia, Moravia, and Lower Austria. Superior iron and steel goods are made in the Prussian Rhine provinces, in the country of Mark, in the grand-duchy of Austria, and in Thuringia. The largest iron and steel works are in Styria, Austria Proper, Silesia, in the Harz and in Nassau-Siegen. Leather is made at Malmedy, and in Bohemia, Moravia, and Silesia. The most celebrated porcelaine is that of Meissen (Dresden), then of Berlin, Nymphenburg, and Vienna. No country in Europe produces so much glass as Germany, in particular Bohemia, then Bavaria, Silesia, Brandenburg, Westphalia, Saxony, and Prussian Saxony. Different articles of wood form also an important branch of German industry, particularly children's troys. Musical instruments, more particularly pianos of superior workmanship, are manufactured at Vienna, Augsburg, Straubing, Bamberg, Nürnberg, Stuttgard, Prague, and Meiningen; violins more particularly in some parts of the Tyrol. A branch of industry peculiar to the Black Forest is the manufacture, on a large scale, of so-called wooden clocks. Superior gold and silver plate, &c., is made at Augsburg, Vienna, Berlin, and Breslau; that of Augsburg is finer—*i. e.* in the quality of the metal—than that of Paris. The philosophical, mathematical, optical, and surgical instruments of Vienna, Berlin, and Munich are renowned; as also the optical glasses of the institution at Munich, which are now superior to those of England, formerly the best to be had. Chronometers are made more particularly at Berlin and Altona. In the manufacture of machines of all sorts, locomotives, &c., Germany has at length become in a great measure independent of England, and can show large and important works at Chemnitz, Berlin, Vienna, Breslau, Hamburg, and in the Prussian Rhine provinces and Westphalia. Paper is made principally in Prussia, then in Saxony, Baden, Bavaria, and Bohemia. Straw-plait is made extensively in Saxony.

The largest and most important cities and towns in Germany are:—Vienna, Berlin, Hamburg, Prague, Breslau, Munich, Cologne, Dresden,

Trieste, Königsberg, Leipzig, Danzig, Magdeburg, Frankfort-on-the-Main, Bremen, Nürnberg, Gratz, Aix-la-Chapelle, Stuttgard, Stettin, Braunschweig (Brunswick), Posen, Mainz (Mayence), Augsburg, Elberfeld, Barmen, Lübeck, Hanover, Frankfort-on-the-Oder, Düsseldorf, Chemnitz, Altona, Karlsruhe, &c. &c.

Exchange places are—Vienna, Berlin, Hamburg, Bremen, Leipzig, Frankfort-on-the-Main, Augsburg, and Nürnberg.

Each state and almost every large town has its bank or banks.

The weights and measures differ in the various states, and even in the different towns of the same state; but measures are being taken for introducing a uniform system. For instance the French ½-kilogramme has been taken as a model for the Zollverein pound, and 100 such make a Zollverein *centner*, or hundredweight.

Formerly each little state had coined money peculiar to itself, but the present metal currency of most of the states of the German Confederation is based upon one or other of the three following standards: 1. the *thirty-thaler standard*, according to which thirty thaler of fine silver go to the Zollverein pound; 2. the *forty-five-gulden standard*, of forty-five gulden, or florins, to the Zollverein pound; 3. the 52½-*gulden-standard*, of 52½-gulden to the Zollverein pound of fine silver.

The thaler of standard No. 1. is equal to 1½ gulden of No. 2., and to 1¾ gulden of No. 3.

This simplification of the currency in the German states was brought about by the currency convention of Vienna, which was agreed to and signed on the 24th. of Jan. 1857, by the delegates of the empire of Austria and the principality of Liechtenstein on the one hand, and of the German Zollverein on the other.

The following is the pith of this agreement as far as it is important for this work:—

Art. 1. The pound of 500 French grammes, such as is already in use in the customs department, shall be taken by the contracting states as the base of all their minting operations.

Art. 2. Silver shall be taken as the standard, and the contracting states shall adopt one or other of the three following currencies: —1. The 30-*thaler standard*, of 30 thalers to the Zollverein pound of fine silver; 2. The 45-*gulden standard*, of 45 gulden to the pound; 3. The 52½-*gulden standard*, of 52½-gulden to the pound. No. 1. shall be denominated the *thaler currency*, No. 2. the *Austrian currency*, and No. 3. the *South-German currency*.

Art. 8. To facilitate commercial operations between the contracting states, coins shall be issued called *conventional money*; viz.,

the *one-thaler piece,* worth 1½ gulden Austrian currency, and 1¾ gulden South-German currency; and the *two-thaler piece,* in proportion.

Art. 10. These conventional coins shall be composed of nine-tenths fine silver and one-tenth copper alloy; so that 27 conventional thaler, or 13½ double thaler, shall weigh a pound.

Art. 18. For the further facilitation of commercial relations at home and abroad, the contracting parties shall issue gold coins called—*krone,* and *halb-krone.*

Art. 19. The standard of the gold coins shall be nine-tenths fine and one-tenth alloy.

Art. 27. This convention shall remain in force till the end of the year 1878.

The *thaler currency* has been adopted by Prussia (except Hohenzollern), Saxony, Hanover, the electorate of Hesse, Saxe-Weimar, Saxe-Altenburg, Saxe-Gotha, Brunswick, Oldenburg, Anhalt-Dessau-Cöthen, Anhalt-Bernburg, Schwarzburg-Sondershausen, a part of Schwarzburg-Rudolstadt, Waldeck, Pyrmont, the two Reuss, Schaumburg-Lippe, and Lippe.

The *Austrian currency* is that of Austria and the principality of Liechtenstein.

The *South-German currency* is at home in Bavaria and Wirtemberg, Baden, the grand-duchy of Hesse, Saxe-Meiningen, Saxe-Coburg, Prussia's Hohenzollern lands, Nassau, part of Schwarzburg-Rudolstadt, Hesse-Homburg, and Frankfort-a.-M.

BILLS OF EXCHANGE.

The following are a few of the articles of the code of laws for bills of exchange in force in nearly all Germany:—

Art. 30. A bill bearing any particular date as day of payment is due that day.

Art. 31. A bill at sight is due on presentation, which must take place within two years after the drawing of the same. If the endorser of such a bill fixes in his endorsement any particular date, his obligation ceases with the expiration of that term.

Art. 32. Bills payable so many days after sight or after date are due—1. If the term is fixed in days, on the last day of that term: the day on which a bill is dated or presented for acceptance is not reckoned. If the term is fixed in weeks, months, a quarter or half-year, &c., the bill falls due on the day of the week or month answering to the day of the week or month on which the bill was drawn or presented for acceptance.

Bills dated the 31st. of a month and payable in a month having only 28, 29, or 30 days, are due the last day of the month. "Half a month" is reckoned 15 days.

Art. 33. There are no days of grace.

Art. 41. Protest *can* be made on the day of payment, but *must* be made on the second working-day after.

Art. 77. All claims against the drawer are forfeited if the bill is not presented for payment within three years after the date of the drawing of the same.

The Germanic Confederation was established in 1815, to provide for the security of Germany at home and abroad, and to uphold its independence and the inviolability of each particular state.

It is *indissoluble*, and no member is at liberty to withdraw his territory from the legitimate jurisdiction and influence of the Confederation.

To protect each and every state against enemies from without, the Confederation keeps up a large armed force of 562,735 men of all arms, and this number can be easily raised in time of war to upwards of a million. This force is divided into 10 corps, of which Austria furnishes 3, Prussia 3, and Bavaria 1; the 8th. is formed of the contingents of Wirtemberg, Baden, and the grand-duchy of Hesse; the 9th. of those of Saxony, the electorate of Hesse, Nassau, and Luxemburg-Limburg; and the 10th. is furnished by the smaller Saxon states and Oldenburg. The contingents of the remaining states form the corps of reserve. The Confederation possesses 5 fortresses—Mainz, Luxemburg, Landau, Rastadt, and Ulm.

The Confederation is supposed to protect kings against rebellious subjects, and good subjects against tyrannical kings.

The Confederation is composed of 31 states and 4 free towns, the deputies from which form the diet, which sits at Frankfort a. M. Of the states 11 have each a vote, viz. Austria, Prussia, Bavaria, Saxony, Hanover, Wirtemberg, Baden, Electoral Hesse, Hesse-Darmstadt, Denmark (for Holstein and Lauenburg), and the Netherlands (for Luxemburg and Limburg); Saxe-Weimar and the other Saxon states have one vote between them; Brunswick and Nassau one; the Mecklenburg states one; Oldenburg, Anhalt, and Schwarzburg one; Liechtenstein, Reuss, Schaumburg-Lippe, Lippe-Detmold, Waldeck, and Hesse-Homburg one; and the four free towns one; altogether 17 votes. Austria presides in the diet.

Whenever important laws relative to the organization of the Confederation are sought to be introduced, or organic changes in the existing ones proposed, the diet then forms what is called the *plenum*, in which Austria, Prussia, Bavaria, Saxony, Hanover, and Wirtemberg have each 4 votes; Baden, Electoral Hesse, the grand-duchy of Hesse,

Holstein-Lauenburg, and Luxemburg-Limburg each 3 votes; Brunswick, Mecklenburg-Schwerin, and Nassau each 2 votes; and the other members of the Confederation each one vote.

The ordinary affairs brought before the diet are decided by a simple majority; in the *plenum* a majority of two-thirds is requisite; and on particular questions unanimity is necessary.

The diet is also called upon to settle disputes between members of the Confederation.

No member of the Confederation can of itself declare war, make peace, or enter into negociations with an enemy.

THE ZOLLVEREIN.

The Zollverein, or Customs Union, comprises at present about two-thirds of the German Confederation, besides the Prussian provinces of Preussen and Posen; with an area of nearly 199,000 square miles, and a frontier line of about 5,000 miles. Austria is the principal state of the Confederation that does not belong to the Zollverein, then the two Mecklenburgs, Schleswig-Holstein, Liechtenstein, and Hamburg, Bremen, and Lübeck.

Prussia gave the impulse shortly after the peace of 1815, and was gradually joined by most of the German states. The immediate objects of this union are—the freest possible communication between state and state, the simplification of the customs, and a great saving in the mode of levying them. By these means the customs may be considerably reduced, and this, together with the advantages of a uniform tarif, acts most favourably upon foreign commerce, and enables the Zollverein also to make arrangements with foreign countries highly favourable to a further development of the resources of its different members. The manufacturer of goods for the home market is no longer confined by heavy duties to his own district, but can offer his goods without let and hindrance to a brotherhood of between 30 and 40 millions.

The principal articles imported into the Zollverein are:—Raw cotton, cotton yarns, iron and steel, tobacco, sugar and sirup, woollen goods, silk and silk goods, rice, fruits, oil, spirits, and cattle.

The import duties collected by the officers of the Zollverein for the general good amounted in 1861 to 24,745,995 thaler (£3,711,899); the export and transit duties to 157,716 thaler (£23,652). Of this total of £3,735,556 about £457,625 must by deducted for cost of collection, leaving £3,277,931 to be divided among the members of the Union.

AMOUNT of the IMPORT, EXPORT, and TRANSIT DUTIES COLLECTED; the REPAYMENTS and DRAWBACKS; the COST of COLLECTION; and the NET CUSTOMS REVENUE, in EACH STATE of the GERMAN CUSTOMS UNION (ZOLLVEREIN); with the NET REVENUE ALLOTTED to the SEVERAL STATES in ratio to the POPULATION, in 1858.

STATES.	POPULATION.	DUTIES COLLECTED.				Repayments, Drawbacks, &c. deducted from Import Duties.	Cost of Collection.	Net Revenue from Import Duties, deducting Repayments, &c. and Cost of Collection.	Revenue alloted from Total Net Duties in ratio to the Population.
		Import. (Repayments, &c. deducted.)	Export.	Transit.	Total.				
Prussia	17,556,556	17,245,899	278,142		17,524,040	282,620	991,931	16,253,968	13,191,598
Luxemburg	189,480	99,300	1,526		100,826	—	87,838	11,462	141,252
Bavaria	4,547,239	1,273,154	30,513		1,303,667	—	317,360	955,794	3,389,833
Saxony	2,039,176	2,505,185	173,565		2,678,750	1,294	131,702	2,373,483	1,536,708
Hanover	1,841,557	2,542,880	31,554		2,574,434	5,424	451,196	2,091,684	2,587,740
Würtemburg	1,669,720	434,489	6,216		440,705	863	18,338	416,151	1,244,727
Baden	1,312,918	1,006,584	40,267		1,046,851	14,188	301,757	704,827	978,741
Electoral Hesse	709,659	303,784	62		303,846	—	—	303,784	529,029
Ducal Hesse	848,102	601,858	2,955		604,813	1,605	8,500	593,358	632,235
Thuringian Union	1,025,642	381,122	203		381,325	268	—	381,122	772,916
Brunswick	245,771	291,415	306		291,721	138	28,232	263,183	184,502
Oldenburg	232,103	277,213	1,232		278,445	225	97,066	180,147	326,149
Nassau	428,237	80,283	1,648		81,931	236	—	80,283	319,238
Frankfort-on-the-Main	294,620	959,683	35,554		995,237	302	* 251,035	708,648	* —
	32,940,780								
TOTAL. Thalers	. .	28,002,849	224,348	379,395	28,606,592	307,163	2,684,955	25,317,894	25,834,668
TOTAL. £	. .	4,200,427	33,652	56,909	4,290,988	46,074	402,742	3,797,683	3,875,199

* Frankfort receives Revenue according to a per-centage, and not in proportion to the population.

The beetroot is largely cultivated in the Zollverein states for the purpose of making sugar; and the tax on the fabrication of this sugar is a chief source of revenue. In Jan. 1856 there existed 203 such sugar works, and in 1861

as many as 247. The net proceeds of the tax on this branch of industry amounted to 4,931,223 thaler, or £739,683; of which sum Prussia paid £660,774.

ANHALT.

The duchies of Anhalt cover an area of 980 square miles, with a population of about 176,000. The most considerable portion lies between Wittenberg and Magdeburg, on the banks of the Elbe and the Saale, and the remainder is on the Selke, in the Nether-Harz. The duchies form one of the most fertile tracts of country in Germany, and are well adapted for the breeding of cattle and sheep. Trade thrives, and is greatly favoured by the great railway traffic through the country, and its favourable position on the Elbe. The mines yield iron, coals, copper, lead, and between 1000 and 1200 pounds troy of silver annually. The weaving of wool and linen is the principal branch of industry, and in the Harz region iron wares are manufactured. Education is an especial object of the solicitude of the government. The form of government is monarchical, but limited as regards taxation. The dukes and the great majority of the people profess the evangelical faith, but there are about 1000 catholics and 2000 Jews. In 1857 Anhalt adopted the thirty-thaler standard for its currency. The coinage consists of one and two-thaler pieces with smaller money for change. The present pound and other weights are those of the Zollverein; and altogether the money, weights, and measures, exchange regulations, &c., are the same as those of Prussia.

In the diet of the Germanic Confederation Anhalt, Oldenburg, and Schwarzburg have, on general matters, one vote between them; but when questions are mooted touching the organisation of the Confederation itself, the diet forms a *plenum*, in which Anhalt-Dessau-Cöthen and Anhalt-Bernburg have each a vote.

ANHALT-BERNBURG.

Anhalt-Bernburg has a population of about 57,000, spread over an area of 340 square miles, and is divided into two parts—the nether-duchy on the Saale and partly on the right bank of the Elbe, and the upper-duchy lying apart in the Nether-Harz. The revenue is about £175,000, the expenses the same: public debt £300,000.

The highest tribunal in criminal cases is the superior court of Berlin. The Confederation contingent is 555 men.

Bernburg, with 10,000 inhabitants, is the capital, and has large paper manufactories and lively trade.

ANHALT-DESSAU-COETHEN.

The duchies of Anhalt-Dessau and Anhalt-Cöthen have formed one duchy since 1853. They cover an area of 640 square miles, with a population of about 120,000, of whom upwards of 900 are catholics and between 1700 and 1800 Jews. The revenue is about £260,000, the expenses some £6,000 or £7,000 less: public debt £360,000.

Dessau, the capital, has a population of 15,000; large distilleries, and important trade in corn and wool.

Cöthen—pop. 12,000; wax-bleaching establishments, tanneries, and important corn and wool trade.

AUSTRIA.

The impire of Austria covers an area of some 266,385 Eng. square miles: the population, including military, is about 36,000,000: about 135, to the square mile. Bohemia, Silesia, Moravia, and Austria unter-der-Enns are the most thickly populated provinces; Salzburg, and Tyrol and Vorarlberg, the most thinly populated.

The different races have been thus computed:

Germans 7,900,000,	Roumans 2,686,000,
Slaves 17,700,000,	Magyars 5,000,000,
Italians 2,500,000.	

Austria is a member of the Germanic Confederation for the provinces—Austria unter-der-Enns, Austria ob-der-Enns, Salzburg, Styria, Carinthia, Krain (or Carniola), Görz-Gradiska and Istria, Tyrol and Vorarlberg, Bohemia, Moravia, Silesia, and the duchies of Auschwitz and Zator; with an aggregate population of 12,820,000 inhabitants.

Form of government. Pressed by the force of circumstances—by the want of money, and the refusal of Hungary to be treated as a mere Austrian province—the emperor, Franz-Joseph, resolved to try constitutionalism, and called a parliament; but up to the present time (1862) the said assembly has deservedly borne the name of the "Rump parliament."

The capital and seat of government is Vienna, on an arm of the Danube.

The majority of the Austrians are catholic, viz 26½ millions; there are about 6,800,000 Greeks of both confessions, near upon 4,000,000 protestants, upwards of 50,000 Unitarians, and 600,000 to 700,000 Jews.

The *military forces* of Austria amount in time of peace to 336,530; viz. 175.460 infantry of the line, 40,000 frontier infantry, 20,000 chasseurs, 66,120 cavalry, 27,950 artillery, and 7,000 engineers, pioneers, &c.

This force can easily be raised in time of war to 650,000. Of the ten *corps d'armée* composing the forces of the German Confederation Austria furnishes three, a total of 142,233 men.

The *navy* consists of 58 steamers (including two iron-cased frigates), mounting 456 guns; and 79 sailing vessels, with 439 guns.

FINANCES.

It is a well-known fact, almost become a proverb, that the financial condition of Austria is one of the most unfortunate. Yet it is not that the annual revenue of the country is on the decrease—on the contrary; within the last ten years it has increased enormously—nearly 70 per cent. And yet the year 1846 was the last year that the budget showed a favourable balance. Besides the ordinary and extraordinary revenue and expenses noted in the budget, there is always in Austria another item—often the most important—called the "particular or extra-extraordinary resources," which are, again, used to cover corresponding "particular expenses." For instance, in 1855 the "particular resources" had to cover "particular expenses" to the amount of 363 millions of florins, or about £38,000,000. Thus we see that the expenses have increased still more rapidly than the revenue. And to darken the picture, the "particular resources" begin now to show signs of exhaustion. The principal of these resources in the last few years was the sale of railways constructed by the state in the better days of the empire. But the most important and best-paying lines are already sold, and the amount produced by the sale of a few lines of secondary importance would be but as a drop in the ocean. And then, again, Austria has made the most extensive use of the credit granted her—loans of all sorts—home and foreign, silver and paper, premium and lottery, free and forced. The disastrous war in Italy greatly augmented Austria's financial embarrassments.

The revenues of the empire in the year 1857 amounted to 298,295,847 florins (in round numbers 29,800,000*l.*), and the expenditure to 340,829,715 florins (34,000,000*l.*), showing a deficit of 42,533,868 florins (4,200,000*l.*).

In the year 1858 the revenues amounted to 282,540,723 florins (28,000,000*l.*), and the expenditure to 319,022,584 florins (31,900,000*l.*), showing a deficit of 36,481,861 florins (3,600,000*l.*). The deficit was, therefore, less than that of the preceding year by 6,052,007 florins (600,000*l.*).

In the year 1859 (the year of the war in Italy) the revenues amounted to 273,406,000 florins (27,300,000*l.*), while the expenditure

rose to 517,467,000 florins (51,700,000*l.*), showing a deficit of 244,061,000 florins (24,400,000*l.*), being an augmentation over the deficit of the preceding year of 207,579,139 florins (20,700,000*l.*).

In the year 1860 the revenues amounted to 301,589,000 florins (30,100,000*l.*), and the expenditure to 344,554,000 florins (34,400,000*l.*), showing a deficit of 42,965,000 florins, which the minister of finance stated to the Reichsrath was further augmented to a total of 65,062,000 florins (6,500,000*l.*). The deficit of the year, therefore, while it fell short of that it presented in the exceptional year 1859 by 179,000,000 florins, exceeded that of the year 1858 by 28,580,139 florins (2,800,000*l.*).

The deficits of the four years above mentioned may be here re-capitulated:—

1857	42,533,868 florins,	1859	244,061,000 florins,
1858	36,481,861 „	1860	65,062,000 „

The deficit of 1861 amounted to 109,500,000 florins.

The budget of 1862 was calculated as follows:—Revenue 296,599,800 florins, expenses 354,586,000 fl.; deficit 57,986,200 fl. This budget, however, supposes great reductions in the army and navy departments especially; should these reductions not be made the deficit will amount 110,186,200 fl. Of the revenue it is calculated that the direct taxes to will amount to 105,640,400 fl., the indirect taxes to 176,560,000 fl.

The public debt of Austria on 31st. Jan. 1862 was 2,451,204,757 fl., or £245,100,000; and the charge on its account in the budget of 1862 is £12,400,000.

FEATURES OF THE COUNTRY.

More than three-fourths of the surface of the county are mountainous. The principal mountain ranges are—the Rhætic and Noric Alps, the Carpathians, the Bohemian Wald, the Erzgebirge, and a part of the Riesengebirge, or Giant Mountains. The number of plains of any considerable extent is small; the principal are;—1. The Great Hungarian plain, stretching away through a part of Hungary, through the Woiwodschaft of Servia, and the Banat, and occupying an area of 27,400 square miles; 2. The Little Hungarian plain, about 4,600 square miles in extent; 3. The Gallician plain, taking up the greater part of that province, viz. 22,900 square miles; 4. The Venetian plain occupies the eastern part of the Lombardo-Venetian plain (about 6,570 square miles) stretching from Milan to the Adriatic.

The only coast land that Austria possesses is on the Adriatic. The principal lakes are—the Platten-See and Neusiedler-See in Hungary; and the Atter and Gmundner-See in Austria Proper.

The most important rivers are the Danube (*Ger.* Donau), the Elbe, the Po, and the Vistula (*Ger.* Weichsel).

The land is in general fertile, especially in the plains of Hungary and Slavonia. On the other hand, the great heath of Debreczin, and the still larger one of Ketskemeter (south from Pest) are sandy, woodless wastes. The valley of the Danube, in the archduchy of Austria, and the plains of Venetia, are not only fertile by nature, but are rendered still more so by the hand of man. Bohemia, Moravia, Gallicia, and especially Bukowina, possess a rich and productive soil.

The climate of Austria in general is very healthy.

MEANS OF COMMUNICATION.

The present extent of railway in the empire of Austria is 3,340 English miles, of which some are worked by horses. Much also of this extent consists of a single line of rails.

Of the rivers the Danube is the only one on which the navigation is at all important. The Danube Steam Navigation Company's receipts for the season from 22nd. March to 31st. Oct. 1858 amounted to £611,622.

The most important canals are:—the Franzens Canal, 66 miles long, uniting the Danube with the Theiss, thus shortening the passage of vessels by upwards of 180 miles; the Bega Canal, in the Banat; the Wiener-Neustadt Canal, from Wiener-Neustadt to Vienna.

The telegraph extends for some 13,000 Eng. miles in all directions through the country.

AGRICULTURE, &c.

Of the 170,485,400 acres comprised by the empire some 141,000,000 are under cultivation, the rest being taken up by lakes, rivers, roads, unproductive land, &c.

Large quantities of corn of all sorts are produced, and also potatoes and beet-root. Tobacco is largely cultivated in Hungary and Slavonia; hops in Bohemia. The Military Frontier, Croatia, Western Hungary, Southern Tyrol, and Southern Styria produce immense quantities of chesnuts. In Dalmatia and Istria there are 40,000 to 50,000 acres of olive plantations. Of wine some 250,000,000 gallons are produced in Hungary. The oak forests of Slavonia yield vast quantities of gall-nuts.

The number of cattle bred is not sufficient to supply the country, and great numbers are imported from Russia and Turkey. Horses are bred principally in Hungary: of the 3,000,000 in the country this pro-

vince possesses at least 1,000,000. Mules are bred in Dalmatia. Great numbers of pigs are reared, especially in the southern provinces. Kärnthen, or Carinthia, is celebrated for its bee-keeping.

MINERALS, &c.

The principal minerals obtained in Austria are: salt, iron, coals, gold, silver, copper, lead, and quicksilver.

Gold is found principally in Siebenbürgen (Transylvania) and Hungary; silver in Hungary and Bohemia; quicksilver is obtained almost exclusively from the celebrated mine of Idria; copper in Hungary and the Banat; tin in Bohemia; lead and litharge in Carinthia, Bohemia, and Hungary; zinc and calamine in the grand-duchy of Cracow; iron, of which the best is obtained in Styria, then in Carinthia, Hungary, Bohemia, Moravia, Lombardy, and Silesia. Stone-salt is obtained in immense quantities from the celebrated mine at Wieliczka, and from Bochnia in Gallicia; spring-salt from the Salzkammergut at Hallstadt, Ischl, &c.; sea-salt from Dalmatia and Istria. Coals are most abundant in Bohemia, Moravia, and Silesia. Other minerals are—antimony, arsenic, chrome ore, manganese, alum, copperas (from iron and copper), sulphur, and salpetre. Here and there are found precious stones.

Austria is very rich in mineral springs: renowned are those of Carlsbad, Teplitz, Franzensbrunnen, Marienbad, Ischl, and Gastein.

FOREIGN COMMERCE.

The total import trade of the empire (exclusive of that of Dalmatia) was valued in 1861 at 232,732,554 florins, against 231,226,702 florins in 1860, showing an increase of 1,505,852 florins. In 1858 the import trade amounted to 322,099,499 florins; in 1859 (the year of the war in Italy) it declined to 268,062,528 florins, showing a decrease of above 54,000,000 florins on the previous year; in 1860 it again fell to 231,226,702 florins, from which, as has already been stated, it recovered in the past year to 232,732,554 florins.

The export trade of 1861 valued 310,687,250 florins, against 305,197,493 florins in 1860, showing an increase of 5,489,757 florins. In 1858 the exports valued 274,167,267 florins; in 1859 they rose to 287,458,451 florins, showing an increase of above 13,000,000 florins over the preceding year; in 1860 they attained to a value of 305,197,493 florins, and have exceeded that sum by 5,489,757 florins in the past year, when they reached, as has been stated, a value of 310,687,250 florins.

The total value of the import and export trades together during the four years which I have mentioned have been as follows:—

VALUE of Import and Export Trades together.

	Florins.		Florins.
1858	596,266,766	1860	536,424,195
1859	555,520,979	1861	543,419,804

As regards the past year, therefore, the value of the whole external commerce of the Empire exceeds by 6,995,609 florins its value in the preceding year, although it falls short of the value attained in 1858 by above 50,000,000 florins.

If the value of the precious metals and of gold and silver coin be subtracted from the account of both trades, the results presented by the last two years will stand as follows:—

IMPORTS.	Florins.	EXPORTS.	Florins.
1861	204,203,014	1861	281,239,090
1860	196,472,777	1860	252,697,748
Increase in 1861	7,730,237	Increase in 1861	28,541,342

The value of the precious metals and gold and silver coin imported in 1861 was 28,529,540 florins, while the value of the exports amounted to 29,448,160 florins.

A comparison between the value of both trades in 1861 shows, if the precious metals, &c., are included, a balance in favour of exports of 77,954,696 florins; and if the precious metals, &c., be excluded from the account, of 77,036,076 florins.

The amount of customs duties levied in 1861 was on—

	Florins.
Imports	12,587,705
Exports	404,139
Together	12,991,844

The trade of Dalmatia is not included, as I have already intimated, in the Returns which I have given above. The accounts from that province are not of a satisfactory character, as they show a falling-off both in the import and export trades during the past year.

The imports valued 7,997,684 florins, against 8,066,667 florins in 1860, showing a decrease of 68,983 florins. The exports valued 4,490,731 florins, against 5,573,347 florins in 1860, showing a decrease of 1,082,616 florins. The value of the export and import trades together, amounted, in 1861, to 12,488,415 florins, against 13,640,014 florins in 1860, showing a decrease of 1,151,599 florins. The amount of the customs duties was, in 1861, 262,688 florins, being less by 3,848 florins than the amount of those levied in the preceding year.

The principal items of importation in the year 1860 were as follows:—

Weaving and Loom Materials, which valued 48,061,106 florins, against 38,750,032 florins in 1859; showing an increase of 9,311,074 florins.

Metals, Precious, Raw, and Half-Manufactured, to the value of 40,096,035 florins in 1860, against 73,748,523 florins in 1859; showing a decrease of 33,652,488 florins.

Yarns, of which the importation valued 16,470,672 florins in 1860, against 11,991,539 florins in 1859; showing an increase of 4,479,133 florins.

Colonial Wares and Southern Fruits were imported in 1860 to the value of 15,694,640 florins, against 16,686,779 florins in 1859; showing a decrease of 992,139 florins.

Medicaments, Perfumes, Dyeing, Tanning, and Chemical Stuffs, of which the importation valued 16,312,469 florins in 1860, against 15,340,528 florins in 1859; showing an increase of 971,941 florins.

Cereals and Fruits were imported to the value of 11,613,442 florins in 1860, against 13,702,566 florins in 1859; showing a decrease of 2,089,124 florins.

Animals, of which the importation valued 11,878,199 florins in 1860, against 15,140,849 florins in 1859; showing a decrease of 3,262,650 florins.

Fats and Oils, of which the importation amounted to 11,125,230 florins in 1860, against 13,368,956 florins in 1859; showing a decrease of 2,243,726 florins.

Woven and Loom Goods were imported in 1860 to the value of 11,367,215 florins, against 9,751,275 florins in 1859; showing an increase of 1,615,940 florins.

In the export trade the principal items were—

Metals, Precious, Raw, and Half-manufactured, of which the exportation in 1860 valued 58,067,837 florins, against 75,055,760 florins in 1859; showing a decrease of 16,987,923 florins.

Woven and Loom Goods, which were exported in 1960 to the value of 45,243,905 florins, against 34,184,965 florins in 1859; showing an increase of 11,058,940 florins.

Weaving and Loom Materials were exported in 1860 to the value of 39,473,198 florins, against 48,789,494 florins in 1859; showing a decrease of 9,316,296 florins.

Cereals and Fruits, of which the exportation in 1860 valued 39,866,171 florins, against 17,197,922 florins in 1859; showing the very large increase of 22,668,249 florins.

Wood, Glass, and Clay Wares were exported in 1860 to the value of 20,734,222 florins, against 18,630,623 florins in 1859; showing an increase of 2,103,599 florins.

Instruments, Machines, &c., were exported in 1860 to the value of 19,745,872 florins, against 16,043,445 florins in 1859; showing an increase of 3,702,427 florins.

Materials for Fuel and Timber were exported in 1860 to the value of 18,981,855 florins, against 15,906,109 florins in 1859; showing an increase of 3,075,746 florins.

Leather and Leather Goods were exported in 1860 to the value of 10,679,250 florins, against 7,859,100 florins in 1859; showing an increase of 2,820,150 florins.

Metal Goods were exported in 1860 to the value of 8,894,403 florins, against 6,515,468 florins in 1859; showing an increase of 2,378,935 florins.

Animal Products were exported in 1860 to the value of 4,588,335 florins, against 5,043,560 florins in 1859; showing a decrease of 455,225 florins.

The latter item, together with those already mentioned of *Metals and Weaving and Loom Materials,* are the only three items in the export trade of 1860 which show a falling off from the results of the preceding year.

Large quantities of goods pass in transit through Austria to and from Turkey, Russia, the Zollverein, &c.

INDUSTRY.

Austria is by no means an industrial country, but still there are some branches of industry that may be called flourishing; the principal manufactures are: glass; cotton, woollen, silk and linen articles; iron and steel goods; leather; porcelaine and earthenware; paper; philosophical, mathematical, optical, and surgical instruments; machines.

SHIPPING AND NAVIGATION.

The effective of the Austrian merchant navy is as follows:—

Sailing vessels for long voyages	606,	of 228,800	tons,	6742 men and boys.
" " coasters	2669,	of 76,389	"	9651 "
" " fishing-boats, &c.	6369,	of 22,630	"	16,570 "
Steamers (of an aggregate of 11,570 horse-power)	59,	of 21,388	"	1701 "
Total	9703,	of 349,207	tons,	34,664 men and boys.

Of this total Görtz, and Trieste and Istria possess 2,529 vessels, of 277,842 tons, and manned by 14,847 men and boys.

Vessels entering Austrian ports in 1859, 62,285, of 2,157,312 tons.

Vessels clearing out of Austrian ports in 1859, 65,597, of 2,155,021 tons.

The movement in the port of Triest was 10,243 entering, of 717,296 tons; 10,322 clearing out, of 736,078 tons.

CHIEF TOWNS.

Vienna (Ger. *Wien*), on the Danube, the Alser, and the Wien, and the Danube canal—pop. about 490,000; its manufactures are—cotton and silk goods, articles in leather, carriages, porcelain, cutlery, machines, musical and optical instruments, chemical products, watches, trinkets, jewelry, &c. Important trade with the East.

Prague (Bohemian *Praha*, Ger. *Prag*)—pop. 152,900: silk, woollen, cotton, and linen tissues; gold and silver embroidery; hats, paper, candles, soap, liqueurs, musical and mathematical instruments, fire-arms, porcelain, &c.

Pesth, the capital of Hungary; pop., with Buda, 187,000; cloth, silks, linen, leather, oil, tobacco, meerschaum pipes, &c.; dyeing establishments.

Venice, (Ital. *Venezia*, Ger. *Venedig*), the ancient queen of the lagoons, has at present a population of something over 119,000, not counting the garrison; silk, lace, hosiery, velvet, cloth of gold and silver, trinkets, cordage, canvas, and serge.

Trieste has, with its territory, some 107,000 inhabitants; white lead, artificial flowers, gloves, furs, leather, gold and silver articles, wax, sugar.

Lemberg (Polish *Lwow*) is the capital of Galicia and Lodomeria, with 73,000 inhabitants; woollens, cottons, and tobacco-pipes. Important trade in corn, cattle, and other agricultural produce.

Grätz or *Graz*—pop. 67,000 an agreeable town, on the river Mur. *(La ville de Grâces sur la rivière de l'Amour.)* Manufactures of woollens, cottons, and silk; and considerable trade in iron, timber, flax, and seeds.

Szegedin, a rising town in Hungary with about 65,000 inhabitants: tanneries, soda and soap works, ship-yards, &c.

Brünn—pop. 60,000; cloth; woollen, silk, and cotton manufactures; tanneries. Here is the fortress Spielberg.

Buda forms a part of the capital of Hungary, with a separate population of 56,000: silks, velvets, cloth, leather; cannon foundries; large trade in wine.

Padua (Ital. *Padova*)—pop. 52,000; cloth, stockings, ribbons, leather,

musical instrument strings, cotton stuffs, &c. Important trade in cattle, wine, oil, and corn.

Theresienstadt, or *Maria-Theresienopol*—pop. 55,000; manufactories of linen and tobacco, and a trade in live stock and other agricultural produce.

Presburg—pop. 46,000; woollens, silks, leather, and tobacco.

Vasarhely—pop. 44,000; cattle, tobacco, wine, and garden produce.

Cracow (Ger. *Krakau*)—pop. 43,000, of whom 12,000 Jews; cloth manufactories; large transit trade.

Keskemet—pop. 40,000; wine, tobacco, horses and horned cattle; soap.

Debreczin—pop, 37,000; woollens, leather, soap, saltpetre, tobacco-pipes, combs, furs, buttons, &c. A large trade in horses, cattle, and swine.

Vicenza (Ger. *Vicenz*)—pop. 35,000; silk, woollen, and linen goods; tanneries; trade in corn, wine, and silk.

Linz, on the Danube, with a population of 29,000; cloth, carpets, and woollen stuffs; also linen, silk and cotton goods; leather, gold lace.

EXCHANGE.

The laws relating to bills of exchange are those in use throughout almost all Germany (*See* German Confederation.)

MONEY.

In conformity with the treaty concluded in 1857 with Prussia and most of the other German states Austria modified its monetary system. All accounts are now made out in *gulden*, or florins. Of the florin $40._5$ are coined out of a Zollverein pound of minting silver, of 500 French *grammes*, or $1._{3396}$ pound troy, $\frac{9}{10}$ fine; being 45 to the Zollverein pound of pure silver. A gulden weighs $12._{3457}$ grammes, or 190 troy grains, and is worth 2*s*. Pieces of 3 gulden (=2 conventional thaler), 2 gulden, and $1\frac{1}{2}$ gulden (=1 thaler), all in proportion, are also coined. No $\frac{1}{2}$ gulden pieces are coined, but $\frac{1}{4}$ gulden pieces, and these only $\frac{13}{20}$ fine.

A gulden is divided into 100 *kreuzer;* and pieces of 10 kreuzer and five kreuzer are coined, the former $\frac{1}{2}$ fine, the latter $\frac{3}{8}$ fine.

The gold coins issued by the government have no fixed value: this depends upon the price of gold at the moment. The government announces from six months to six months the price at which they are taken by its agents, in payment of taxes, &c. In the treaty of 1857

Austria reserved to itself the right of continuing its issue of ducats. It also coins, like all the contracting states, *kronen* (crowns), of which 45 go to the Zollverein pound of minting gold, by $\frac{9}{10}$ fine. The krone is worth about £1 7*s.* 4*d.* Halb-kronen are in proportion. Of the ducat 67 go to the Cologne mark, $\frac{4}{1}$ fine; value 9*s.* 4$\frac{3}{4}$*d.* (The Prussian Cologne mark is $233._{8555}$ grammes, or $3608._{9506}$ grains troy.)

MEASURES.

Measures of Length:—

The Viennese, or Austrian, foot (*fuss*) is divided into 12 inches of 12 lines: a Viennese foot $= 1._{0371}$ Eng. foot.

100 Viennese feet	$= 103._{713}$ English feet.	$= 103._{713}$	Russian feet.
" " "	$= 31._{610}$ French mètres.	$= 110._{489}$	Neapol. palmi.
" " "	$= 100._{717}$ Prussian feet.	$= 106._{225}$	Roman piedi.

The ell is $2._{465}$ Viennese feet, and is therefore $0._{85217}$ English yards.

100 Viennese ells	$= 85._{217}$	English yards.
" " "	$= 77._{921}$	French mètres.
" " "	$= 109._{565}$	Russian arschin.
" " "	$= 113._{622}$	Turkish pik.
" " "	$= 93._{219}$	Spanish varas.
" " "	$= 130._{974}$	Milanese bracce.

The *klafter* has six feet: the *strich* (for measuring recruits) has 3 lines $= \frac{1}{4}$ inch: the hand (*faust*, fist), used for measuring horses, has 4 inches of 4 *strich*.

The engineer's *ruthe* has 10 feet of 10 inches of 10 lines.

The posting mile has 4,000 klafter, and $= 4._{714}$ English miles.

For yarns the *wiedel*, or *gebinde* (skein) has 240 *faden*, or threads, each of either $2\frac{1}{2}$ or $1\frac{1}{4}$ Viennese ells in length; and therefore has either 600 or 300 Viennese ells. In the former case 5, in the latter 10 *wiedel* make a *schneller*, or *strehn*, which always has 3,000 Viennese ells. For cotton yarns the indication of the fineness is generally given according to English measure, the length of the thread then being 54 English inches: 80 *faden* form an *unterband*, or *gebinde*, of which 7 go to a *strehn*, which latter therefore has a length of 840 yards. The *number* of the yarn indicates the number of *strehne* required to weigh an English pound avoirdupois. The less usual mode is by Viennese measure; the length of the *faden*, or thread, is $2\frac{1}{8}$ Viennese ells; 100 *faden* make a *gebinde*, or *unterband*, of which 7 go to a *schneller*, or *strehn*, which latter then has $1487\frac{1}{2}$ Viennese ells. The number of the yarn then

indicates the number of *strehne* which are required to weigh a Viennese pound. Any number, therefore, reeled according to Vienna measure is finer than the corresponding number of that reeled according to English measure.

The *lachter*, used in mining measurements, has about six feet, varying somewhat in different provinces.

SQUARE MEASURE:—

The Viennese square foot has 144 square inches: the square *klafter* has 36 square feet.

100 Viennese square feet = $9_{.992}$ French square mètres,
" " " = $107_{.558}$ English square feet,
" " " = $111_{.023}$ Baden square feet.

The *joch* has 1,600 square *klafter*.

1 joch = $1_{.4222}$ English acres, = $1_{.94099}$ Saxon acker,
1 " = $57_{.5543}$ French ares, = $1_{.68916}$ Bavarian morgen,
1 " = $2_{.2542}$ Prussian morgen, = $1_{.59872}$ Baden morgen.

For vineyards the *rahel*, or *achtel*, is used: it is 400 square klafter, or $\frac{1}{4}$ joch. The great *rahel* is 600 square klafter, or $\frac{3}{8}$ of a joch.

CUBIC MEASURE:—

The cubic *klafter* has 216 cubic feet of 1728 cubic inches.

100 Viennese cubic feet = $111_{.548}$ English cubic feet,
" " " = $111_{.548}$ Russian "
" " " = $3_{.1585}$ French cubic mètres,
" " " = $102_{.465}$ Prussian cubic feet,
" " " = $87_{.894}$ Portuguese cubic palmos,
" " " = $139_{.086}$ Saxon cubic feet.

The *klafter* of firewood is 6 feet high and 6 feet broad, and the logs 3 feet long: it consequently contains 108 cubic feet, or half a cubic klafter.

DRY MEASURE:—

Corn, pulse, flour, seeds, potatoes, and nuts are measured by the *metzen*, of 16 *mühlmossel* of 4 *futtermossel* of 2 *becher*. It contains $1_{.9471}$ Viennese cubic foot.

100 *Viennese metzen* = $21_{.150}$ English imp. quarters,
" " " = $61_{.499}$ French hectolitres,
" " " = $29_{.299}$ Russian tschetwert,
" " " = $111_{.896}$ Prussian scheffel,
" " " = $44_{.206}$ Danish corn tonder.

Charcoal is sold by the *stübich* of 2 metzen. For lime (*kalk*) the *kalkmüthel* is used, which contains $2\frac{1}{2}$ metzen.

The strike is used with all things measured by the metzen.

The sack of coals must be 7 feet high and 4 broad.

FLUID MEASURES:—

The integer in this case is the *maass*, or *kanne*, which is divided into 4 *seidel*.

100 *Viennese maass*	=	$31_{.144}$	English gallons,
" " "	=	$141_{.502}$	French litres,
" " "	=	$141_{.502}$	Warsaw kwarta,
" " "	=	$73_{.232}$	Copenhagen kannen,
" " "	=	$115_{.052}$	Russian stoof,
" " "	=	$116_{.693}$	Amsterdam mengel,
" " "	=	$8_{.769}$	Castilian cantaras.

The beer *eimer* has $42\frac{1}{2}$ maass; and two of these eimer make a *fass*.

For wine and spirits the *eimer*, containing 41 maass, is used.

100 *eimer*	=	$1277_{.0090}$	English imp. gallons,	= $36_{.9483}$	Swedish ohm,
" "	=	$58_{.0204}$	French hectolitres,	= $38_{.6802}$	Swiss saum,
" "	=	$76_{.5037}$	Leipzig eimer,	= $22_{.4716}$	Castilian moyos,
" "	=	$84_{.4524}$	Prussian eimer,	= $38_{.7452}$	Danish ohm.

An older *eimer*, containing 40 maass is a fictitious measure, used only in accounts.

WEIGHTS.

The trade *pfund*, or pound, has 32 *loth* of 4 *quentchen* of 4 *sechzehntel* (i. e. $\frac{1}{128}$ loth), or *pfennige*, which latter again is sometimes subdivided into 15 *gran*. A Viennese *pfund* = $1_{.2246}$ English pound avoirdupois: 100 *pfund* make a *centner*, or hundredweight.

A Vienna centner	=	$123_{.462}$	English pounds avoirdupois,
" "	=	$56_{.001}$	French kilogrammes,
" "	=	$176_{.783}$	Genoese libbre,
" "	=	$43_{.802}$	Constantinople oke,
" "	=	$171_{.366}$	Milanese libbre piccole,
" "	=	$73_{.443}$	" " grosse,
" "	=	$174_{.590}$	Neapolitan libbre,
" "	=	$56_{.001}$	Dutch pfund,
" "	=	$112_{.002}$	German zollpfund,
" "	=	$136_{.751}$	Russian funda.

The *stein* (or stone) has 20 pfund: the *saum* has 275 pfund, or $2\frac{3}{4}$ centner: the *saum* of steel (in Styria) has 2 *lägel* of 125 pfund, and therefore only 250 pfund. The *karch* has 400 pfund. The *tonne*, or *tonnellata*, has 2,000 pfund; a *last* 400 centner.

The *pfund* used for silver and for coining has 2 *mark* of 16 *loth* of 4 *quentchen* of 4 *pfennige* of 2 *heller* of 128 *richtpfennige*.

The Vienna *mark* weighs $4331._{019}$ English troy grains.

100 *Viennese mark* = $75._{191}$ English troy pound,
" " " = $114._{044}$ Dutch " "
" " " = $120._{030}$ Leipzig Cologne mark,
" " " = $120._{007}$ Zollverein minting mark.

Gold. The *ducat* (as weight) is divided into 60 *gran*, and weighs $53._{86839}$ English troy grains, or $3._{4906}$ French grammes.

For determining the fineness of gold and silver the *mark* is divided, for gold, into 24 *karat* of 12 *grän*; for silver into 16 *loth* of 18 *grän*.

Articles of gold must be of one of the following finenesses:—No. 1. 7 car. 10 gr.; No. 2. 14 car. 1 gr.; No. 3. 18 car. 5 gr. All articles weighing 4 ducaten and upwards must be marked accordingly.

Articles of silver must have a fineness of either 13 or 15 loth, and must be marked accordingly.

The jewel carat is divided into halves, quarters, eighths, &c.; but it is also divided into 4 grän.

Medicines and apothecaries' wares are weighed by a *pfund* of 12 *unzen* of 8 *drachmen* of 3 *skrupel* of 20 *gran* = 5760 *gran*. It is $\frac{3}{4}$ of the trade pfund.

100 *apothecary's pfund* = $112._{331}$ English troy pounds,
" " " = $121._{706}$ Castilian medicinal pounds,
" " " = $117._{215}$ Russian " "
" " " = $42._{001}$ French kilogrammes.

This pound, with its divisions, is the legal weight for medicines throughout the empire, Venetia excepted.

BADEN.

The grand-duchy of Baden has an area of 5823 English square miles, with a population of about 1,400,000. Of these inhabitants 880,000 are catholics, 440,000 evangelicals, the rest Jews, Mennonites, &c.

The country is divided into 4 circles, 64 bailiwicks, and 1584 communes. There are two universities, Heidelberg protestant and Freiburg catholic.

The form of government is a constitutional monarchy, hereditary in the male line. There are two chambers.

The net receipts of the grand-duchy amount to about £1,000,000; the expenses are about the same. The public debt is £3,544,122; the railway debt £4,499,691.

The efficient force of the army is 8000 men in time of peace and something over the double in time of war.

The duchy is bordered on the south by Switzerland and the Rhine, and is separated from France and the Bavarian Palatinate on the west by the Rhine; in the north it borders on Hesse-Darmstadt and Bavaria, and has Bavaria and Württemberg on the east. The Rhine flows for some 280 miles through the land, washing the walls of Constance, Waldshut, Breisach, Kehl, Philippsburg, and Mannheim. Here is the celebrated Black Forest. The highest points of the Black Forest are the Feldberg (4,630 feet), and the Belchen (4,397 feet). The country is mountainous and hilly, one-fifth only being lowlands. On the east side of the Black Forest the Danube has its source. Baden extends from the Lake of Constance along the Rhine to the confluence of the Neckar with this great stream: it lies between 47° 32′ and 49° 49′ north latitude, but is sometimes very narrow, being, near Rastatt, only 10½ English miles in width. Along the valley of the Rhine the country is fruitful and well cultivated.

Railway communication is very good in Baden, expecially considering the smallness of the country. A main line was constructed by the state. It was one of the first railroads constructed upon the Continent: for many years the wide gauge was in use upon it, but in 1854 a narrow gauge was adopted similar to that in use in the other States of the Zollverein, so that the international commerce by rail can now be carried on uninterruptedly.

The main line traverses the whole length of the Grand Duchy, from the frontiers of Darmstadt, near Weinheim, and from Mannheim, on the Rhine, to Basle and to Waldshut on the frontiers of Switzerland. The course taken by it is through the plain of the Rhine, but following closely the borders of the mountain-range, so that great facility of transport is offered by it to the produce of the numerous valleys debouching upon the plain from the Black Forest. Some 250 miles of rail are now in working order in the country, of which three-fourths have a double line of rails.

The Rhine forms another great high-road through the land.

Baden is a member of the Zollverein, and occupies an honorable place as regards its commerce. The principal branches of industry are:—woollens, cloths, cottons, silks, paper, jewelry, tobacco, chemicals, glass, stoneware, and porcelain, and beet-root sugar, &c. Great quantities of iron are obtained. Other minerals are also found, such as coals, calamine, alum, vitriol, sulphur; the agate, cornelian, chalcedony, jaspis, amethyst, garnet, &c.; calcareous spar, gyps, alabaster, porcelain

earth, &c. Baden exports—wood, corn, hemp, flax, maize, hops, oil, fruit, wine, tobacco, jewellery, straw plait, wooden wares, linen, &c.

Great numbers of horned cattle, pigs, and goats are bred.

The chief towns are: *Carlsruhe*, with 26,500 inhabitants; room papers, jewellery, cards, tobacco, carriages, and machines; important trade. —*Mannheim*, with 27,000 inhabitants; mirror glass, tobacco and cigars, room papers, furniture, jewellery, mustard, stoneware, sugar: important trade.—*Freiburg*, pop. 17,000; chemicals, paper, starch, champagne; trade in corn, hemp, rapeseed, tobacco, fruit, wine, and cattle.—*Heidelberg*, pop. 16,000; breweries, fisheries, tanneries, weaving establishments; tobacco, soap, leather; cultivation of the vine, of fruit, hops, and tobacco; celebrated for the ruins of its once princely residence.—*Baden-Baden* is celebrated for its mineral springs, for bathing. It is visited sometimes by 20,000 persons in one season: its fixed population is about 6,000. Exchange matters are regulated according to the exchange of Frankfort-on-the-Main. The universal German exchange laws are in force.

MONEY.

All reckonings are kept in *gulden* (florin) of 60 *kreuzer*: 52½ gulden go to a pound (500 French grammes) of pure silver: nine parts of silver are then mixed with one of copper. A gulden is worth 1*s.* 9*d.*, frs.2 10*c.*

Gold coins are *ducats*, worth about 9*s.* 4¾*d.* Silver coins are—1, 2, 3½, and ½ gulden.

In copper—1 kreuzer and ½ kreuzer.

MEASURES.

Long Measure:—

The *fuss* (foot) has 10 *zoll* of 10 *linien* of 10 *punkt*, and is the unity of the measures of length.

100 Baden feet = $98._{427}$ English feet, = $95._{586}$ Prussian feet,
" " " = $30._{000}$ French mètres, = $94._{906}$ Austrian "

The *elle* (ell) has two *fuss*, or feet. The *ruthe* is 10 *fuss*.

The *klafter* is 6 *fuss*. 25 Baden *stunden*, or leagues, make one degree of the equator. 1 Baden mile = $5._{71}$ English miles.

Square Measure:—

The square *ruthe* contains 100 square fuss.

The *morgen* has 400 square ruthen.

100 *Baden morgen* = $88._{961}$ English acres, = $140._{998}$ Prussian morgen,
" " " = $36._{000}$ French hectares, = $62._{558}$ Vienna joch.
The Baden square mile = $32._{6}$ English square miles.

Cubic Measure:—

The *klafter*, for measuring firewood, is six fuss high and broad, and the logs 4 fuss long; it therefore contains 144 cubic fuss.

Dry Measure:—

The unity of this is the *mässlein*, which contains $\frac{1}{18}$ Baden cubic fuss = $1\frac{1}{2}$ French litre = $0._{33}$, or $\frac{1}{3}$ English gallon.

The *zuber* has 10 *malter* of 10 *sester* of 10 *mässlein* of 10 *becher*. Measures of *half-sester* and *double-sester*, *half-mässlein* and *double-mässlein*, are also allowed.

100 *Baden malter* = $51._{585}$ English quarters,
" " " = $272._{918}$ Prussian scheffel,
" " " = $150._{000}$ French hectolitres,
" " " = $243._{954}$ Vienna metzen.

For charcoal measures equal to a *malter* are used: coals, &c., are sold by a measure equal to 2 *sester*.

Fluid Measure:—

In this case the *mass* (containing exactly the same quantity as the mässlein of the dry measure) is the unity = $\frac{1}{3}$ Eng. gallon. The *fuder* has 10 *ohm* of 10 *stützen* of 10 *mass* of 10 *glas*. These measures correspond to the *zuber*, *malter*, *sester*, *mässlein*, and *becher* of dry measure.

100 *Baden maass* = $33._{014}$ English gallons, = $131._{001}$ Prussian quart,
" " " = $150._{000}$ French litres, = $106._{027}$ Vienna maass.

WEIGHTS.

The *pfund*, or pound, is half the French kilogramme = 500 grammes = $1._{1023}$ English pound avoirdupois = $1._{3296}$ troy pound. The *pfund* has 10 *zehnlinge* of 10 *centas*, of 10 *dekas* of 10 *as* = 10,000 as; it is also divided in common into 2 *mark*, 4 *vierlinge*, 8 *halbvierlinge*, 16 *unzen*, 32 *loth*; the *loth* is subdivided into 2 *halbloth*, or 4 *quentchen* of 2 *halbquentchen*; the *quentchen*, again, has 4 *pfennige* of 4 *karat* of 4 *gran* of 4 *gränchen* of 4 *richttheile*: 1 *pfund* = $131._{072}$ *richttheile*.

The *stein*, or stone, has 10 pfund = 5 kilogrammes. The *centner* has 100 pfund = 50 kilogrammes, and is the same as the Zollverein centner, and = $110._{23}$ English pounds.

The Baden-Cologne mark, for gold and silver, has $233._{640}$ French

grammes = $7_{.51}$ oz. troy: it is divided into 10 *loth*. For minting purposes the Zollverein pound of 500 grammes is used, divided into 1000 parts.

Apothecaries' wares are sold by the Nürnberg pfund of $350_{.78}$ grammes = 11½ oz. English apothecary's weight. This pfund is divided into 12 *unzen* of 8 *drachmen* of 3 *skrupel* of 20 *gran* = 5760 gran.

BAVARIA.

The kingdom of Bavaria consists of two parts distinctly separate one from the other. One is Bavaria Proper, the other Rhenish Bavaria (consisting of the Pfalz, or Palatinate, and Zweibrücken). The former is bordered on the north by Hesse-Cassel (Electoral Hesse), Weimar, Meiningen-Hildburghausen, Coburg-Gotha, Reuss, and Saxony; on the east by Bohemia, the grand-duchy of Austria, and Salzburg; on the south by Salzburg and the Tyrol and Vorarlberg; on the west by Württemberg, Baden, and Hesse-Darmstadt. It has an area of 26,642 English square miles. Rhenish Bavaria has an area of about 2,965 English square miles, and lies on the other side of the Rhine; it is bounded on the south by France and separated from Baden by the Rhine. Rhenish Bavaria was the original inheritance of the royal house of Bavaria. That part of Bavaria south of the Danube forms a plateau of an average elevation of 1660 feet. The north and central tracts are for the most part hilly, rising towards the mountains on the frontiers, the only important chain entirely Bavarian being the Fichtelgebirge. The branches of the Rhætic Alps extend a considerable distance into the southern plateau, being in some places covered with perpetual snow, and rising, in the Zugspitze, to the height of 10,150 feet. Bavaria is almost entirely drained by the Danube and the Main. The other principal rivers are the Inn, Isar, Lech, and Iller, joining the Danube on the south; the Altmühl, Naab, and Regen, entering it on the north; while the Regnitz, Saale, Lichtenstein, Rodach, and Fauber, are tributaries of the Main. The principal lakes are the Chiem See, Würm See, Starnberger See, Ammer See, König See, Tegern See, Staffel See, and Walchen See. Bavaria is divided into eight circles.

The climate of Bavaria is temperate and healthy, though rather cold. The soil is in general fertile, producing wheat, maize, and other cereals; hops, hemp, flax, tobacco, potatoes, and various kinds of fruits. The Bavarian wines are excellent, those of Franconia being most esteemed.

The population of the kingdom of Bavaria amounted in 1858 to

4,615,748 souls; of whom about 3,070,000 catholics, 1,200,000 protestants: the Jews number some 60,000 to 70,000.

The government is a constitutional monarchy, and there are two chambers. The crown is hereditary in the male line.

The budget is thus calculated for the years 1861-67: yearly revenue 46,720,597 florins, or £4,138,052; expenses the same. The public debt of Bavaria (including the railway debt, &c.) amounted in 1860 to 330,457,608 florins, or £28,915,040, demanding a yearly interest of £1,186,182. The total amount of the debts of the various communes throughout the kingdom amounted in 1859-60 to 14,558,643 florins, or £1,273,881. Altogether the finances of Bavaria are in an enviably sound state.

The Bavarian army numbers: infantry 142,912 men, cavalry 21,860, artillery 2,519 (with 136 guns); engineer corps 2,625 men. Active militia beyond the Rhine—infantry 54,000 men, cavalry 2,500.

Means of communication are the excellent railroads, the principal of which extends from Lindau, on the Lake of Constance, to Hof on the borders of Saxony. The line from Augsburg to Munich and the Austrian frontier on the east completes the communication between these places and Lindau. The journey from Vienna to Paris is now performed *viâ* Munich, instead of *viâ* Prague, Dresden, &c. The Danube forms another great highway; the traffic on it is very considerable, and a line of steamers run regularly between Donauwörth and Linz. The principal canal is the Donau-Main Canal, connecting the Danube and the Main, with a length of about 111 miles: in 1860 no less than 4,326 vessels and 1,405 rafts, transporting 4,162,330 Cwt. of merchandize, made use of this canal. The gross receipts were 192,982 florins, or £16,885.

In the year 1859-60 the number of letters sent through the post was 27,336,750. The number of newspapers posted has increased of late pretty regularly at the rate of about 1,000,000 yearly. The telegraphic despatches numbered 4,126,328 government, private, and international.

COMMERCE, INDUSTRY, &c.

Great quantities of corn are imported into the Zollverein across the frontiers of Bavaria. Other imports into Bavaria are colonial wares, oil, drugs, cotton and twist, furs, wool, tobacco, &c. The principal exports are:—corn, hops, salt, mirrors, wood and wooden articles, iron and iron, steel, and brass wares; gold-beaters' wares, marble, lithographic stones, glass, hemp, flax, wine, fruit, combmakers' wares, woollen goods, butter, and tallow.

One of the great products of Bavaria is beer, the so-called "fifth

element." More than the half of the barley crop, *i. e.* some 1,200,000 scheffel, or 917,628 English quarters, and 50,000 Cwt. of hops, are yearly used in Bavaria in the making of beer. This material costs about 15,000,000 florins, or £1,312,500. The cost of preparation, interest on capital, &c., amount to 12,600,000 florins, or £1,102,500; the tax is £700,000. The number of breweries is 4,858: the beer produced yearly 8,400,000 eimer, or 118,584,756 English gallons. In spite of the enormous quantity produced, only 2 per cent is exported.

The gold washings yielded in 1859-60 the value of 85¼ crowns, of fl.4 40kr. The mines, quarries, &c., yielded: iron ore 1,287,012 Cwt., lead 14,267 Cwt., quicksilver 72½ Cwt., cobalt and grey copper ore 617 Cwt., antimony ore 276 Cwt., magnetic and sulphur pyrites 48,391 Cwt., ochre and coloured earths 9,627 Cwt., coal and lignite 5,181,636 Cwt., graphite 10,819 Cwt., porcelain clay 7,958 Cwt., emery 1,204 Cwt., potters' earth 33,824 Cwt., steatite 689 Cwt., gypsum 120,195 Cwt., slate 27,496 Cwt., barytes, felspar, fluorspar, and quarz together 28,240 Cwt. The total value was calculated at 1,533,787 florins, or £134,206.

The smelting-houses, foundries, &c., furnished the following quantities: gold 1¼ lb., silver 56¾ lbs., raw iron—pig or bar—566,955 Cwt., castings in bronze 79,228 Cwt., castings in iron 69,170 Cwt., bar and wrought iron 614,594 Cwt., sheet iron 27,432 Cwt., iron wire 10,880 Cwt., steel 620 Cwt., worked lead 540 Cwt., alum 66 Cwt., sulphate of iron 7,509 Cwt., mixed vitriol 1,507 Cwt. The whole was valued at 8,680,860 florins, or £759,575.

The saltworks of Berchtesgaden, Traunstein, and Rosenheim yielded about 1,019,698 Cwt. of salt of various quantities: valued at 4,353,887 florins, or £380,965. The total number of hands engaged in these works was 11,179, their families numbering 21,137 souls.

CHIEF TOWNS.

Munich, on the Isar; population, with Au, and including garrison, 139,000. In no town in Germany are painting and sculpture so encouraged. Here are produced—excellent mathematical, mechanical, optical, chirurgical, and musical instruments; gold, silver, bronze, iron, and copper wares; gold and silver filatures; carriages; cotton goods, fustian, linen goods, damask, cloth, oilcloth, paper-hangings, pianofortes, tobacco, stoneware, leather, &c.; iron-foundries, bell-foundries, precious stones and glass cutting and polishing establishments, copper-works, oil-mills, paper-mills; immense breweries.—*Nürnberg*, on the Pegnitz and the Ludwig (Main and Danube) canal; pop. 60,000. Hardware, gold, silver, mirrors, pins and needles, musical instruments, playthings, lead-pencils.

—*Augsburg*, a very ancient town, the *Augusta Vindelicorum* of the Romans, is situated near the confluence of the Wertach and Lech; pop. 44,000; cotton factories, spinning and weaving establishments; gold, silver, and brass wares; paper-hangings, chemicals, oilcloth, machines, optical instruments; engraving establishments, copper-works, diamond-polishing works, breweries, oil-mills, polishing mills, spice mills. Cotta's book dépôt is remarkable.—*Würzburg*, on the Main, with 37,000 inhabitants; leather manufactories, bell-foundries, iron-foundries; musical instruments.—*Regensburg*, or *Ratisbon*, at the confluence of the Regen with the Danube; pop. 26,000. Here are corn-mills, polishing-mills, paper-mills, sawing-mills, fulling-mills; weapon manufactories, iron and copper works, breweries; porcelain, stoneware, tobacco, leather, Turkish yarn dyeing-establishment, silk manufactories; lead-pencils, chemicals, brass and steel wares; ship-building; corn and transit trade.—*Bamberg*, pop. 24,000; breweries, gardens for medicinal plants; leather, cloth, shoes, gloves, oilcloth, tobacco, starch, musical instruments, carriages, porcelain, sealing-wax.

EXCHANGE.

Since 1851 the 'universal German Exchange regulations' have been in force. The operations of the Augsburg exchange give the rule for the country.

MONEY.

Accounts are kept in *gulden* of 60 *kreuzer* of 4 *pfennige*. 52½ silver gulden are coined out of a pound (500 French grammes) of fine silver, the coins to be $\frac{9}{10}$ fine. A gulden is worth on an average 1*s.* 9*d.*, $2\frac{22}{189}$ French francs, 53 Russian kopeken. Coins issued by the mint: Gold—*krone*, 50 out of a pound (500 French grammes) of fine silver, $\frac{9}{10}$ fine; and ½ *krone*: Silver—conventional 3½ and 1¾ *gulden* (=2 and 1 thaler) according to the thirty-thaler standard, $\frac{9}{10}$ fine; then 2, 1, and ½ *gulden*; and 6 and 3 *kreuzer* pieces as small change, ⅓ fine: Copper —½ *kreuzer* (=2 pfennige), 1 *pfennig*, and 1 *heller*.

The worth of a krone depends upon the price of gold at the moment, being on an average £1 7*s.* 4*d.*

MEASURES.

Long Measure:—

The Bavarian *fuss*, or foot, has 12 *zoll* of 12 *linien*: it is equal to $0_{.95756}$ English foot, $0_{.29186}$ French mètre, $0_{.92992}$ Prussian foot.

The *klafter* has 6 fuss: the *ruthe* 10 fuss.

The *elle* has 2 fuss 10¼ zoll, and is equal to $0._{91101}$ English yard, $0._{83301}$ French mètre, $1._{47436}$ Leipzig ell.

SQUARE MEASURE:—

A square *fuss* has 144 square *zoll:* a square *ruthe* has 100 square *fuss.* A *tagewerk, morgen,* or *juchert* = $0._{8419}$ English acre, $34._{07272}$ French ares, $1._{33450}$ Prussian morgen, $0._{59210}$ Vienna joch.

For wood the *klafter* is 6 fuss high and broad, and 3½ fuss deep, and therefore contains 126 cubic fuss.

DRY MEASURE:—

The Bavarian *metzen* is divided into halves, quarters, &c., and contains 34⅔ Bavarian *kannen,* and = $0._{12745}$ English imperial quarters.

100 Bavarian metzen = $12._{745}$ English quarters,
" " " = $37._{6596}$ French hectolitres,
" " " = $67._{428}$ Prussian scheffel,
" " " = $60._{260}$ Vienna metzen.

A *schäffel* has 6 *metzen:* a *muth* 24 *metzen.* Lime is piled up when measured.

FLUID MEASURE:—

The *maasskanne* = $0._{235289}$ English gallons, $1._{069}$ French litre, $0._{933622}$ Prussian quart, $0._{75564}$ Vienna mass. The *schenk-eimer* has 60 maass, or $14._{117}$ English imperial gallons. The *bier-eimer* has 64 maass, and the *fass,* or cask, 25 such eimer.

WEIGHTS.

The *pfund* is the Zollverein pfund of 500 French grammes = $1._{10232}$ English pound avoirdupois.

The *mark,* for gold, has 24 *karat* of 12 *grän;* and for silver 16 *loth* of 18 *grän:* it is equal to $233._{95}$ French grammes. For coining the Zollverein pfund is employed.

The *pfund* for medicines, &c. = 360 French grammes, $5555._{664}$ Eng. troy grains; and has 12 *unzen* of 2 *loth:* the *unze* has 8 *drachmen* of 3 *skrupel* of 20 *gran.*

In Rhenish Bavaria the French metrical weights and measures, as tolerated up till 1839, are still in use.

1 *fuss* = ⅓ mètre; 1 *elle* = 1 French *aûne usuelle,* $1._{212}$ English yards. The *scheffel* = ⅛ hectolitre = $0._{2439}$ English imp. bushels; the litre is $0._{931}$ of the present French litre. The centner = 100 kilogrammes.

The *klafter,* for firewood, is the same as in Bavaria Proper.

BREMEN.

Bremen is a free territory, having an area of 97½ English square miles, with a total population of about 92,000 souls. It has four towns, one borough, twelve villages, and some 30 hamlets. It is situated in the plain of the Weser. The town of Bremen has a population of about 62,000. The real ports are Vegesack and Bremerhaven.

The government is republican: at the head of the administration stands the senate, composed of 18 senators chosen for life and two mayors chosen for four years, a change of one taking place every two years.

The revenue of Bremen amounted in 1859 to £14,158. The debt was, in 1861, £1,900,000.

Bremen is a great resort for emigrants bound to America: the number that embarked here in 1860 was 30,128; while since 1832 not less than 761,696 persons have taken their departure from this port *en route* for America.

The shipping of Bremen in 1860 numbered 262 vessels of 82,633 *lasts* of 4,000 Bremer pfund, or 4,396 English pounds. The vessels arriving at Bremen amounted to 2798, of 282,624 *lasts* of 4,396 Eng. pounds: those clearing out to 3,100, of 289,546 *lasts*.

The imports in 1860 amounted to 14,678,412 centner, value 71,504,302 Bremer thaler, or £11,768,416; the exports to 8,068,062 centner, value 70,068,298 Bremer thaler, or £11,581,740. Of course by far the greater part of this is transit trade. The principal articles imported and again exported are cotton, coffee, rice, tobacco, sugar, linen, grain, oak-bark, oil-cake, and hams.

Great quantities of woollen yarns and twists are imported into Germany *viâ* Bremen.

The articles produced in the territory are—woollen and cotton goods, leather, hats, paper, tobacco, starch, colours, soap, and chicory. Ship-building is largely carried on here. The trade is extensive and flourishing.

EXCHANGE.

The 'universal German laws of Exchange' are in force in Bremen. There are certain regulations attached thereto peculiar to Bremen, but these are of secondary importance and would occupy too much of our space to be given here.

MONEY.

All accounts are kept in "thaler in gold," a fictitious money, of which 5 are supposed to go to a so-called louisd'or, or pistole. The

worth of such a thaler is about 3*s.* 3½*d.* The pistolen of Hanover, Denmark, Brunswick and Hesse have course in the territory of Bremen.

Bremen issues no gold coins. The silver pieces are of 36, 12, 6, and 1 grot, which are used only as change. In copper there are pieces of 2½ and 1 schwaren.

Instead of "thaler in gold" the German thaler is now used in all the accounts kept by the post-offices, the railway, the union custom houses, as also at the two ports of Vegesack and Bremerhaven.

MEASURES.

Long Measure:—The *fuss* has 12 *zoll*, or 10 *decimal zoll*: 2 *fuss* make an *elle*; 6 *fuss* make a *klafter*; 16 *fuss* = 1 *ruthe*; for yarn 3¾ *ellen* = 1 *faden*; 90 *fäden* = 1 *gebind*; 10 *gebinde* = 1 *kopf*.

100 *Bremer fuss* = $94._{933}$ English feet, = $92._{193}$ Prussian fuss,
" " " = $28._{935}$ French mètres, = $91._{537}$ Vienna fuss.

Square Measure:—The square *fuss* has 144 square *zoll*, or 100 square *decimal zoll*. The *tagewerk*, a measure for land, varies according to the quality of the land, from 30,000 to 70,000 square fuss. Wood patches are measured by the square ruthe or the square fuss. The *morgen* has 120 square *ruthen*, or 30,720 square *fuss*.

Cubic Measure:—The cubic *fuss* has 1,728 *zoll*, or 1,000 cubic decimal *zoll*, and = $0._{02422537}$ cubic French mètre.

For wood, the *faden* is 6 fuss high and 6 broad, the logs being 2 fuss long = 72 cubic fuss: in measuring wood by the *repp* the wood is generally 4½ fuss long.

Dry Measure:—The *last* has 40 *scheffel* of 4 *viertel* of 4 *spint*.

100 Bremer scheffel = $0._{25485}$ English imp. quarter, $0._{74104}$ French hectolitre. The *bräu* of malt has 45 *scheffel*; the *tonne* of salt 3½ *scheffel*. Corn, beans, pease, &c., are now weighed.

Fluid Measure:—The *fuder* of Rhenish wine has 6 *ohm* of 45 *stübchen*; the *stübchen* has 4 *quart* of 4 *mingel*, or *mengel*: the *anker* has 45 *quart*. 100 Bremen wine stübchen = $70._{903}$ English imp. gallons = $322._{444}$ French litres = $281._{341}$ Prussian quart. The *oxhoft* has 1½ *ohm*: French wine and brandy are sold by the *oxhoft* of 30 *vierteln*.

The *tonne*, for beer, has 45 *stübchen* of 4 *quart* of 4 *mengel*: this stübchen has $3._{77154}$ French litres: the half-tonne must have 23 stübchen, the quarter-tonne 12 stübchen.

Whale-oil, &c., is sold wholesale by the *tonne* of 216 pfund net: the finer oils by 100 pfund.

WEIGHTS.

The *pfund* is the same as the Zollverein pfund = 500 French grammes: it is divided into 10 *neuloth* of 10 *quint* of 10 *halb-grammes*. The medicinal *unze*, weighing 6 *quint*, is divided into 8 *drachmen*, of 3 *skrupel*, of 20 *grän*.

BRUNSWICK.

The duchy of Brunswick (*Ger.* Braunschweig), consisting of three larger and six smaller detached portions of territory, occupies a total area of 1526½ English square miles, with about 275,000 inhabitants. The largest of these portions lies between Hanover and Prussia, and contains the towns of Brunswick (or Braunschweig), Wolfenbüttel, and Helmstadt: the second runs E. and W. from Lippe to the Harz mountains: the third lies S. E. of this, and is traversed by the Harz. The six other lie scattered about at no great distance from the capital, except Thedinghausen, which is situated on the Weser, 12 miles S. E. of Bremen.

The government is a limited hereditary monarchy: there is but one chamber, consisting of deputies from the people.

The surface of the country is generally level, except in the neighbourhood of the Harz Mountains. This range and its prolongation, the Solling hills, are covered with fine forests, and timber is a chief export. The soil is generally fertile, and agricultural produce, with cattle, forms the chief wealth of the people, who are industrious and contented.

The spinning of yarn, weaving, and iron-works are the principal branches of industry after agriculture. The Harz Mountains contain rich mines, some of which belong to the duchy, while others are worked jointly with Hanover or Prussia.

The chief articles exported are—timber, corn; rape, turnip, and clover seed; starch, maccaroni, oilcake and oil, iron and steel wares, coal; horses, horned cattle, sheep, wool, linen, leather, chemicals, &c.

The revenue amounts to about £700,000: the public debt to £1,600,000.

The military numbers 2,700 men in time of peace, the double in time of war.

Brunswick, the capital, has a population of about 50,000 inhabitants. Here are linen and woollen weaving establishments, leather manufactories; leather gloves, paper hangings, playing-cards, articles of papier-maché, tobacco, mirrors, porcelain and faïence, machines, articles of gold and silver, colours, chicory; breweries, distilleries, printing establishments. Brunswick has two large fairs yearly and a wool-market.

EXCHANGE.

The 'universal German laws of Exchange' are in force here, with some peculiar enactments with respect to bills of exchange drawn in connexion with the Brunswick fair. All exchange transactions are regulated by the exchanges of Berlin or Leipzig.

MONEY.

Accounts are kept in thaler of the 30-thaler standard. A thaler is worth 3*s.*, and is divided into 30 *groshen* of 10 *pfennige.*

Of gold coins are now issued the *krone* and *halb-krone.* The *krone* is worth about £1 7*s.* 4*d.* Of silver coins there are *thaler, two-thaler* pieces, and $\frac{1}{6}$-*thaler* pieces. The *groschen* are a mixture $\frac{312\frac{1}{2}}{1000}$ fine. Copper coins are those of 2 *pfennige* and 1 *pfennig.*

MEASURES.

Long Measure:—The *fuss* has 12 *zoll* of 12 *linien* = $0._{93625}$ English foot, $0._{28536}$ French mètre. The *elle* has 2 *fuss:* the ruthe is 16 fuss, divided for land-measuring into tenths and hundredths. The mining *lachter* has 80 *zoll* and $8\frac{1}{2}$ linien = $1._{919259}$ mètre: it is divided into 8 *spann* of 10 *lachter-zoll.* The *meile* has 1625 *ruthen,* or 26,000 *fuss* = $4._{61}$ English miles. For yarns the *faden* is $3\frac{3}{4}$ *ellen:* the *lopp* has 10 *gebinde,* or skeins, and = 3375 *ellen.*

Square Measure:—The square *ruthe* has 256 square *fuss.* The *morgen* of field land has 120 square *ruthen;* that of wood-land 160 square *ruthen.*

Cubic Measure:—The cubic *fuss* has 1728 cubic *zoll* of 1728 cubic *linien.* Turf, fire-wood, charcoal, stone, &c., are sold by the cubic fuss. The *maass* has 2 cubic fuss. The *schacht-ruthe,* for sand, &c., has 256 cubic fuss.

Dry Measure:—The *wispel* has 40 *himten* of 4 *vierfass* of 4 *metzen.* 100 himten = $10._{711}$ Eng. imp. quarters, $31._{145}$ French hectolitres.

Fluid Measure:—An *anker* has 40 *quartier,* an *ohm* 160, an *oxhoft* 240, and a *tonne* 108. 100 *quartier* = $20._{6}$ English imp. gallons, $93._{648}$ French litres, $81._{818}$ Prussian quart.

WEIGHTS.

Trade Weight:—The *pfund* is the Zollverein pfund of 500 French grammes = $1._{10232}$ English pound: it is divided into 10 *loth* of 10 *quint* of 10 *halb-gramm.*

The weights for gold and silver, medicinal drugs, &c., are the same as in Prussia.

FRANKFORT-ON-THE-MAIN.

The territory of Frankfort-on-the-Main (*Ger.* Frankfurt-am-Main) covers an area of $41._4$ English square miles, with upwards of 80,000 inhabitants. The town of Frankfort has a population of about 69,000: it is a free town, and the seat of the diet of the German Confederation.

The government of Frankfort is republican: it consists of a senate of twenty members and an elected legislative assembly.

The revenue is about £170,000: the debt of the state in 1860 was £831,250: the railway debt about £700,000.

The military contingent is 1,119 men.

The town of Frankfort has two important fairs: its productions are oilcloth, yarns, carpets, paper-hangings, articles of gold and silver, chemicals, &c. The 'universal German laws of Exchange' are in force here, accompained, however, by certain peculiar regulations concerning bills for fair business, &c.

MONEY.

The *gulden* has 60 *kreuzer* of 4 *pfennige* or *heller:* it is worth about 1*s.* 9*d.* 52½ are coined out of a pound of fine silver. Gold coins:—*krone,* worth £1 7*s.* 4*d.;* *halb-krone*: *ducats* are no longer issued as money. Silver coins:—*gulden, two-gulden* pieces, ½ and ¼ *gulden.* Small change: pieces of 6, 3, and 1 *kreuzer.*

MEASURES.

Long Measure:—The *fuss,* or *schuh,* has 12 *zoll* of 12 *linien* $= 0._{92378}$ English foot, $0._{28461}$ French mètre. The *elle* $= 0._{59855}$ English yard: in practice 5 ellen go to 3 English yards: the elle is divided into halves and quarters. The Frankfort-Brabant elle $= 1._{29267}$ English yard.

A *klafter* is 6 *fuss,* or *schuh.* The field *ruthe* is 12½ *schuh,* or *fuss,* long, but is divided into 10 field *schuh* of 10 *zoll.* The wood ruthe is $15._{8489}$ *schuh.*

Square Measure:—The field *morgen* has 160 square field *ruthen* $= 0._{5004238}$ English acre. The *hube,* or *hufe,* of land is 30 morgen.

The wood *morgen* has 160 square wood *ruthen* $= 0._{474245}$ English acre.

Cubic Measure:—The general cubic *ruthe* is the cubic feld *ruthe*, and has 1953⅛ cubic*schuh*, or *fuss*. The cubic ruthe for masons, &c., is 12 schuh long, 13 schuh high and 2 schuh thick = 312 cubic schuh. The cubic ruthe for road stones, &c., is 12 schuh long, 6 broad, and 4 high = 288 schuh.

The *stecken*, for firewood, is $3._{55}$ schuh long and $3._{55}$ high, and the wood is generally 3 schuh long; so that the stecken contains $37._{811}$ cubic schuh. 2 stecken make 1 *gilbert*: of fir firewood 3 stecken make a *gilbert*. The wood *klafter* of firewood is 6 schuh long, 7 high, and the logs 3 schuh long = 126 schuh.

Dry Measure:—The *malter* has 4 *simmer*, of 4 *sechter* of 4 *gescheid* of 4 *viertelgescheid* = $0._{39455}$ English imp. quarter, $1._{147}$ French hectolitre. Corn is now generally weighed, but as the price is always per malter, 183 pfund wheat and 173 pfund rye, with a 3-pfund sack, are supposed respectively to make a malter.

Charcoal is sold by the *kohlenbütte*, which contains $5._{2574}$ cubic *schuh* = $26._{67}$ English gallons. Coals are generally weighed: the smaller pieces, dust, &c., are measured by the malter.

Lime is measured by the *kalkbütte*, containing 6$\frac{11}{16}$ cubic schuh = $31._{24}$ English gallons, $141._{95}$ French litres.

Fluid Measure:—The *ohm* has 80 *alte maass*, or *aichmaass*, of 4 *schoppen* = $31._{5642}$ English gallons.

The maass = $0._{39455}$ English gallon, $1._{7926}$ French litre.

The *fuder* of wine has 6 *ohm*: the *stück* of wine 8 *ohm*: the *oxhoft* about 1½ *ohm*.

For common use for milk, vinegar, oil, &c., the *junge maass* is used: 9 *junge maass* = 8 *alte maass*: 100 *junge maass* = $35._{071}$ English gallons. The peculiar measure for olive oil is a *maass* equalling $0._{9112}$ English pint, which is reckoned to be equal to a *pfund*, or pound.

WEIGHTS.

The *pfund* is the Zollverein *pfund* of 500 French grammes = $1._{10232}$ English pound. This *pfund* has 30 *loth* of 10 *quent* of 10 *cent* of 10 *korn*. The pfund may also be divided into 32 *loth* of 4 *quent* of 4 *richt-pfennige*. 100 pfund make a centner: 300 pfund = 1 *schiffspfund*; 4,000 pfund = 1 *schiffslast*.

For gold, silver, and coining purposes the pfund is divided into thousand-parts. For jewels and pearls the Dutch *karat* (= $3._{17735}$ Eng. troy grains) is in use. For medicinal drugs, &c., the Prussian apothecary's weight is used.

HAMBURG.

The territory of the free town of Hamburg has a total area of 122 English square miles. The town and the suburbs, with the immediate neighbourhood, occupy 56½ Eng. square miles. The population of the territory amounts to about 231,000 souls, of whom some 216,000 Lutherans, 8,000 Jews, 3,000 catholics, 3,000 of the reformed faith, the rest Mennonites, &c.

Hamburg is situated on the Elbe, and is the largest commercial town and sea-port in Germany. The population, including the suburbs of St. George and St. Paul, 176,000. It has an exchange. Sugar-refining is the most important branch of industry; then brewing, distilling, dyeing, the manufacture of linen goods, of musical, surgical, and mathematical instruments, of leather, hats, tobacco, soap, cotton, silk, pottery, tin and copper. The port is not only important on account of its extensive foreign trade, but for the commercial intercourse it maintains with the whole of Germany by means of the Elbe, and by the railroads here meeting.

The government is democratic: the executive is vested in a senate composed of four burgomasters and twenty-four councillors. The committee of sixty and the committee of ancients complete the powers of the state.

The revenue amounts to about £800,000, the expenses to about the same. The public debt is £4,684,000.

The military contingent to the Confederation is 2,163 men.

The imports and exports effected through Hamburg are very considerable. The imports amounted in 1860 to 37,822,469 centner, or about 1,857,350 tons of merchandize, valued at £46,000,000. The exports amounted to about 1,178,521 tons, value £42,264,150.

The principal articles of import are—tea, corn, cattle and butchers' meat, wool, skins, olive oil, clover-seed, rapeseed, linseed, timber, saltpetre, sulphur, silver and copper ore, raw iron, copper, railway rails. The exports are—woollen and half-woollen (mixed) goods, cotton goods, silks, linens, cotton yarns, wool, coffee, sugar, corn, butter, coals, timber, twists, &c. &c. Large quantities of woollen yarns and twists are imported into Germany *viâ* Hamburg.

The number of vessels arriving at the port of Hamburg in 1860 was 5,029, of 630,770 lasts of 4,000 *pfund*, or pounds: clearing out 5,045, of 635,231 lasts. The number of vessels belonging to Hamburg in 1860 was 486, of 88,155 lasts of 4,000 pfund; of which 17 steamers, of 6,789 lasts: 212 of these vessels guaged 100 lasts of 6,000 pfund

and under. Five steamers, of an aggregate of 2,613 lasts of 6,000 pfund, and of 1,725 horse-power, keep up the communication between Hamburg and New-York.

The 'universal German laws of Exchange' are in force here, with different additions only of interest for Hamburg.

MONEY.

All accounts are here kept in *marks banco,* which, however do not exist as coin.

The current coins, Lübeck current *(lübisch Courant),* consist principally of small change, such as 8, 4, 2, and 1 schilling pieces, ½-schilling and ¼-schilling pieces.

A *mark* has 16 *schillinge:* the mark banco = 1*s.* $6_{.212}$*d.;* the mark Lübeck current = 1*s.* $2_{.797}$*d.* 13¼ marks banco are generally reckoned = £1.

MEASURES.

Long Measure:—The *fuss* has 12 *zoll* and = $0_{.93792}$ English foot, $0_{.28642}$ French mètre. The *elle* has 2 *fuss:* 100 *ellen* = $62_{.647}$ English yards, $57_{.283}$ French mètres. The *Brabant elle* here sometimes employed = 1⅓ Hamburg elle: 3 Eng. yards = 4 Brabant ellen. The *klafter,* or *faden,* has 6 fuss. The *marschruthe* has 14 fuss, the *geestruthe* 16, and the so-called Rhenish *ruthe* 12 Rhenish fuss. The Hamburg *meile,* or mile, is the same as the Prussian = $4_{.68}$ Eng. miles.

Land Measure:—The *morgen* has 600 *marschruthen* of 196 square fuss = $2_{.38}$ English acres, $96_{.475}$ French ares.

Cubic Measure:—The *klafter,* for firewood, is 6⅔ fuss high and 6⅔ broad, and the logs generally 2 fuss long.

Dry Measure:—The *last* has 60 *fass,* of 2 *himten* of 4 *spint* of 4 *grosse* (great) *maass* of 2 *kleine* (little) *maass.* The *winspel* of wheat, rye, or pease has 20 *fass:* of barley or oats 30 *fass.* The *scheffel* of wheat, rye, and pease has 2 fass; of barley and oats 3 *fass:* the *winspel* has 10 *scheffel.* 100 himten = $9_{.0522}$ English imp. quarters, $26_{.325}$ French hectolitres.

For salt there is the salt *tonne* of 12,100 cubic *zoll:* = $36_{.27}$ Eng. imp. gallons, $164_{.794}$ French litres: for coals the coal *tonne* of 16,438 cubic *zoll* = $49_{.21}$ Eng. imp. gallons, $223_{.87}$ French litres.

Fluid Measure:—The *fuder* has 6 *ohm* of 4 *anker,* or 5 *eimer,* or 20 *viertel,* or 40 *stübchen:* the *anker* has 5 *viertel,* the *eimer* 4 *viertel:* the *viertel* has 2 *stübchen,* or 4 *kannen,* or 8 *quartier:* the *kanne* has

2 *quartier*, or 4 *ösel*. 100 kannen = $39_{.727}$ Eng. imp. gallons, $180\frac{1}{2}$ French litres.

Rhine Wine is sold by the *rhein-wein viertel* of $1_{.567}$ Eng. gallon, $7_{.12}$ French litres.

The *oxhoft* has $1\frac{1}{2}$ *ohm*, or 6 *anker*, or 30 *viertel*. A *fass*, or *tonneau*, has 4 *oxhoft*: $\frac{2}{3}$ *oxhoft*, or 1 *ohm* is also called a *tierce*.

The *tonne* of beer has 192 *quartier*: the vinegar *tonne* has 120 quartier.

WEIGHTS.

The *pfund* is the Zollverein pfund of 500 French grammes = $1._1$ Eng. pound avoirdupois. This *pfund* has 10 *loth* of 10 *quint* of 10 *halbgramm*.

Medicines, &c.—The *unze* (6 *quint* in weight) has 8 *drachmen*, of 3 *skrupel* of 20 *grän*.

For gold and silver the Hamburg-Cologne mark is used: the same = $3608._{846}$ Eng. troy grains, or $233._{85489}$ French grammes. Coining weight is also this mark: assay weight also this mark, divided for gold into 24 *karat* of 12 *grän*, for silver into 16 *loth* of 18 *grän*. Jewels and pearls are weighed according to the *karat* of 4 *grän*, which is as near as possible the English jewel carat this latter being as $0._{9971}$ to the Hamburg and Dutch jewel carat.

HANOVER.

The kingdom of Hanover occupies an area of 14,786 English square miles, with a population of 1,900,000, of whom 1,560,000 Lutherans, 97,000 of the reformed church, 216,000 catholics, 12,000 Jews, then Mennonites, quakers, &c.

The surface in the south is covered by the Harz Mountains, which slope away towards the north. The principal river is the Elbe.

The government is a limited monarchy, hereditary in the male line.

The revenue amounts to about £3,000,000, the expenses the same. The public debt is but £9,000,000, of which one-half has been spent in the construction of the railways, which all belong to the government.

The manufactures of Hanover are insignificant; the oldest and principal branches of industry being the preparation of flax (cultivated in the provinces of Hildersheim, Lüneburg, and Osnabruck), and the manufacture of linen yarns and linen. Fire-arms are made at Hertzberg. The iron foundries and other iron-works are important. There are also numerous distilleries, and brandy and other spirits are largely exported.

Next in importance are the paper and leather manufactures. There are also several mines of coal, iron ore, gold, silver, copper and lead: the silver and copper mines are by far the most valuable. The principal articles of export are linens, linen yarns, flax; wool, leather and hides, fire-arms, brandy and other spirits, corn, meal, seeds, chemicals, paper; cattle and pigs.

Of railroad 527 English miles are now open, which have cost the government in their construction £5,500,000. The net profits derived from the railways and telegraph department in 1860, amounted to £293,539.

The principal sea-ports of Hanover are—Papenburg, Emden, Leer, and Harburg, possessing (1860) respectively 156, 101, 39, and 24 sea-going vessels. Geestemunde, at the mouth of the Weser, is a rising port. The number of sea-going vessels amounted in 1861 to 817, of 49,320 lasts: river craft, barges, &c., 2,478, of 26,144 lasts.

Hanover, the capital of the kingdom, on the Leine, has a population (the suburbs Hannover and Linden included) of 63,000. The industry comprises:—paper-hangings, articles of gold and silver, colours, earthenware, sealing-wax, oil-cloth, artificial flowers, cottons, chicory, machines, stockings, hats, vinegar, spirits, and beer.

The 'universal German laws of Exchange' are here in force. There is no exchange in the country, and all such matters are regulated by the exchanges of the neighbouring capitals.

MONEY.

Accounts are kept in *thaler* of 30 *groschen* of 10 *pfennige* = 3*s.* Gold coins: *krone* and *halb-krone,* worth £1 7*s.* 4*d.* and 13*s.* 8*d.* Silver coins: 2 and 1 *thaler,* $\frac{1}{6}$-*thaler,* $\frac{1}{12}$-*thaler;* with small change of 1 *groschen* and $\frac{1}{2}$-*groschen.*

MEASURES AND WEIGHTS.

Long Measure:—The *fuss* has 12 *zoll* of 12 *linien* = $0_{.95833}$ Eng. foot, $0_{.292}$ French mètre. The *elle* has 2 *fuss:* the *klafter* has 6 *fuss:* the *ruthe* has 16 *fuss:* the *meile,* or mile, has 1587½ *ruthen* = $4_{.61}$ Eng. miles.

Land Measure:—The *morgen* has 120 square *ruthen* = $0_{.747689}$ Eng. acre, $26_{.21}$ French ares.

Cubic Measure:—The *klafter,* for firewood, contains 144 cubic *fuss.*

Dry Measure:—The *last* has 16 *malter* of 6 *himten* of 4 *metzen* (or *spint*) of 4 *mühlenköppe,* or *hoop.* 100 himten = $10_{.713}$ Eng. imp. quarters, $31_{.152}$ hectolitres.

Fluid Measure:—The *stübchen* has 2 *kannen* of 2 *quartier* of 2 *nössel:* the *ohm* has 4 *anker* of 40 *quartier:* the *fuder* has 4 *oxhoft*, or 6 *ohm*. 100 *stübchen* = $85._{1046}$ Eng. gallons, $389._{396}$ French litres: 100 *ohm* = $3428._{186}$ Eng. gallons, $155._{758}$ French hectolitres. The *brau*, or *gebräude*, of beer has 43 *fass* of 52 *stübchen*.

The *pfund* is the Zollverein *pfund* of 500 French grammes = $1._{1}$ English pound avoirdupois. The *centner* has 100 *pfund;* the *schiffslast* 4,000 *pfund*. The *pfund* has 10 *loth* of 10 *quint* of 10 *halbgramm*.

For medicines the *unze* (weighing 6 quint) is divided into 8 *drachmen* of 3 *skrupel* of 20 *gran*. For coining purposes and for gold and silver the Cologne mark, of $233._{8555}$ French grammes = $3608._{9506}$ Eng. troy grains, is still used. For jewels, &c., the weights are the same as in Prussia.

HESSE-CASSEL.

The electorate of Hesse-Cassel (*Ger.* Kurhessen) comprises several distinct and separate principalities and lordships, and covers an area of 4424 English square miles, with a population of about 750,000, of whom a very large majority are protestants.

The surface of the country is for the most part rugged and mountainous, being covered by various branches of the Odenwald, Spessart, Rhöngebirge, and Thüringerwald. It is drained chiefly by the Werra and its tributaries. Nearly two-fifths of the surface are arable, and, although badly cultivated, furnish grain equal to the consumption. The forests are valuable, principally for the vast herds of swine they largely contribute to nourish. The minerals are more numerous than valuable: those of coal and iron are successfully worked.

The government is called a constitutional monarchy, but the constitutional limits are not well-defined.

The revenue is about £765,000, the expenses amount to the same sum. The state debt is near upon £10,000,000.

The town of Cassel has a population of about 38,000. Industry—Manufactories of wool, silk, cotton, leather, stoneware, porcelaine, paper-hangings, carriages, colours, tobacco, machines, soap, beer; considerable trade.

The federal contingent is, active and reserve, 12,856 men.

The laws of exchange are the old ones of Frankfort. All exchange matters are regulated by Leipzig and Berlin.

MONEY.

Accounts are kept in *thaler* of 30 *groschen* of 12 *pfennige* = 3*s*.

Gold coins:—*krone* and ½-*krone* = £1 7*s.* 4*d.*, and 13*s.* 8*d.* Silver coins:—*thaler, doppel-thaler,* and ⅙-*thaler;* with small change of 2½, 1, and ½ *groschen.*

The weights and measures are so different in the various parts of the electorate that we think it best to give those in use in the capital, Cassel.

MEASURES AND WEIGHTS.

Long Measure:—The *fuss* has 12 *zoll* of 12 *linien* = $0._{94391}$ Eng. foot, $0._{2877}$ French mètre. An *elle* = $0._{62381}$ Eng. yard, $0._{5704}$ French mètre. The *Cassel-Brabant elle* = $0._{75932}$ Eng. yard.

Land Measure:—The *acker* = $0._{5897}$ Eng. acre, $23._{865}$ French ares.

Cubic Measure:—The *klafter* of wood is 5 *fuss* high and the same broad, and the logs are 6 *fuss* long = 150 cubic *fuss.*

Dry Measure:—The *viertel* has 2 *scheffel* of 8 *metzen* of 4 *mässchen.* 100 scheffel = $27._{639}$ Eng. imp. quarters, $80._{369}$ hectolitres.

Fluid Measures:—For wine, spirits and vinegar: the *fuder* has 6 *ohm* of 20 *viertel* of 4 *maass* of 4 *schoppen* = 320 *schoppen.* 100 maass = $42._{908}$ Eng. imp. gallons, $194._{950}$ French litres. The ohm = $34._{32658}$ Eng. imp. gallons. The beer *ohm* has 80 *maass* of 4 *schoppen.* 8 beer maass = $8._{964}$ wine maass.

The *pfund schwergewicht,* or heavy weight = $1._{06755}$ Eng. pound avoirdupois, and is used in wholesale transactions: the *pfund leichtgewicht,* or light weight = $1._{021}$ Eng. pound avoirdupois. 57 pfund heavy weight = 59 pfund light weight.

The *Cassel Cologne mark* for gold and silver = $233._{906}$ French grammes. Assay weight as in Prussia.

HESSE-DARMSTADT.

The grand-duchy of Hesse-Darmstadt consists of two larger portions of territory and 18 enclaves: it covers an area of 3237¼ Eng. square miles, with 850,000 souls. Of these latter some 400,000 are Lutherans, 218,000 catholics, 168,000 unitarians, 31,000 of the reformed Church, 30,000 Jews, and some 4,000 of other denominations.

Over the east of the country extend the Vogelberg and its ramifications, one part of it forming the watershed between the Rhine and the Weser.

The government is a constitutional monarchy. The revenue is about £800,000, the expenses a trifle less. The debt properly so called—*i. e.*

not including the loans for railways—amounts to but £566,125. The railway debt is of about the same amount.

The mountains are well wooded, and contain mines of copper, iron in abundance, potters' clay, salt, and lignite. The chief crops are corn, flax, and potatoes. The chief manufactures are leather, and woollen and linen cloth.

The town of Darmstadt has a population (including Bestungen) of about 35,000. Industry—paper-hangings, chemicals, tobacco, technical and musical instruments, machines, articles of gold and silver.

Laws of exchange as in Prussia. All exchange operations are regulated by Frankfort.

MONEY.

Accounts are kept in *gulden* (florins) of 60 *kreuzer*, of 4 *pfennige* = 1*s.* 9*d.* The gold coins issued since 1857 are the *krone* and the *halb-krone*, the former of which is worth about £1 7*s.* 4*d.*: before 1857 there were 10 and 5 gulden pieces, worth about 17*s.* 6*d.* and 8*s.* 9*d.*—Silver coins—pieces of $3\frac{1}{2}$ and $1\frac{3}{4}$ *gulden* = 2 and 1 *thaler:* then 2 and 1 *gulden* and $\frac{1}{2}$-*gulden*, with small change of 6, 3, and 1 *kreuzer*.

MEASURES AND WEIGHTS.

Long Measure:—The *fuss* has 10 *zoll* of 10 *linien* = $0._{82022}$ Eng. foot, $0._{25}$ French mètre. The *elle* has 24 *zoll* = $0._{65618}$ Eng. yard. The *klafter* has 10 *fuss*. The *meile*, or mile, has 3,000 *klafter* = $4._{65}$ Eng. mile.

Land Measure:—The *morgen* has 4 *viertel*, or 400 square *klafter*. 100 morgen = 25 French hectares, $61._{77857}$ Eng. acres.

Cubic Measure:—The *stecken*, divided into halves and quarters, contains 100 cubic *fuss*: this is the measure for firewood.

Measures of Capacity:—32 cubic *zoll* make the corn *mässchen*, and the same number the *schoppen* for fluids. The *malter* (for corn) has 4 *simmer* of 4 *kumpf* of 4 *gescheid* of 4 *mässchen*. 100 simmer = $11._{005}$ Eng. quarters.

The measure peculiarly used for lime guages 10 cubic *fuss*: the measure for charcoal 40 cubic *fuss*.

Fluid Measure:—The *ohm* has 80 *maass* of 4 *schoppen* = 320 *schoppen*. 100 maass = $44._{019}$ Eng. gallons, 200 French litres.

The *pfund* is the Zollverein *pfund* of 500 French grammes = $1._{1}$ Eng. pound avoirdupois. The *pfund* is divided into 32 *loth* of 4 *quentchen* of 4 *richtpfennige*. This *pfund* is also used for gold and silver

and for minting purposes. For jewels the karat, equal to an English carat, is used. The apothecary's *pfund* has 5,522 troy grains, and is divided into 12 *unzen* of 8 *drachmen* of 3 *skrupel* of 20 *gran*.

LIPPE-BÜCKEBURG.

Lippe-Bückeburg, or Schaumburg-Lippe, covers an area of 179 Eng. square miles, with a population of 31,000. Capital Bückeburg, with 2,500 inhabitants. The country is hilly. By far the greater part of the inhabitants are protestants. Industry—spinning, weaving; coal mines. The revenue is about £34,200; expenses are the same. Military 555 men.

MONEY.

Accounts are kept in *thaler* of 30 *groschen* of 12 *pfennige* = 3*s*. Gold coins now issued—*krone* and *halb-krone*, the former worth about £1 7*s*. 4*d*. Silver coins—*thaler*, *double-thaler*, $\frac{1}{6}$-*thaler*, with small change of pieces of $2\frac{1}{2}$, 1, and $\frac{1}{2}$ *groschen*.

MEASURES AND WEIGHTS.

Long Measure:—The *fuss* has 12 *zoll* of 12 *linien* = $0_{.9517}$ Eng. foot, $0_{.2901}$ French mètre. The *elle* has 2 *fuss:* the *lachter* has 7 *fuss:* the *ruthe* has 16 *fuss*.

Land Measure:—The *morgen* has 120 square *ruthen* = $0_{.6285}$ Eng. acre.

Cubic Measure:—The *klafter* contains 216 cubic *fuss*.

Dry Measure:—The *fuder* has 12 *malter* of 6 *himten* of 4 *metzen:* the himten = $7_{.25}$ Eng. gallons.

Fluid Measure:—The *oxhoft* has 6 *anker* of 28 *maass:* the *maass* = $1_{.04}$ Eng. quart, $1_{.22}$ French litre.

The *pfund* is the Zollverein *pfund* of 500 French grammes = $1_{.1}$ Eng. pound avoirdupois: it is divided into 10 *loth* of 10 *quint* of 10 *halbgramm*.

For medicines the *unze* (weighing 6 quint) is divided into 8 *drachmen* of 3 *skrupel* of 20 *gran* = 480 *gran*.

For jewels and pearls the Dutch jewel carat is used.

LIPPE-DETMOLD.

This principality has an area of 436¼ Eng. square miles, with a population of 108,000. The reigning family and a majority of the inhabitants are Calvinists. Capital Detmold, with 5,400 inhabitants. Income about £336,000, expenditure the same: public debt £49,950. Military 840 men, and 240 reserve. In addition to the cultivation of the soil, the people are occupied with spinning and weaving linen, yarn, and stuffs, in distilleries, tanneries, &c.

MONEY.

Accounts are kept in *thaler* of 30 *groschen* of 12 *pfennige* = 3*s*. The gold coins issued are the *krone* and the *halb-krone*, the former of the value of £1 7*s*. 4*d*. Silver coins—*thaler, doppel-thaler*, ⅙-*thaler*, with smaller change of 2½, and 1 *groschen*, and ½-*groschen* pieces.

MEASURES AND WEIGHTS.

Long Measure:—The *fuss* has 12 *zoll* of 12 *linien* = $0._{94818}$ Eng. foot: the *elle* is 2 *fuss;* the *ruthe* is 16 *fuss* long, but is divided decimally.

Land Measure:—The *morgen* has 120 square *ruthen* = $0._{636}$ Eng. acre.

Dry Measure:—The rye, or hard-corn, *scheffel*, has 6 *grosse metzen*, or 8 *kleine metzen*, or 24 *mahlmetzen* = $9._{74}$ Eng. gallons. The oats *scheffel* has 7 *grosse metzen* = $11._{368}$ Eng. gallons.

Fluid Measure:—The *kanne* has 4 *ort* = $1._{21}$ Eng. quart. The *oxhoft* has 1½ *ohm*, or 6 *anker*, or 162 *kannen*. The beer *ohm* has 100 *kannen*.

The *pfund* = $1._{1}$ Eng. pound avoirdupois = 500 French grammes: the *centner* has 100 pfund. For coining purposes, apothecary's weight, &c., *see* Prussia.

LÜBECK.

The territory of Lübeck, one of the four German free towns, consists of ten different small tracts, covering in all 126¼ Eng. square miles, with a population of about 44,000, not reckoning its half of the district Bergedorf, which it holds conjointly with Hamburg. It is governed by a senate. The revenue amounts to about £78,000, the expenses to the same.

The debt is about £702,000 of which nearly two-thirds were contracted for the construction of railways. The military contingent is 610 men, with 68 men reserve.

The town of Lübeck is situated on the Trave, about 9 Eng. miles from its mouth, with which it is connected by a railway. It has about 27,000 inhabitants. The principal branches of industry are the manufactures of tobacco, starch, soap, woollens, linens, paper, articles of gold and silver, and musical instruments.

The total importation of Lübeck in 1860 amounted in value to £3,463,504.

The arrivals at Lübeck in 1860 were 1134 vessels, of 83,458 lasts: the clearances 1151 vessels, of 85,728 lasts.

The number of vessels owned at Lübeck in 1861 was but 56, of 6373 lasts of 4120 Lübeck pfund. Of these 13 were steamers.

All exchange matters are regulated by the exchange of Hamburg. With respect to bills of exchange the 'universal German laws of Exchange' are in force.

MONEY.

Accounts are kept in *marks* of 16 *schillinge* of 12 *pfennige*. A mark = 1*s.* 3*d.*

Silver coins issued at present—*thaler* of 2½ mark courant, worth 3*s.*; then pieces of 8 *schillinge* (½ mark), 4 *schillinge*, 1 *schilling*, ½ *schilling*, and ¼ *schilling*.

MEASURES AND WEIGHTS.

Long Measure:—The *fuss* has 12 *zoll* of 12 *linien* = $0._{94365}$ Eng. foot. 100 Lübeck *ellen* = $62._{91}$ Eng. yards. The *ruthe* has 16 *fuss:* the *meile* is the geographical mile, of which 15 make a degree = $4._{602}$ Eng. miles.

Land Measure:—This is calculated according to how many *scheffel* of seed are required, and of course this quantity varies according to the soil.

Dry Measure:—100 wheat and rye *scheffel* = $11._{931}$ Eng. imp. quarters. 100 oats *scheffel* = $13._{589}$ Eng. imp. quarters. With the former *scheffel* wheat, rye, barley, and pease are measured: with the latter oats and fruit. Malt is sold according to the *schiffspfund* = 280 pfund. Salt is sold by the *tonne* of about 39 *stübchen* of the fluid measure. Coals are sold by the *tonne* of about 38 *stübchen* of the fluid measure.

Fluid Measure:—The *fuder* has 6 *ohm*, or 4 *oxhoft:* the *oxhoft* has 1½ *ohm*, or 6 *anker*, or 30 *viertel*. The *anker* has 10 *stübchen*, or

40 *quartier*, of 2 *plank* of 2 *ort*. 100 *stübchen* = $80_{.06}$ Eng. imp. gallons, 363¼ French litres. 100 *ohm* = $3202_{.419}$ Eng. gallons. The *fass* for spirits = 240 *quartier*. The *fass* for beer = 160 *quartier*. For retail, wine, beer, oil, &c., are sold by the *kross*, or *quartier*, of $0_{.94096}$ French litre, $0_{.828}$ Eng. quart.

The *pfund* has 32 *loth* of 4 *quentchen* = $1_{.0725}$ Eng. pound avoirdupois. The *centner* has 8 *liespfund*, or 112 *pfund*. The *schiffspfund* has 2½ *centner*, or 20 *liespfund* of 14 *pfund*.

For coining purpose, and for gold and silver, the Cologne mark is used = $3608_{.9506}$ Eng. troy grains. Apothecary's weight—the *pfund* is $357_{.854}$ French grammes, 5,522 Eng. troy grains.

MECKLENBURG-SCHWERIN.

Mecklenburg-Schwerin, with its different small territories, covers an area of 5,170 Eng. square miles with a population of 549,000, of which 540,000 Lutherans. The form of government is monarchical-feudal. The land forms a part of the great North-German lowland: it is very fruitful, yielding great quantities of corn, &c., and affording pasturage to large herds of cattle.

The revenue amounts to about £512,000; expenses the like sum. Debt, including those of the communes, £1,360,000. Federal military contingent 5,380 men. The industry comprises—linen and woollen goods, shoes, spirits, tobacco, glass, paper, &c.

The movement in the ports of Warnemünde (Rostock), in 1860, was as follows:—entered 605 vessels, cleared out 624: Wismar—230 entered, 232 cleared out: total 835 entered, 856 cleared out. Rostock possesses 335 vessels of 42,012 lasts of 6,000 pfund; Wismar 46, of 5,644 lasts.

The capital, Schwerin, has a population of 23,000; Rostock has 25,000 inhabitants, Wismar 13,000.

All exchange operations are regulated by either Berlin or Hamburg. The 'universal German laws of Exchange' are in force.

MONEY.

Accounts are kept in *thaler* of 48 *schillinge* of 12 *pfennige* = 3*s*. Silver coins are pieces of 1 *thaler*, ½ and ⅙ *thaler*; with small change of 4 *schillinge* and 1 *schilling* pieces. In copper 1, 2, and 3 *pfennige*.

MEASURES.

Long Measure:—The Mecklenburg *fuss* = $0_{.95475}$ Eng. foot: the Rostock *fuss* = $0_{.9439}$ Eng. foot. The Mecklenburg *ruthe* has 16 Mecklen-

burg *fuss:* the Rostock *ruthe* has 16 Rostock *fuss.* The Mecklenburg *elle* = $0_{.62647}$ Eng. yard. The Rostock *elle* = $0_{.62927}$ Eng. yard. The Wismar *elle* = $0_{.6365}$ Eng. yard. The Mecklenburg *meile* = $4_{.68}$ Eng. miles.

Land Measure:—The *morgen* differs according to the soil, and varies from 200 to 400 square *ruthen.*

Cubic Measure:—Firewood is generally sold by the *faden,* which is 7 Hamburg *fuss* ($0_{.93792}$ Eng. foot) in length, the same in height, with logs of 3 *fuss* = 147 Hamburg cubic *fuss.*

Corn Measure:—The *last* has 8 *drömt* of 12 *scheffel* of 4 *fass* of 4 *metzen.* 100 *scheffel* = $13_{.274}$ Eng. imp. quarters. This *scheffel* is different in different parts of the country. Salt and coals are sold by the *last* of 12 *tonnen* of 6 *scheffel.*

Fluid Measure:—The *fuder* has 4 *oxhoft* of 1¼ *ahm,* or *ohm:* the *ahm* has 4 *anker,* or 5 *eimer.* The *eimer* has 4 *viertel* of 2 *stübchen* of 2 *kannen* of 2 *pot* or *quartier* of 2 *össel* of 2 *ort,* or *pegel.* 100 *kannen* = $39_{.721}$ Eng. imp. gallons. The beer *tonne* has 4 *viertel* of 16 *kannen* = 128 *pot.*

100 Mecklenburg *pfund* = $106_{.86}$ Eng. pounds avoirdupois. 100 Rostock *pfund stadtgewicht* = $112_{.040}$ Eng. pounds avoirdupois. 100 Rostock *pfund kramergewicht* = $106_{.71}$ Eng. pounds avoirdupois. The Mecklenburg *schiffspfund* has 2½ *centner,* or 20 *liespfund* of 14 *pfund.*

For gold and silver the Cologne mark = $3608_{.846}$ Eng. troy grains, is used. Assay weight and apothecary's weight as in Prussia.

MECKLENBURG-STRELITZ.

The duchy of Strelitz and the principality of Ratzeburg cover an area of 1,048 Eng. square miles, with 100,000 inhabitants. The town of Neustrelitz has about 8,000 inhabitants.

MONEY.

Accounts are kept in *thaler* of 24 *groschen* of 2 *schillinge,* or 48 *schillinge* = 3*s.* The different silver coins issued are the same as in Mecklenburg-Schwerin.

MEASURES AND WEIGHTS.

The *fuss* for field-measuring is the Mecklenburg-Schwerin *fuss:* the *fuss* for building purposes is the Prussian. 100 *ellen* = $75_{.799}$ Eng. yards.

The *ruthe* is threefold: 1. For field-measuring 16 Mecklenburg-Schwerin *fuss;* 2. For building purposes 12 Prussian *fuss;* 3. For ditch-work 16 Prussian *fuss.*

Land Measure:—The *morgen* is no determined measure, varying according to the land.

Cubic Measure:—For firewood the *faden* is 6 *fuss* long and the same high, logs 4 *fuss* long = 144 cubic *fuss.*

Dry Measure:—The *last* has 4 *wispel* of 2 *drömt* of 12½ *scheffel* of 16 *metzen.* The *scheffel* = 12 Eng. imp. gallons.

Fluid Measure:—The *oxhoft, ohm, anker* and *pegel* are the same as in Mecklenburg-Schwerin.

The *pfund* has 32 *loth* of 4 *quentchen* = $1_{.03113}$ Eng. pound avoirdupois. The *centner* is 110 *pfund.*

NASSAU.

This duchy has an area of 1,760 square miles, with 450,000 inhabitants, of whom 234,000 protestants, 207,900 catholics; Jews 70,000.

Expenses of the state £439,000, covered by a like income. Debt £1,142,500. Federal military contingent 5,498 men and 16 cannon.

The soil is fertile: wine is the chief produce. There are mines of copper, lead, silver, iron and coal; and celebrated mineral waters at Wiesbaden, Ems, and Nieder Selters. Wiesbaden has a population of 12,000, besides which thousands flock there in summer.

In all exchange matters Frankfort-a.-M. gives the law.

MONEY.

Accounts are kept in *gulden* of 60 *kreuzer* of 4 *pfennige* = 1*s.* 9*d.* Silver coins now issued—pieces of 3½ *gulden* (2 thaler conventional money), 1½ *gulden* (1 thaler), 2, 1, and ½ *gulden:* then small change of 6, 2, and 1 *kreuzer.* Copper coins—1, ½, and ¼ *kreuzer.*

MEASURES AND WEIGHTS.

The *fuss* has 10 *zoll* of 10 *linien* = $0_{.98427}$ English foot, $0_{.3}$ French mètre. The *elle* has 2 *fuss:* the *ruthe* 10 *fuss.* For land-measuring the *feldschuh* is used = ½ French mètre, $1_{.64}$ Eng. foot. 10 *feldschuh* make one *feldruthe.*

Land Measure:—100 square *feldschuh* make a square *feldruthe.*

Cubic Measure:—For firewood the *klafter* has 144 cubic *fuss:* the *wagen* charcoal has 10 *bütten* of 20 cubic *fuss*: the *fuder* of ore has 30 *maass* of 2 cubic *fuss:* the *zain*, for peat, has 20 cubic *fuss.*

Dry Measure:—The *malter* has 100 *liter* = $22._{0097}$ Eng. imp. gallons, 100 French litres: 1 *viertel* is 25 liter, 1 *zehntel* has 10 liter, 1 liter = $0._{88}$ Eng. quart.

Fluid Measure:—The *ohm* has 160 *liter* = $35._{2}$ Eng. imp. gallons: 1 *liter* = $0._{88}$ Eng. quart. The *maass* has 2 *liter*, or *flaschen*, of 2 *schoppen.* The *stück* has 7½ *ohm* = 1,200 *flaschen*, or *liter.*

The *pfund* is the French ½-kilogramme = $1._{1}$ Eng. pound avoirdupois: it is divided into 32 *loth* of 4 *quentchen* of 4 *richtpfennige.* The *centner* has 100 *pfund.*

For gold, silver, and jewels the Nassau-Cologne mark is used: the same = $233._{957}$ French grammes, $3609._{956}$ Eng. troy grains. It is divided as in Prussia. For minting purposes the Prussian mark ($3608._{9506}$ Eng. troy grains) is used. Apothecary's weight is the old Nürnberg *pfund* = 5,522 Eng. troy grains: it is divided into 12 *unzen* of 8 *drachmen* of 3 *skrupel* of 20 *gran.*

OLDENBURG.

The grand-duchy of Oldenburg consists of the duchy of Oldenburg, with Kniphausen, the principality of Lübeck, and the principality of Birkenfeld, with a total area of 2415¼ Eng. square miles, and 298,000 inhabitants, of whom 196,000 Lutherans, 75,000 catholics: the rest are other denominations of Christians, and Jews. Revenue £360,000; expense the same. Debt £640,500 (1861). Military 4,007 men. The capital Oldenburg has a population of 12,000 souls.

Movement in the port of Ems: Entered—1,016 vessels, of 87,934 lasts, besides 7,212 coasters, of 133,728 lasts; cleared out—930 vessels, of 87,778 lasts, and 8,257 coasters, of 161,265. Number of vessels carrying the Oldenburg flay—642, of 34,458 lasts, and manned by 2878 men. Agriculture is the chief occupation of the people.

In all exchange matters the exchanges of Bremen or Berlin give the law. The 'universal German laws of Exchange' are in force.

MONEY.

Accounts are kept in *thaler* of 30 *groschen* of 12 *schwaren* = 3*s.* Gold coins now issued—the *krone* and *halb-krone*, the former = £1 7*s.* 4*d.*

Silver coins—pieces of 2, 1, and $\frac{1}{6}$ *thaler*, with smaller change of $2\frac{1}{2}$, 1, and $\frac{1}{2}$ *groschen* pieces.

MEASURES AND WEIGHTS.

Long Measure:—The *fuss* has 12 *zoll* of 12 *linien* = $0._{97075}$ Eng. foot. The *elle* = $0._{63529}$ Eng. yard. The *meile* = $6._{132}$ Eng. miles.

Land Measure:—The *morgen* has 140,000 square *fuss* = $3._{0286}$ Eng. acres.

Dry Measure:—The *last* has 12 *mal*, or *malter*, of $1\frac{1}{2}$ *tonne* of 8 *scheffel* of 16 *kannen* of 4 *ort*. A *scheffel* = $0._{62716}$ Eng. bushels.

Fluid Measure:—The *oxhoft* for wine and brandy has $1\frac{1}{2}$ *ohm*, or 6 *anker* of 40 *quartier*, or 26 *kannen* of 4 *ort* = 240 *quartier*, or 156 *kannen* = $213._{52}$ French litres, $46._{974}$ Eng. gallons. 1 wine *kanne* = $1._{2}$ Eng. quart. For beer the *tonne* has 4 *henkemann* of 28 beer *kannen* = 112 beer *kannen*. 1 beer *kanne* = $1._{24}$ Eng. quart. Milk, and also salt and grist, are measured by the beer kanne.

The *pfund* = 500 French grammes = $1._{1}$ Eng. pound; and is divided into 10 *loth* of 10 *quint* of 10 *halbgramm*. For gold and silver the Oldenburg-Cologne mark is $233._{095}$ French grammes = $3597._{122}$ Eng. troy grains. For medicines, &c., the *unze* (of 6 quint) is divided into 8 *drachmen* of 3 *skrupel* of 20 *grän*.

PRUSSIA.

The kingdom of Prussia occupies an area of $5{,}103._{8}$ German geographical square miles, equal to 108,090 Eng. square miles; with a population of 18,000,000 souls. Of protestants there are 11,000,000, catholics 6,620,000, Jews 243,000, Mennonites 14,000, German catholics 146,000.

The greater part of the Jews are in the regencies of Posen, Bromberg, Marienwerder, Oppeln, and Berlin. The greater part of the Mennonites are in the regency of Danzig; the greater part of the Freethinkers, or German Catholics, are in the regency of Liegnitz; there are none in the regencies of Stralsund, Münster, Cologne, and Aix-la-Chapelle. Of the 23,388 prisoners confined in the 40 prisons of the kingdom, at the end of December 1859, only 264 were Jews.

It is reckoned there are 3,501,393 children who go to school, from the ages of 6 to 24; this is $19._{74}$ per cent. Of people capable of military service, there were (*a*), belonging to the standing army, from 20

to 24 years of age, 778,454, or $8._{30}$ per cent.; (*b*) belonging to the reserve, and the first call of Landwehr, from 25 to 32 years of age, 1,077,958, or $12._{23}$ per cent.; (*c*) belonging to the second call, from 33 to 39, 872,174, or $9._{87}$ per cent.

The military population was 202,673, of which 794 were Jews. There were 13,297 deaf and dumb, 7,391 males and 5,906 females; 10,205 blind, 5,283 males, 4,923 females. Of the total population there were 2,400,074 who spoke a foreign language, and 15,339,838 who spoke German as their language; thus the proportion was $86._{47}$ German to $13._{53}$ per cent. non-German.

The Kingdom of Prussia consists of 8 provinces, 994 towns, and 335 rural districts; there were, in 1858, 5,250,124 inhabitants in the towns, and 14,487,779 in the rural districts; the municipal population has increased $0._{72}$, which is the same degree in which the rural population has decreased; 9,822 persons emigrated, and 3,462 immigrated; there were 730,170 children born, of which 61,596 were natural children. In 1858 there were 519,728 deaths. Of the total population, there were 8,837,012 males, and 8,902,901 females, showing an excess of 65,889 females over males of the ages from 17 to 32, and from 46 upwards. A much larger proportion of men over 40 die than women.

Two of the eight provinces of which Prussia is composed, do not belong to the German Confederation; thus the Confederate population of Prussia amounted at the end of 1858 to 13,578,258.

The form of government in Prussia is monarchical, but limited by the constitution of 31st January, 1850, and sworn to by His Majesty King Frederick William IV. on the 6th February, 1850. According to the constitution the person of the King is inviolable; the law-giving power is exercised by His Majesty and the diet in common; the executive power belongs to him alone. He names and dismisses the ministers, summons the diet, opens or prorogues its sittings, and can dissolve the house of deputies, but he cannot dissolve the first chamber. He has chief command of the whole army, and makes the nominations to the posts in the army as well as to the other branches of the government, and can declare war, make peace, and enter into treaties with foreign governments. He can also diminish punishments and can pardon; he can also confer decorations. The crown is hereditary in the male line. The king is of age at 18 (the other princes are of age at 24). If the King is not of age, or is prevented from governing, his nearest male relation assumes the regency, and has to take the above oath before the summoned diet.

The ministers have to countersign every act of the king's connected with the government. Under extraordinary circumstances the king can

issue ordinances which have the validity of laws, but which must afterwards be santioned by the Diet.

The ministers are responsible, but there exists no law on the subject. The Diet chosen, according to electoral laws, from the people, is employed in giving its assent with regard to the formation of laws and on the subject of finance. It consists of the "Herrenhaus" (House of Lords), which cannot be dissolved, and consists of princes of the royal house whom the king chooses to name, of members with hereditary rights, and of members chosen for their life. The members of the second chamber are 352 in number, and are elected for three years.

The council of the state ("Staats-Rath") consists, according to a decree of 1817, of royal princes who have attained the age of 18, of servants of the State who are members of it by their office, and of such people as have by their merits deserved a seat and voice in it. Its importance ceased in 1848, and it was not re-assembled till 1854. It has now no functions, and has not been summoned for two years. From the council of state there is formed a court for the decision of disputes between the courts of justice and the administrative officers, consisting of a president and nine members of the council of state, whose names are submitted to the king by the president. The ministry of the state is charged with all matters connected with the administration of the State.

The Universities of Prussia are:—1. Greifswald, founded in 1456. 2. Halle, to which is added Wittenberg; the latter founded in 1502, the former in 1694: they were united in 1817. 3. Breslau, to which is added Frankfort; the latter founded in 1506, the former in 1702; they were united in 1811. 4. Königsberg, founded in 1544. 5. Berlin, founded in 1810. 6. Bonn, founded in 1818. 7. Münster, newly organized in 1833. 8. Paderborn has also a philosophical and theological institution.

Means of Offence and Defence.—The *army* consists of 212,649 men in time of peace and 622,866 in time of war. The *navy* numbers 74 vessels of all sorts, carrying 321 guns.

Fortresses of the first class:—Luxemburg, Mayence, Rastatt (the commandant is named by Prussia for five years, and by Austria for five years), Stettin, Cologne, Danzig, Königsberg, Magdeburg, Posen, Coblenz, and Ehrenbreitstein. The fortresses of the second class are, Thorn, Torgau, Minden, Colberg, Stralsund, Erfurt, Glogau, Glatz, Neisse, Wesel, and Saarlouis. The fortresses of the third class are, Wittenberg, Cosel, Küstrin, Graudenz, Pillau, Schweidnitz, Spandau, and Weichselmünde.

FINANCES.

The following table contains a list of the ordinary and extra-

ordinary expenses, as well as of the ordinary receipts and the deficits from 1854 to 1861, including an extraordinary credit of 9,000,000 thalers granted last year.

	Expenses.			Ordinary Receipts.	Deficit.
	Ordinary.	Extraordinary.	Total.		
	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.
1854 . . .	103,068,422	4,921,647	107,990,069	103,925,069	4,065,000
1855 . . .	105,256,214	4,579,418	109,835,632	105,953,312	3,882,320
1856 . . .	110,781,024	5,555,853	116,336,877	113,064,113	3,272,764
1857 . . .	115,140,298	5,102,014	120,242,312	120,242,312	
1858 . . .	120,200,955	6,208,803	126,409,778	126,409,778	
1859 . . .	123,625,414	8,233,874	131,859,288	130,399,288	1,460,000
1860 . . .	124,874,378	5,740,877	136,342,326	130,312,755	6,029,571
Extraord. Credit	. . .	5,727,071			
1861 . . .	133,164,802	9,043,742	140,208,544	132,510,615	7,697,929

The total receipts in 1861 amounted to 135,341,701 thaler (£20,301,255), the expenses to 140,208,544 thaler (£21,031,281); thus showing a deficit of 4,866,843 thaler (£730,026).

Since 1849 the amount of the expenditure has increased from 91,600,000 to 140,200,000 thalers, that is, 48,600,000 thalers, or 53 per cent. The accession of the Hohenzollern States caused an addition to the expenditure of 250,000 thalers. Without taking into consideration the credit of 9,000,000 thalers for the army, the increase of the state expenditure rose in one year from 130,615,255 to 140,208,544 thalers, *i. e.*, nearly 10,000,000 thalers; whereas the increase during the preceding eleven years was on an average of 3,500,000 thalers: thus the expenditure in one year was nearly three times greater than usual.

The public debt amounted in 1861 to 281,037,576 thaler (£42,155,636).

The Mint. The amount of money issued from the Mint was, for 1861, the following:—(1.) Gold crowns, 100,000; in ½ gold crowns, 9,100 (1,000,083 thaler 3 silvergroschen). (2.) In ⅔ Vereins-thaler, 100,000; (3.) In ⅓ thaler, Vereins-thaler 2,450,000 thaler; Mansfelder thaler, 50,000 thaler; (4.) In ⅙ thaler, 100,000 thaler; (5.) In $\frac{1}{12}$ thaler, 180,000; (6.) In silvergroschen, 70,000 thaler; in ½ silvergroschen, 10,000 thaler; (7.) In copper money of 4 pfenninge, 4,000; of 3 pfenninge, 14,000; of 2 pfenninge, 8,000; of 1 pfenning, 14,000 thaler. Total 4,000,083 thaler 10 silvergroschen, equal to about 600,012*l.*

FEATURES OF THE COUNTRY.

Prussia is divided into two principal territories, an east one and a west one. The eastern division is a sort of inclined plane, sloping away north and north-west to the Baltic and the German Ocean. In the south, where its boundary is partly formed by the Riesengebirge, the

land attains an average height of about 2,000 feet: in the south-west, where it is covered by portions of the Thuringia Forest, the average height is about 1,000 feet above sea-level; but in the north, on approaching the sea, the flats are so low that strong embankments are necessary to save the whole country from inundation, except where natural embankments of sand-hills and shingle exist. In this division the principal rivers are the Elbe, with its affluents the Havel, Mulde, and Saale; the Oder, with its tributaries the Warta, Bober, and the two Neisse; and the Vistula. The western division is much more finely diversified, its mountains not being confined to any one locality, but stretching across the country in all directions, and separated by numerous undulating plains and valleys remarkable both for their beauty and fertility. In this division nearly the whole drainage belongs to the basin of the Rhine, which receives a large share of it directly, and the remainder chiefly by the Sieg, Wupper, Ruhr, Lippe, Nahe, and Moselle.

MEANS OF COMMUNICATION.

Trade possesses considerable facilities of transport by the rivers, canals, common roads, and railways. Of these latter some 3,740 Eng. miles are at present in working order. Of rivers there are some 6,370 Eng. miles, of which 3,912 navigable and 2,457 passable for rafts.

The post-office in Prussia is also person and packet carrier. In 1860 the total number of objects sent through the post amounted to 159,949,715. The gross receipts amounted to £1,913,179, the expenditure to £1,618,196, leaving a profit of £294,983.

The length of telegraph line in Prussia in 1860 was 4,775 Eng. miles; length of wire 13,800 miles.

AGRICULTURE, &c.

Agriculture, though much improved, cannot compare with the best systems of great Britain. The principal crops are wheat, rye, barley oats, potatoes hemp, flax, oil and seed plants, beetroot (for sugar), hops and tobacco. The vineyards are chiefly confined to Rhenish Prussia. The forests are extensive: they give food to large herds of swine, and their timber yields a valuable addition to the public revenue.

MINERAL WEALTH.

The state mines are the following:—

1. In the Silesian district: iron works, iron splitting works, and foundries at Tongelow and Wondolleck; lead works at Friedrichsgrube; coal mines at Königsgrube; coal pits at Königin Louisen Grube; silver and lead foundries at Friedrichshütte; various foundries at Königshütte;

Cologne (Ger. *Köln*, Dutch *Keulen*)—pop., with Deutz, 115,000; cotton and wool-spinning factories; cotton silk, and wool weaving establishments; manufactories of paper-hangings, lace, leather, hats, colours, soap, white lead, porcelain, tobacco, articles of gold and silver, eau de Cologne, sealing-wax, sugar, breweries, distilleries, machine manufactories, iron-foundries, printing-offices: important trade in wine, corn, skins, oil, seeds.

Königsberg—pop. 82,000; woollen, cotton, and silk stuffs; canvas, linen, woollen yarn, hats, leather, soap, starch, tobacco, machines, cast-iron articles; sugar refineries, distilleries, steam-mills: trade.

Magdeburg—pop., with Neustadt and Sudenburg, 77,000; woollen, cotton, linen, and silk goods; stockings, ribbons, woollen yarn, cigars, tobacco, beetroot sugar, spirit, liqueurs, beer, leather, iron goods, machines.

Elberfeld and *Barmen* now form one town with a population of some 90,000 souls; cottons, woollens, ribbons, linen, velvet and silk; Turkey-red dyeing, and bleaching establishments; calico-printing.

Posen—pop. 43,000; woollen and linen cloth, paper, sealing-wax, tobacco, liqueurs, carriages; gold, silver and copper ware; fire-arms.

Düsseldorf—pop. 37,000; silks, cottons, ribbons, thread, linen, iron and steel wares, steam-machines. Here is a celebrated school of painting.

EXCHANGE.

The laws of exchange are those of the 'universal German code.' Berlin has an exchange that influences all Prussia.

MONEY.

Prussia reckons in *thaler* of 30 *silbergroschen* of 12 *pfennige* = 3*s*. The gold coins now issued are the *krone* and *halb-krone*, the former being worth about £1 7*s*. 4*d*., the latter of course half as much. Silver coins are the *thaler*, *double-thaler*, and ⅓ *thaler*; with small change of 2½, 1, and ½-*silvergroschen*. The thaler = 3*s*., the silbergroschen = 1¼*d*.

MEASURES.

Long Measure:—

The *fuss* has 12 *zoll* of 12 *linien* = $1_{\cdot 02972}$ Eng. foot.

100 *Prussian fuss* = $102_{\cdot 972}$ Eng. feet, = $99_{\cdot 289}$ Vienna fuss,
" " " = $31_{\cdot 385}$ French metre, = $102_{\cdot 972}$ Russian feet.

The *elle* has 25¼ *zoll* = $0_{\cdot 73939}$ Eng. yard, $0_{\cdot 66694}$ French metre. The *ruthe* has 12 *fuss*, and in land-measuring is divided decimally. The *faden* (fathom) has six *fuss*: the *lachter*, for mining, has 80 *zoll*. The

Prussian *meile* (mile) has 2,000 Prussian *ruthen* = $1._{0169}$ German geographical mile, $4._{6806}$ English miles. (A German geographical mile is $\frac{1}{15}$ degree.)

The *stück* of yarn has 20 *gebinde* of 40 *faden* (reel lengths): the *faden* is 3½ Prussian *ellen* in length.

SQUARE MEASURE:—

The square *ruthe* = has 144 square *fuss* of 144 square *zoll* of 144 square *linien*.

100 *Prussian sq. fuss*	=	$106._{033}$	Eng sq. feet,
" " "	=	$98._{596}$	Vienna sq. fuss,
" " "	=	$9._{850}$	French sq. mètres,
" " "	=	$100._{000}$	Danish sq. fod.

The Prussian *morgen*, for land, has 180 square *ruthen*.

100 *Prussian morgen*	=	$63._{094}$	English acres,
" " "	=	$44._{362}$	Vienna joch,
" " "	=	$25._{532}$	French hectares,
" " "	=	$74._{935}$	Bavarian morgen.

CUBIC MEASURE:—

The cubic *ruthe* has 1,728 cubic *fuss* of 1,728 cubic *zoll* of 1,728 cubic *linien*. 100 cubic *fuss* = $109._{184}$ Eng. cubic feet, $3._{092}$ French cubic mètres. The *klafter*, of 108 cubic *fuss* ($6 \times 6 \times 3$), is used for stones, earth, turf, firewood, &c.; and for building purposes the *schacht-ruthe* of 144 cubic *fuss* ($12 \times 12 \times 1$).

DRY MEASURE:—

The *scheffel* has 16 *metzen* of 3 *quarts*.

100 *Prussian scheffel*	=	$18._{901}$	Eng. imp. quarters,
" " "	=	$39._{507}$	Danish korn-tonnen,
" " "	=	$54._{962}$	French hectolitres,
" " "	=	$95._{967}$	Venetian staja,
" " "	=	$89._{369}$	Vienna metzen,
" " "	=	$100._{000}$	Hamburg fass.

At the royal magazines the scheffel of wheat is calculated to equal 85½ pfund; of peas, beans, &c., 90½, rye 80½, barley 55½, oats 45½, flour and meal 75 pfund.

The measure for coals, salt, lime, gyps, ashes, &c., is the *tonne* of 4 *scheffel*, the *tonne* of linseed has 37⅔ *metzen*. In the case of salt the *tonne* is considered to equal 405 pfund, and this article is thus sold.

FLUID MEASURE:—

The *fuder* (for wine and spirits) has 4 *oxhoft* of 1½ *ohm* of 2 *eimer* of 2 *anker* of 30 *quart* = 720 *quart*.

The *eimer* has 60 *quart:* the bottle of wine is about $\frac{3}{4}$ quart.

100 *Prussian eimer* = $1512._{104}$ Eng. imp. gallons,
" " " = $558._{600}$ Russian wedra,
" " " = $68._{702}$ French hectolitres,
" " " = $43._{751}$ Swedish am.

For beer the *gebräude* has 9 *kufen*, or 18 *fass*, or 36 *tonnen* of 100 *quart*.

WEIGHTS.

The *pfund* is the Zollverein *pfund* of 500 French grammes = $1._1$ Eng. pound: the same is divided into 30 *loth* of 10 *quentchen* of 10 *zent* of 10 *korn*. 100 pfund make a *centner;* 4,000 a *schiffslast*.

100 *Prussian pfund* = $110._{232}$ Eng. pounds avoirdupois,
" " " = $133._{962}$ Eng. troy ponud,
" " " = $122._{097}$ Russian funda,
" " " = $108._{933}$ Portuguese arratels,
" " " = $50._{100}$ French kilogrammes,
" " " = $147._{425}$ Roman libbra,
" " " = $100._{000}$ Danish pund,
" " " = $39._{109}$ Constantinople oka.

This *pfund* is also used for coining purposes, and for gold, silver, and jewels, and medicines.

REUSS.

The principalities of Reuss-Greiz and Reuss-Schleiz lie along the W. border of Saxony, and are traversed by the upper courses of the Elster and Saale. They occupy an area of about 450 Eng. square miles, with a population of 122,000. The revenue of Reuss-Greiz is about £8,700: that of Reuss-Schleiz £42,225. The debt of this latter amounts to about £60,000. The federal military contingent for Reuss-Greiz is 260, for Reuss-Schleiz 609.

Gera is the principal town of the Reuss territories, and contains about 14,000 inhabitants: it has extensive manufactories of woollen and cotton goods, tanneries, dye-works, and breweries.

Exchange:—The 'universal German laws of Exchange' are in force: all exchange operations are regulated by the exchange of Leipzig.

Money is the same as in Prussia.

Long Measure:—The *fuss* has 12 *zoll* = $0._{9299}$ Eng. foot. The *elle* has 2 *fuss:* the *ruthe* has 16 *fuss*. The Leipzig *fuss* ($0._{9291}$ Eng. foot) is often used.

Square Measure:—For land is the *scheffel* of 120 square *ruthen* $=25._{214}$ French ares, $0._{623}$ Eng. acre.

Cubic Measure:—The *klafter* is 3 *ellen* high and 3 broad, and the logs either $1\frac{1}{2}$ or $1\frac{3}{4}$ *elle* long.

Dry Measure:—The *scheffel* has 4 *viertel* of 4 *maass* $=106._{16}$ litres, $23._{353}$ Eng. imp. gallons.

Fluid Measure:—The *eimer* has 72 *kannen*. The *kanne* $=0._{92147}$ French litre, $1._{62}$ Eng. imp. pints. The *fass* of beer has 6 *eimer*.

Trade Weight:—The *pfund* has 32 *loth* of 4 *quentchen*, of 4 *pfenniggewicht* of 2 *hellergewicht* $=1._{03094}$ Eng. pound avoird. 22 of these *pfund* (1 *stein*) $=21$ *pfund* town-butchers' weight and 20 *pfund* village-butchers' weight.

For gold and Silver the Cologne mark ($=3{,}608._{95}$ Eng. troy grains) is used. For medicines there is the old Nürnberg *pfund* ($=5{,}522$ Eng. troy grains), divided into 12 *unzen* of 8 *drachmen* of 3 *skrupel* of 20 *gran*.

SAXE-ALTENBURG.

This, the smallest of the Saxon duchies, is situated on the western frontier of the kingdom of Saxony: it covers an area of 508 Eng. square miles, and has a population of about 138,000. The land is fertile. The inhabitants occupy themselves principally with agriculture, cattle-breeding, &c. The chief industrial productions are woollen yarn, articles of wool, leather, glue, stoneware, and porcelain. The revenue amounts to £120,000; the expenses are the same. The military contingent is 1473 men, including the reserve. The capital, Altenburg, has a population of 17,000: cloth, gloves, ribbons, leather.

Exchange:—The 'universal German laws of Exchange' are in force. All exchange matters are regulated by the Leipzig exchange.

Money:—Accounts are kept in *thaler* of 30 *groschen* of 10 *pfennige* $=3s.$ Gold coins are the *krone* and *halb-krone;* the former being worth £1 7*s.* 4*d.* Silver coins are the *thaler, two-thaler* piece and $\frac{1}{6}$ *thaler;* with smaller change of 2, 1, and $\frac{1}{2}$ *groschen*, with 2 and 1 *pfennig* pieces.

Long Measure:—The *fuss* has 12 *zoll* $=0._{92685}$ English foot: the *elle* has 2 *fuss:* 100 *ellen* $=61._{79}$ Eng. yards: 1 *meile* has 13,242 *ellen*.

Land Measure:—The *acker* has 200 square *ruthen* $=64._{4312}$ French ares, $1._{592}$ Eng. acre. The *hufe* (hide) of land has 12 *acker*.

Dry Measure:—The *malter* has 2 *scheffel* of 4 *viertel* of 4 *metzen* of 4 *mässchen*: 3 *viertel* make a *sack*. 100 scheffel = $50._5$ Eng. imp. quarters.

Fluid Measure:—The *eimer* has 60 *kannen* of 2 *nössel*. The *kanne* = $1._{975}$ Eng. imp. pint: 100 *kannen* = $24._7$ Eng. imp. gallons. The *tonne* of beer = $1\frac{1}{2}$ *eimer;* 1 *viertel* = 2 *tonnen*.

Trade Weight:—The *pfund* = 500 French grammes, $1._1$ Eng. pound avoird. This pfund is also used for coining purposes.

For medicines the old Nürnberg *pfund* is used, divided into 12 *unzen* of 8 *drachmen* of 3 *skrupel* of 20 *gran* = 5522 Eng. troy grains.

SAXE-COBURG-GOTHA.

The duchy of Saze-Coburg-Gotha consists of two parts, one lying E. of Saxe-Weimar, the other between Schwarzburg and Prussia. They occupy a total area of about 800 Eng. square miles (according to others 769, or even only 760 Eng. square miles), with a population of 155,000.

The total revenue amounts to £234,000. Debt about £330,000, inclusive of Gotha bank-notes to the amount of £60,000, and of Coburg bank-notes amounting to £36,000.

The principal occupations, besides agriculture, are the fabrication of linen, woollen, and cotton articles; the manufacture of iron and steel wares, of arms, articles of wood, leather, porcelain, &c. Federal military contingent 1860 men.

The 'universal German laws of exchange' are in force here: and all exchange operations are regulated according to the notations of the Leipzig exchange.

The town of Coburg has about 13,000 inhabitants; Gotha about 15,000.

COBURG.

Money:—Coburg reckons in *gulden* of 60 *kreuzer* of 4 *pfennige:* the *gulden* = 1*s*. 9*d*.

Long Measure:—The *fuss* has 12 *zoll* = $0._{9973}$ Eng. foot. The *werkruthe* has 14 *fuss*. The *elle* = $1._{9235}$ Eng. foot.

Square Measure:—The *acker*, or *feldmorgen*, has 160 square *ruthen*, or 31,360 square *fuss* = $0._{7159}$ Eng. acre.

Dry Measure:—The *simmer* for wheat, rye, pease, beans, &c. = $19._{568}$ Eng. gallons; for barley, oats, and spelt it contains $24._{298}$ Eng. gallons.

Fluid Measure:—The *eimer* has 80 *maass* = $17._{016}$ Eng. imp. gallons, $77._{345}$ French litres.

Weight:—The *pfund* is the Zollverein *pfund* of 500 French grammes, $1._{1}$ Eng. pound avoird. 100 *pfund* = 1 *centner*.

GOTHA.

Money:—Gotha reckons in *thaler* of 30 *groschen* of 10 *pfennige* = 3*s*.

Long Measure:—The *fuss* has 12 *zoll* of 12 *linien* = $0._{9436}$ English foot. The *elle* = $0._{61532}$ Eng. yard. The *feldruthe* is 14 *fuss* long: 140 square *feldruthen* make 1 *feldacker* = $0._{560948}$ Eng. acre, $22._{7}$ French ares. The *waldruthe* has 16 *fuss;* 160 square *waldruthen* make a *waldacker* = $0._{83732}$ Eng. acre. The *lachter* has 7 Dresden *fuss*.

Cubic Measure:—The *klafter* of firewood is 6 Leipzig *fuss* long, 6 *fuss* high, and 3 *fuss* thick = 108 Leipzig square *fuss*.

Dry Measure:—The *malter* has 2 *scheffel*, or 4 *viertel*, or 16 *metzen*: the *metze* has 4 *mässchen* of 4 *nössel:* 100 *viertel* = $15._{171}$ Eng. imp. quarter, $44._{116}$ French hectolitres. The *stoss*, for charcoal, contains 6 *viertel*.

Fluid Measure:—The *ohm* has 2 *eimer* of 40 *kannen* of 2 *maass* of 2 *nössel*. The *oxhoft* of wine has 3 *eimer* of 2 *anker:* the *feuillette* = $1\frac{1}{2}$ *eimer*, or 3 *anker:* a *stück* (piece) has 16 *eimer:* a *fuder* has 12 *eimer:* a *muid* = 3 *oxhoft;* a *pipe* = 6 *eimer*. The *eimer* = 16 Eng. imp. gallons, $72._{77}$ French litres. The *fass* of spirits has 110 *kannen*. Oil is sold by a measure supposed to weigh a pound; it is called *pfund*, and = $1._{4}$ Eng. pint, $0._{7999}$ French litres.

Weight:—The *pfund* is the Zollverein *pfund* of 500 French grammes, $1._{1}$ Eng. pound avoird. 100 *pfund* = 1 *centner*.

SAXE-MEININGEN.

This duchy is composed of a main state and several smaller isolated territories, and covers a total area of 910 Eng. square miles, with a population of 170,000. The main territory is situated N. and N.W. of Saxe-Coburg. The revenue for the year 1859-60 was £151,342; the expenses amounted to something less. The debt is about £350,000. The federal military contingent is 1,726 men. The capital, Meiningen, has a population of 6,700.

Exchange:—The 'universal German laws of exchange' are in force here: all exchange operations are regulated by the course of exchange at Frankfort-on-the-Main.

Money:—Reckonings are kept in *gulden* of 60 *kreuzer* of 4 *pfennige*: the *gulden* = 1*s.* 9*d.* Silver coins are—pieces of 3½, 2, 1, and ½ *gulden*; with small change of 6 and 3 *kreuzer*; then copper coins of 1 *kreuzer*, 2, and 1 *pfennig*.

Long Measure:—The *werkfuss* = $0._{92849}$ Eng. foot, $0._{283}$ French mètre: the *vermessungsfuss* = $0._{99739}$ Eng. foot, $0._{304}$ French mètre. The *ruthe* has 14 *vermessungsfuss*. The *elle* = $2._{086}$ Eng. feet, $0._{6359}$ French mètre.

Square Measure:—The *acker* = $0._{7159}$ Eng. acre.

Cubic Measure:—The *klafter* has 126 cubic *werkfuss*.

Dry Measure:—The *malter* has 4 *metzen* of 2 *maass* = $36._{76}$ Eng. imp. gallons, $167._{1}$ French litres.

Fluid Measure:—The *ohm* has 2 *eimer* of 32 *schenkmaass* = $14._{399}$ Eng. imp. gallons.

Weight:—The *pfund* = $1._{1}$ Eng. pound avoirdupois, 500 French grammes.

SAXE-WEIMAR-EISENACH.

The grand-duchy of Saxe-Weimar-Eisenach occupies an area of about 1,400 Eng. square miles, with a population of 268,000. The revenue amounts to £231,750: the expenses are something less. The state debt was, in 1859, about £760,000. The federal military contingent is 2,010 men. The capital, Weimar, has 14,000 inhabitants.

Exchange:—The 'universal German laws of Exchange' are here in force. All exchange operations are regulated by the Leipzig and Berlin exchanges.

Money:—Accounts are kept in *thaler* of 30 *groschen* of 12 *pfennige* = 3*s.*

Long Measure:—The *werkfuss* has 12 *zoll* of 12 *linien* = $0._{92514}$ Eng. foot, $0._{28198}$ French mètre. The *elle* has 2 *fuss*: the *klafter* 6 *fuss*: the *ruthe* 16 *fuss*. The *meile* has 1632 *ruthen*.

Land Measure:—The *acker* has 140 square *ruthen* = $0._{704}$ Eng. acre, $28._{4971}$ French ares.

Cubic Measure:—The cubic *ruthe* for building and paving contains $16 \times 16 \times 2 = 512$ cubic *fuss*.

Corn Measure:—The *scheffel* has 4 *viertel* of 4 *metzen*. 100 *scheffel* $= 26_{.469}$ Eng. imp. quarters, $76_{.965}$ hectolitres. (There are, besides, some fifteen other measures of this kind in the country, differing more or less one from the other.)

Fluid Measure:—The *eimer* has 72 *ohmmaass*, or *kannen*, for oil; and 80 *schenkmaass*, for wine, beer, and spirits. The *eimer* $= 15_{.7758}$ Eng. imp. gallons. The *ohmmaass* $= 1_{.7528}$ Eng. pint: the *schenkmaass* $= 1_{.577}$ Eng. pint.

Weight:—The *pfund* $= 1_{.1}$ Eng. pound avoird., 500 French grammes. 100 *pfund* make a *centner*.

SAXONY.

The kingdom of Saxony is bounded on the north and east by Prussia, on the south by Austria, on the west by the Saxon duchies and Prussia. It covers an area of 5,774 Eng. square miles, with a population of 2,226,000. The great majority of the people are protestants, viz. 2,180,000: there are about 39,000 Roman catholics, 1,800 German catholics, and 1,600 Jews.

In the south the country is rugged and mountainous, being covered by the Erzgebirge, or Ore Mountains. Among the mountains and between their ramifications there are many beautiful and fertile valleys, particularly towards the east. South-east of Dresden is a small tract of country of a most picturesque character, denominated Saxon Switzerland. The most important river is the Elbe: its chief tributaries in Saxony are the Mulde and Elster. Much of the surface of the country is not naturally fertile, but the industry of the inhabitants has brought the greater part under cultivation. The forests are extensive and valuable: average yield per annum £164,134. In 1858 there were 526 mines being worked, employing 11,464 persons. In the space of eighteen years (1844-58) the value of the metals produced and sold was as follows:—gold (91 lbs.) £6,125; silver (721,574 lbs.) £3,190,353; copper (9,807 Cwt.) £46,013; metallic lead (403,050 Cwt.) £35,223; litharge lead (133,508 Cwt.) £110,044. The produce of coals in 1858 was valued at £489,198. The Dresden porcelain (manufactured at Meissen) is celebrated. Other branches of industry are the manufacture of woollen and half-woollen goods, cotton goods, linen, and silk; the fabrication of

stockings, lace, cloth; the casting of iron, &c. The chief destination of the manufactured goods was, till very lately, America.

The revenue of Saxony is about £1,854,000. The debt amounts to £9,480,000. The army numbers 25,396 combatants. The government is a constitutional monarchy.

Exchange:—The 'universal German laws of Exchange' are in force. Leipzig has an exchange.

Principal Towns:—*Dresden*, the capital, has a population of 128,152 (including the military). Industry: straw-hats, artificial flowers, embroidery, mathematical and musical instruments, chemicals, mineral waters, chocolate, articles of gold and silver.—*Leipzig* has a population of 78,500: its Easter and Michaelmas fair are visited by thousands of foreigners from all parts of the world. It has an exchange, is the principal seat of the German book trade, and has large printing-offices, type-foundries, wood-engraving and lithographic establishments, Payne's English steel-plate engraving establishment; musical, mathematical, and chirurgical instruments; oil-cloth, gasometers; dyeing establishments, &c. The university is celebrated.—*Chemnitz* has a population of 45,500. Industry:—machines; then cotton-spinning and weaving and the production of cotton goods, stockings, and mixed goods.

MONEY.

In Saxony accounts are kept in *thaler* of 30 *groschen* of 10 *pfennige* = 3*s*. Silver coins are pieces of 2 and 1 *thaler*, and $\frac{1}{2}$ and $\frac{1}{6}$ *thaler*; with smaller change of $2\frac{1}{2}$, 2, 1, and $\frac{1}{2}$ *groschen*. Copper coins are 5, 3, and 1 *pfennig*.

MEASURES.

Long Measure:—The *fuss* has 12 *zoll* of 12 *linien* = $0_{\cdot 92912}$ Eng. foot, $0_{\cdot 28219}$ French mètre. The *elle* has 2 *fuss*: the *stab* has 2 *ellen*. The *ruthe* has 8 *ellen*. The *postmeile* has 7,500 French mètres, or $4_{\cdot 65}$ Eng. miles. The *stück* of cotton or worsted yarn has 4 *strehn*, or 12 *zaspel* or *zahl* of 20 *gebinde* of 20 *faden*. The length of the *faden* of cotton yarn is 3 *ellen* (the stück = 14,400 ellen); of woollen yarn 4 *ellen* (the stück = 19,200 ellen). The *stück* of linen yarn has 6 *strehn* or 12 *zaspel* of 20 *gebind* of 20 *faden*.

Square Measure:—The *acker* has 300 square *ruthen* = $1_{\cdot 3679}$ Eng. acre, $55_{\cdot 342}$ French ares.

Cubic Measure:—The *schragen*, for firewood, has 3 *klafter*: the *klafter* is 6 *fuss* long, 6 *fuss* broad or high, and the logs are 3 *fuss* long.

Dry Measure:—The *wispel* has 2 *malter*, or 24 *scheffel:* the *scheffel* has 4 *viertel* of 4 *metzen* of 4 *mässchen*. The *scheffel* = $22._{87229}$ Eng. imp. gallons, $103._{8286}$ French litres.

Fluid Measure:—The *kanne* = $1._{64736}$ Eng. imp. pints, $0._{935588}$ French litre. The *fass* has 6 *eimer* of 72 *kannen*. For French wines the *oxhoft* has 3 *eimer*, for cognac $3\frac{3}{8}$ *eimer*. The *ohm* has 2 *eimer* of 2 *anker* of 36 *kannen*. A *fass* of beer = 420 *kannen*, a *viertel* 210, a *tonne* 105.

Weight:—The *pfund* is the Zollverein *pfund* of 500 Fr. grammes = $1._{1}$ Eng. pound avoird. 100 *pfund* make a *centner*. The *pfund* has 30 *loth* of 10 *quent* of 10 *cent* of 10 *korn*.

SCHWARZBURG-RUDOLSTADT.

This principality is situated between Prussian Saxony and the Saxon duchies. The two principal portions are the seigneuries of Rudolstadt and Frankenhausen. Area 369 Eng. square miles, with 70,000 inhabitants. It has a rugged surface and an infertile soil, but is carefully cultivated, and rears great numbers of cattle, and possesses mines of iron, lead, and salt. Revenue something over £100,000. Federal military contingent 899 men. The capital, Rudolstadt, has about 6,000 inhabitants.

Exchange:—The 'universal German laws of exchange' are in force. In exchange operations Rudolstadt is guided by Frankfort-a.-M., Frankenhausen by Berlin and Leipzig.

UPPER SEIGNEURY.

Money:—In the *Upper Seigneury*, with Rudolstadt, accounts are kept in *gulden* of 60 *kreuzer* of 4 *pfennige* = 1*s.* 9*d.* Coins the same as in Bavaria.

Long Measure:—The *fuss* has 12 *zoll* = $0._{9268}$ Eng. foot. The *elle* has 2 *fuss*, the *ruthe* has 16 *fuss*.

Land Measure:—The *acker* has 160 square *ruthen* = $0._{8056}$ Eng. acre.

Cubic Measure:—The *klafter* of firewood is 6 *fuss* long, the same high, and the logs are sometimes 3 *fuss*, sometimes $3\frac{1}{2}$ *fuss* long.

Dry Measure:—The *scheffel* has 8 *achtel* of 2 *metzen* of 24 *nössel:* the *nössel* = $0._{856}$ Eng. imp. pint.

Fluid Measure:—The *eimer* has 72 *maass* of 2 *nössel:* the *nössel* = $0._{72}$ Eng. imp. pint.

WEIGHT:—The *pfund* = $1._1$ Eng. pound avoird., 500 Eng. grammes.

LOWER SEIGNEURY.

MONEY:—In the Lower Seigneury, with Frankenhausen, accounts are kept in *thaler* of 30 *groschen* of 12 *pfennige* = 3*s*.

LONG MEASURE:—The *werkfuss* is the Prussian: the *vermessungsfuss* is the same as in the Upper Seigneury. The *elle* is two of these latter *fuss:* the *ruthe* 16.

LAND MEASURE:—The *acker* is the same as in the Upper Seigneury.

DRY MEASURE:—The *marktscheffel* has 12 *scheffel* of 4 *viertel* of 2 *metzen* of 2 *mässchen*. The *scheffel* = 10_{039} Eng. gallons.

FLUID MEASURE:—The *eimer* has 36 *kannen*, or 72 *maass* of 2 *nössel:* the *kanne* = $1._{64}$ Eng. pint. Spirits are sold by the *fass* and *stübchen:* the *fass* has 34 *stübchen* of 4 *maass*, or *kannen*. For *beer* the *ohmkanne* has 8 *maass*.

WEIGHT:—The *pfund* = $1._1$ Eng. pound avoird., 500 French grammes.

SCHWARZBURG-SONDERSHAUSEN.

This principality is divided into two seigneuries, with a total area of 329 Eng. square miles, and a population of 63,000. The country is well-wooded and tolerably fertile, producing good crops of corn and flax, and rearing great numbers of cattle. Revenue £90,000. Federal military contingent 751 men. The capital, Sondershausen, has a population of about 6,000.

EXCHANGE:—The 'universal German laws of Exchange' are in force. Money, Weights, and Measures as in Prussia.

WALDECK.

The principality of Waldeck covers an area of 459 Eng. square miles, with a population of 58,000. Nearly one-third of the country is covered with forests: the surface is drained away east into the Weser by several small streams. Revenue £66,000. Federal military contingent 866 men.

EXCHANGE:—The 'universal German laws of exchange' are in force here.

MONEY as in Prussia.

Long Measure:—The *fuss* has 12 *zoll* = $0._{9593}$ Eng. foot, $0._{2924}$ French mètre. The Prussian *fuss* is also used, especially in building. The *elle* has 2 *fuss*.

Dry Measure:—The *mütte* has 4 *scheffel*. The capacity of the *scheffel* is different in different parts of the country, containing from 11 to 12 gallons.

Fluid Measure:—The *ohm* has 100 *maass*: the *maass* = $1._{4252}$ French litre, $1._{25}$ Eng. quart.

Weights:—As in Prussia.

WIRTEMBERG.

The kingdom of Wirtemberg, or Württemberg, has an area of 7,500 Eng. square miles, with a population of 1,786,000. The surface is somewhat mountainous except a few tracts in the south. In the west it is traversed by a part of the Schwarzwald, or Black Forest. The chief rivers are the Neckar and the Danube. The chief employment of the people is agriculture: vineyards are numerous in the low tracts. The industry comprises—linens, cottons, hosiery, woollens, toys, wooden clocks, jewellery, paper, silks, leather, iron and steel wares, chemicals, beer, and distilled liquors. Cattle, corn, timber, wool, fruits, wines, and salt are exported. The principal mineral productions are: iron, coal, salt (obtained from springs), gypsum, nitre, silver, copper, lead, cobalt, slate, and limestone. There are several mineral springs in the Black Forest.

The government is an hereditary constitutional monarchy. There is one university (protestant), at Tübingen.

The revenue is £1,246,565: the public debt £5,950,000. The federal military contingent is 26,885 in time of war, 10,581 in time of peace.

Exchange:—The 'universal German laws of exchange' are in force here.

Principal Towns:—*Stuttgart* is the capital with a population of 52,000; woollen, cotton, linen, and silk stuffs; musical, mathematical, and surgical instruments; gloves, jewellery, carpets, straw hats; vinegar and chemicals: important printing and lithographic establishments.—*Ulm* has 22,000 inhabitants. It is a fortified town. Industry: leather, tobacco-pipes, woollens, linens, vinegar: snails are largely exported.—*Esslingen*, pop. 15,000; woollen and cotton goods, articles of lacquered ware, yarns, paper, articles of gold and silver.

Money:—Accounts are kept in *gulden* of 60 *kreuzer* of 6 *heller* = 1*s.* 9*d.* Coins issued are: gold—*krone* and *halb-krone*, the former being worth £1 7*s.* 4*d.*; silver—pieces of 3½ *gulden* (=2 thaler), 2 *gul-*

den, $1\frac{3}{4}$ *gulden* (=1 thaler), 1 *gulden*, $\frac{1}{2}$ *gulden*; with small change of 6, 3, 1, and $\frac{1}{2}$ *kreuzer*; copper—$\frac{1}{2}$ and $\frac{1}{4}$ *kreuzer*.

MEASURES.

Long Measure:—The *fuss*, or *schuh*, has 10 *zoll* of 10 *linien* $=0_{.9399}$ Eng. foot, $0_{.28649}$ French mètre. The *elle* is $2_{.144}$ *fuss* $=0_{.614235}$ French mètre, $0_{.6717}$ Eng. yards, or $1_{.915}$ Eng. foot. The *ruthe* has 10 *fuss*.

Land Measure:—The *morgen* has 384 square *ruthen* $=0_{.7788}$ Eng. acre, $31_{.517}$ French ares.

Cubic Measure:—The *klafter* of firewood is 6 *fuss* long and 6 broad, and the logs 4 *fuss* long = 144 cubic *fuss*.

Dry Measure:—The *scheffel* has 8 *simri* of 4 *vierlinge* of 8 *ecklem* of 4 *viertelein* $=4_{.8158}$ Eng. bushel.

Fluid Measure:—The *fuder* has 6 *ohm* or *eimer* of 16 *imi* of 10 *maass* of 4 *quart* or *schoppen*. There are three sorts of this measure, the principal of which is the *helleiche*: the *eimer* of this $=64_{.69}$ Eng. imp. gallons: the *maass* $=1_{.617}$ Eng. quart.

WEIGHTS.

Trade Weight:—The *pfund* $=1_{.1}$ Eng. pound avoird., 500 French grammes. It is divided into 32 *loth* of 4 *quentchen* of 4 *richtpfennige*. The centner has 100 pfund.

For *gold* and *silver* the *mark* has 8 *unzen* of 2 *loth* of 4 *quentchen* of 4 *pfennige*: the mark $=3{,}608_{.28}$ Eng. troy grains. Assay weight is the Prussian. For medicines the *pfund* has 12 *unzen* of 8 *drachmen* of 3 *skrupel* of 20 *gran* $=357_{.6476}$ French grammes, 5,522 Eng. troy grains.

GREAT BRITAIN AND IRELAND.

The United Kingdom of Great Britain and Ireland occupies an area of 112,190 square miles, with a population of 29,300,000 souls. England, with Wales and the adjacent small islands has an area of 58,714 square miles, with 20,420,000 inhabitants; Scotland, 31,324 square miles and 3,080,000 inhabitants; Ireland, 32,512 square miles, with a population of about 5,800,000.

England and Wales are divided into 52 counties; Scotland into 33. Ireland has 4 provinces, subdivided into 32 counties.

The form of government is an hereditary constitutional monarchy. The government consists of the reigning monarch, the house of lords, and the house of commons. This latter body numbers about 469 members, 144 for the counties and 325 for cities and boroughs.

In England and Wales the very great majority of the inhabitants are protestants: in Ireland the catholics are the much more numerous party, numbering some 4,490,000.

COLONIAL POSSESSIONS, &c. 1859.

	Superficies. Eng. sq. miles.	Population according to last Census.	Revenue £.	Expenses £.	Vessels in and out: Tons.	Import £.	Export £.
India	752,008	185,908,277	36,060,788	43,590,788	5,061,052	34,545,052	30,532,298
North America:—							
Canada	242,482	1,842,265	1,947,829	2,293,408	1,382,253	6,990,659	4,725,169[1]
New Brunswick	27,037	193,800	160,107	153,545	1,482,928	1,416,034	1,073,422
New Scotland	15,620	277,117	139,788	138,119	1,295,134	1,620,191	1,377,826
Prince Edward's Isle	2,173	71,496	27,401	29,805	166,955	234,698	178,680
Newfoundland	35,850	122,638	133,735	145,310	409,586	1,323,288	1,357,113
Total of N. Amer. Col.	323,162	2,507,316	2,408,863	2,760,187	4,636,856	11,584,870	8,712,210
Bermudas	20	10,982	16,765	18,181	77,936	166,915	34,177
Honduras	17,000	19,000	27,982	25,778	51,449	175,293	288,161
West Indies:—							
Bahamas	5,522	27,619	31,849	34,871	60,313	213,166	141,896
Turk Islands	—	3,250	9,793	9,544	118,919	42,655	33,488
Jamaica	6,400	377,433	279,935	262,142	164,816	853,015	961,007
Virginians	94	6,053	1,993	1,693	11,938	10,075	11,789
St. Christopher	68	20,741	17,845	18,408	54,588	110,835	136,511
Nevis	20	9,571	4,721	4,683	23,116	34,748	48,186
Antigua	108	35,408	34,446	33,606	67,796	203,938	289,064
Montserrat	47	7,053	3,248	3,321	14,206	19,718	16,746
Dominica	291	25,230	14,211	13,523	17,925	66,506	26,861
St. Lucia	300	26,471	12,832	12,499	24,286	103,973	101,879
St. Vincent	131	30,128	19,911	23,825	37,861	131,451	178,990
Barbadoes	166	135,939	87,595	80,353	255,651	1,049,237	1,225,572
Granada	133	35,517	16,948	19,402	44,116	124,660	131,507
Tabago	97	16,363	9,110	9,152	16,303	57,691	77,897
Trinidad	2,012	68,600	167,103	187,047	199,508	734,902	820,606
Guyana	76,000	127,695	275,619	263,159	268,369	1,179,901	1,228,844
Total W. Ind. Col.	89,389	953,671	987,159	976,935	1,379,692	4,936,531	5,500,643
Falkland Isles	13,000	539	7,657	5,139	22,140	13,890	6,892
Australia:—							
New South Wales	478,861	336,572	2,339,491	1,858,167	750,136	6,597,053	4,768,049
Victoria	86,944	530,262	3,257,724	2,754,744	1,295,648	15,622,891	13,867,859
South Australia	300,000	117,967	669,683	629,756	223,641	1,507,495	1,655,876
West Australia	45,000	14,823	57,943	54,919	121,079	125,315	93,037
Tasmania	22,628	86,596	429,425	422,587	245,985	1,163,907	1,193,898
New Zealand	95,000	73,343	459,649	—	256,972	1,551,039	551,484
Total Aust. Col.	1,028,434	1,559,563	7,213,915	5,711,173[2]	2,893,472	26,567,691	22,130,203
Hongkong	29	86,941	65,225	66,109	1,164,640	—	—
Labuan	50	1,774	6,707	6,591	9,276	36,724	6,358
Ceylon	24,700	1,791,272	747,037	698,998	781,392	3,471,487	2,594,752
Mauritius	708	298,569	609,517	572,479	613,258	2,440,821	2,560,799
Port Natal	18,000	160,170	50,905	49,917	29,315	199,917	110,415
Cape of Good Hope	123,900	267,096	650,925	600,325	736,400	2,579,359	2,021,321
St. Helena	47	5,949	20,736	20,176	152,152	120,181	21,465
Gold Coast	6,000	151,346	8,286	7,568	215,768	114,596	118,563
Sierra Leone	300	38,318	31,433	29,147	81,275	169,727	247,261
Gambia	—	6,939	15,599	16,962	49,450	76,150	110,364
Gibraltar	1[illegible]	17,750	32,500	28,369	1,797,789	—	—
Malta	115	138,176	147,385	142,347	962,483	2,428,909	1,775,794
Ionian Islands	1,041	233,973	130,262	149,363	844,115	1,306,303	649,057
Grand Total	2,398,934[3]	193,757,012	49,239,645	54,484,805[3]	21,580,843	90,032,014[3]	77,349,681[3]

[1] Without reckoning the value of ships built in Canada and sold in the United Kingdom.
[2] Without New Zealand. [3] Without Hong Kong and Gibraltar.

FINANCES, &c.

The expenses for the public service amount to about £70,000,000. The total debt is £802,000,000, of which £786,000,000 funded and £16,000,000 not funded. The yearly interest required for this debt is something over £26,000,000.

The money coined by the London mint in the years 1851-61 was as follows:—

52,385,860 sovereigns,	16,420,756 threepenny pieces,
14,773,863 half-sovereigns,	59,412,864 pennies,
16,471,352 florins,	89,642,781 halfpennies,
23,973,475 shillings,	29,122,516 farthings,
20,048,996 sixpences,	3,535,776 half-farthings.
1,891,154 fourpenny pieces,	

According to the returns for the income tax there are but 59 persons in England with an income of £50,000 and upwards; 530 have incomes varying from £10,000 to £50,000; 897 from £5,000 to £10,000 yearly. This can, however, scarcely be taken as a true return.

ARMY AND NAVY.

The effective of the English army is 213,000 men. Infantry 148,000; cavalry 12,330; foot artillery 25,030; horse artillery 2,345. Of militia in 1860 there were 67,810 infantry and 15,000 cavalry. The volunteers number some 150,000 regularly embodied and drilled. The military police in Ireland consists of 12,400 men, with 358 horses. The native Indian army consists at present of 110,400 men. Then there are the West-India regiments, composed of Africans, and numbering 180 officers, 3,242 subalterns and soldiers: the Ceylon rifle-brigade, 79 officers, 1590 subalterns and soldiers: the Cape mounted rifles (Hottentots and Europeans), 48 officers, 1,036 subalterns and soldiers: Royal Canadian rifles, 39 officers, 1,067 subalterns and soldiers: St. Helena regiment (English) 21 officers, 412 subalterns and soldiers: Royal Malta Fencibles, 25 officers, 613 subalterns and soldiers: Gold Coast artillery, 17 officers, 334 subalterns and soldiers (natives): Royal Newfoundland companies, 9 officers, 220 subalterns and soldiers (English veterans): Falkland Isles detachment, 1 officer, 36 subalterns and soldiers (English veterans).

The navy consists of about 1,000 vessels of all kinds, mounting about 16,600 guns. There are 53 screw liners, besides six or eight ironsides afloat or being constructed. The men voted for 1861 were 78,200, including 18,000 marines and 9,500 coast-guards.

FEATURES OF THE COUNTRY.

The general surface of England is pretty level or undulating, the

only well-defined mountain groups being in the north, where the surface is marked by very prominent features. From the western extremity of the Cheviot Hills a chain of mountains runs away south through Northumberland, Cumberland, Lancashire, and Yorkshire, to the middle of Derbyshire, forming the watershed of the northern half of the country: its highest point (2,901 feet) is Cross Fell. The Cumbrian mountain group of the Lake district are rugged and picturesque, and present the highest summits in England; as Scawfell Pike (3,166 feet), Helvellyn (3,055 feet), Skiddaw (3,022 feet), and Bowfell (2,911 feet). The rest of England presents no marked character in mountain chain or tableland. The chief rivers are the Severn, Humber, Tyne, Tees, Thames, Great Ouse, and Mersey. The lakes of England all lie in the mountain-group of Westmoreland and Cumberland: the largest is Windermere. The climate of England is characterized by its mildness and the absence of extremes. The country is well-wooded, especially in the central and southern parts. The best oak timber is grown in the weald of Kent, in Surrey and Sussex. The soil is generally rich and in a high state of cultivation: about half the cultivable lands are meadows and pasturage land. The mines of England, especially those of coal and iron, are a great source of wealth, and have done wonders in facilitating the development of the manufacturing industry.

Wales is mountainous throughout, but the groups in the southern part are less closely placed, and the elevations less than in the north. The highest mountains in Wales are Snowdon (3,571 feet) and Cader-Idris (3,550 feet). Large coal-fields run through the country, and there are also rich beds of ironstone.

Scotland is separated from England by the Solway Frith and the river Liddell, the Cheviot Hills and the River Tweed. The coast outlines are extremely irregular, especially on the west side, which is rugged and generally elevated; while the eastern coast, though indented by many friths, is generally smoother in the outlines, less rocky and elevated, and bordered by a greater extent of level land. The broad valley of Strathmore, crossing the middle of Forfarshire and the southern part of Perthshire, and having a maximum elevation of 200 feet, is continued across the western parts of Stirlingshire to the foot of Loch Lomond, where it becomes confluent with the great depression occupied by the Frith of Clyde. It divides the country into two parts essentially differing in aspect as in geological formation—the Highlands on the north-west and the Lowlands on the south-east. The principal hill-ranges run north-east and south-west. The highest mountain-tops in Scotland are Ben-Nevis (4,406 feet), Ben-Macdhui (4,296 feet), Cairntoul (4,245 feet), and Cairngorm (4,095 feet). The much-visited Ben-Lomond rises to a

height of 3,192 feet. Three-fourths of the surface of the country is covered by mountains. The three Lothians, much of the counties of Stirling and Fife, the Strathmore valley, with the Carse of Gowrie (in Forfarshire), and several tracts on the east coast, in Ayrshire, and the southern counties, are the exceptions: they are generally very level, have a rich soil, and are highly cultivated. Scotland abounds in lakes, many of which are highly picturesque and beautiful: Loch Lomond is the largest. The principal rivers are the Tay, the Tweed, the Clyde, the Forth, and the Spey. The climate varies much with the locality—on the west coast moist but temperate, on the east coast drier.

The interior of Ireland is a level or undulating plain, bordered by elevations which extend nearly all round the island. The Shannon is the largest river of the United Kingdom; Lough Neagh is the largest lake, occupying 153¼ square miles. The climate of Ireland is humid and mild, which, added to a freedom from continual frosts, gives a peculiar bright green look to the surface, whence the name of "Emerald Isle."

MEANS OF COMMUNICATION.

Although none of the rivers of the United Kingdom are navigable far inland, yet the country has the most complete system of internal communication in the world. The common roads are far superior to those of other countries, and there is (more particularly in England) a complete network of railways. At the end of the year 1860 the railways had attained a length of 10,433 miles, of which 6,690 were double lines of rails. The gross revenue of this enormous extent of railroad for 1860 was £27,766,622. The canals are also many and important. Telegraphic communication is most admirably organized all over the country.

The Post-Office.—The number of receiving-boxes in the United Kingdom is 14,354. In 1861 there were 593,000,000 letters sent through the post, equal to about 20 per head of the population. Of these 487,000,000 in England, 56,000,000 in Scotland, and 50,000,000 in Ireland. Of every 380 letters one was registered. About 72,300,000 newspapers and 12,300,000 book-packets passed through the post. The number of money orders issued was 7,580,455, for an aggregate sum of £14,616,348. There were 2,532 post-office savings-banks. The post-office officials number 25,376. The revenue in 1861 amounted to £3,665,828; the expenses were £2,503,843; clear profit £1,161,985.

AGRICULTURE, &c.

The soil of England is generally rich and is in a high state of cultivation: wheat is the principal crop, and thrives best in Essex, Kent,

Suffolk, Rutland, Herts, Hants, Berks, and Hereford. About half of the cultivated lands are taken up with meadows and pasture-land. It is estimated that the number of sheep in England is above 30,000,000. The wool produced is very fine and valuable, and amounts annually to some 542,000 packs of 240 lbs. each. Horses and cattle are raised in great numbers and are deservedly renowned throughout the world. Barley is grown chiefly for malting, and in greatest quantity in the eastern and midland counties. Oats are largely grown for horses. Turnips, swedes, and mangold-wurzel are also extensively grown for sheep and cattle. Hops are a precarious crop; they are grown principally in Kent, Surrey and Herefordshire. The south-west counties are celebrated for their orchards.

Some parts of the lowlands of Scotland are very fertile, and the system of farming one of the best in the world. The principal wheat districts are the Lothians, parts of Perthshire, and Fifeshire. Turnips are extensively and very successfully grown in Roxburgshire. Of sheep there are said to be about 5,000,000.

The extent of arable land in Ireland has greatly increased since the passing of the bill for the sale of encumbered estates; and much more wheat and other cereals have been grown since the great failure of the potato crop. The climate is peculiarly adapted for the cultivation of flax, which has hitherto been grown almost exclusively in the province of Ulster.

MINERAL PRODUCTIONS, &c.

The mines of England, especially those of coal and iron, are the great sources of her wealth and of the astonishing development of her manufacturing industry. Tin, copper, lead, zinc, and manganese are also obtained in various parts of the country. In Wales the coal-field of Glamorgan and the adjoining country is the largest in Southern Britain: with it are associated rich beds of ironstone. The only important mines of Scotland are those of lead at Wemlockhead and Leadhills, and those of iron associated with coal in most parts of the great coal-field of Scotland. The country south of Glasgow abounds with iron-works. The exports of iron and steel—wrought and unwrought—for 1861 amounted in value to £10,341,574; of machinery—steam engines £1,243,467, other kinds £2,976,221, together £4,219,688; coals, coke, and culm £3,593,076. In Ireland there are several coal-fields, of which the great Munster one is the largest in the United Kingdom, occupying portions of Clare, Limerick, Cork, and Kerry. In a coal-field surrounding the sources of the Shannon their are deposits of ironstone, humanly speaking, inexhaustible. The Leinster coal-field has also much valuable ironstone. Gold, silver, copper,

and lead are the principal metals found in Ireland; but tin, antimony' zinc, manganese, and nickel are also met with. At the end of the last century large quantities of gold were found in the bed of a stream flowing into the valley of Anoca from Croghan-Kinsheln mountain, in County Wicklow, some of the nuggets weighing 22 oz.: gold is still found in the same locality. Among the remains of animals found in the different earthy deposits, are those of the elk and the elephant; and it appears certain that these animals existed in Ireland contemporaneously with man.

COMMERCE AND INDUSTRY.

Corn.—The wheat harvest of England in 1861 was about three-fourths of an average one, yielding about 15 millions of quarters. To this may be added 1½ quarter, on account of the excellence of the said 15 million quarters, and 1 million quarters foreign wheat in store, making altogether 17½ million quarters. The consumption being about 25 millions of quarters, there was a deficit of 7⅞ millions of quarters. This deficit was increased by exports to France of about 1 million quarters; so that on the whole some 8⅞ millions of quarters of wheat had to be provided up to the harvest of 1862. Of the other cereals there was comparative abundance.

The amount of wheat imported into the United Kingdom in 1861 was 6,966,845 quarters, against 5,906,181 quarters in 1860, and 4,023,578 in 1859. Of these 6,966,845 quarters 2,534,951 came from America, 1,047,436 from Russia, 1,033,058 from Prussia; the smaller quantities from Denmark, Mecklenburg, the Hanse Towns, France, Turkey and its tributaries Wallachia and Moldavia, Egypt, &c. Of barley 1,405,981 quarters were imported; oats 1,875,574, pease 402,932, beans 564,478, Indian corn (maize) 3,106,595 quarters. Of wheaten flour the total imported amounted to 6,234,279 Cwts., *viz.* from America 3,858,562 Cwts. France 461,387, the Hanse Towns 281,901, other countries 1,632,429 Cwts. Of potatoes 385,446 Cwts., and of Indian flour 9,618 Cwts., were imported. The gross revenue receipts amounted to £837,634, of which £348,348 for wheat, £155,331 for maize, £116,898 for wheaten flour.

Linen.—The year 1861 was a bad one for all affairs in linen. The exports amounted in value to £2,738 of linen lace, &c., £269,778 of thread, and £10,633 of linen tape, &c. The total worth of the linen cloths, handkerchiefs, &c., exported was £3,575,896, of which for £642,696 to Amerika, £299,927 to the Hanse Towns (for Germany), £293,720 to Cuba, £206,794 to Brazil; then smaller quantities to the West Indies, East Indies, Australia, &c. Of linen yarn for some £1,615,800 was

exported, of which for £458,142 to Spain and the Canaries, £431,515 to the Hanse Towns (for Germany), £142,924 to Holland.

The importation of flax amounted to 1,333,679 Cwts., of which 1,031,044 Cwts. from Russia and Prussia. Of hemp the importation amounted to 792,054 Cwts., of which 480,339 Cwts. from Russia, and 212,743 Cwts. from the Philippines. India sent but 19,514 Cwts.

Cotton.—The quantity of raw cotton imported into England in 1859, 1860, and 1861, with the value thereof, was as follows:—

1859 . . . 1,225,989,072 lbs., valued at £34,559,636,
1860 . . . 1,390,938,752 „ „ „ „ 35,756,889,
1861 . . . 1,256,984,736 „ „ „ „ 38,653,398.

The quantity received in 1862 will probably be something over 400,000,000.

Quantities of Raw Cotton Imported into the United Kingdom from Various Countries.

Years.	The United States.	Brazil.	The Mediterranean.	British Possessions in the East Indies.	British West Indies and British Guiana.	Other Countries.	Total.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
1857	654,758,048	29,910,832	24,882,144	250,338,144	1,443,568	7,986,160	969,318,896
1858	835,237,776	18,617,872	38,248,112	132,722,576	367,808	11,148,032	1,034,342,176
1859	961,707,264	22,478,960	38,106,096	192,330,880	592,256	10,773,616	1,225,989,072
1860	1,115,890,608	17,286,864	44,036,608	204,141,168	1,050,784	8,532,720	1,390,938,752
1861	819,500,528	17,290,336	41,479,200	369,610,448	486,304	9,187,920	1,256,984,736

The quantity of cotton manufactures—comprising calicoes, cambrics, and muslins—exported in 1859, 1860, and 1861, with their value, was as follows:—

1859 . . . 2,551,909,929 yards, valued at £ 38,744,113,
1860 . . . 2,765,337,818 „ „ „ „ 42,141,505,
1861 . . . 2,544,411,550 „ „ „ „ 37,543,908.

Of cotton twist and yarn were exported:—

1859 . . . 192,206,643 lbs., valued at £ 9,458,112,
1860 . . . 197,343,655 „ „ „ „ 9,870,875,
1861 . . . 177,776,249 „ „ „ „ 9,292,841.

Twists were sent (1861) in the largest quantities to the following countries:—

Holland . . . . . for £ 2,073,120,
British India . . „ „ 1,515,227,
The Hanse Towns for £ 1,538,825,
Prussia . . . . . „ „ 936,619.

The principal customers of England (1861) for cotton goods were:—

British India . . . . for £ 10,019,091,
China and Hong Kong „ „ 3,177,043,
Brazil . . . . . „ „ 2,477,078,
Turkey . . . . . for £ 1,977,365,
America . . . . . „ „ 1,254,269,
The Hanse Towns „ „ 1,019,028.

The export to India was divided as follows:—

Bombay . . .	for £3,433,818,	Singapore . .	for £616,189,
Madras	„ „ 210,926,	Ceylon	„ „ 302,673.
Bengal	„ „ 5,455,485,		

Wool.—The following table gives the imports of raw wool imported into England in the last five years:—

QUANTITIES of WOOL (Sheep, Lamb, and Alpaca) IMPORTED into the UNITED KINGDOM from VARIOUS COUNTRIES.

Years.	Spain.	Germany, viz., Mecklenburg, Hanover, Oldenburg, and Hanse Towns.	Other Countries of Europe.	British Possessions in South Africa.	British Possessions in the East Indies.	British Settlements in Australia.	South America.	Other Countries	Total.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
1857	397,238	6,088,002	23,802,520	14,287,828	19,370,741	49,209,655	9,306,886	7,287,028	129,749,898
1858	110,510	10,595,186	17,926,859	16,597,504	17,333,507	51,104,560	10,046,381	3,024,216	126,738,723
1859	153,874	12,036,125	27,145,518	14,269,343	14,363,403	53,700,542	9,759,779	1,856,050	133,284,634
1860	1,000,227	9,292,942	28,570,342	16,571,345	20,214,173	59,166,616	8,950,629	4,627,303	148,396,577
1861	630,554	3,344,928	20,432,505	18,676,286	19,161,004	68,506,222	12,351,777	4,069,565	147,172,841

To this must be added woollen manufactures not made up, and entered at value, £987,731.

Of sheep, lamb, and alpaca wool the total imports amounted in value to £9,718,434; of woollen rags torn up to be used as wool, £284,429; woollen manufactures not made up £987,731: total £10,990,594.

The principal countries sending this wool are, firstly Australia, then Central Europe, British India and British Africa.

The quantities of woollen manufactures exported were as follows:—

	1860	1861	
Cloths of all kinds, coatings, &c. . . .	570,671,	581,316	pieces.
Mixed stuffs, flannels, &c.	93,064,504,	78,593,745	yards.
Worsted stuffs	2,619,245,	2,198,580	pieces.
Woollen and worsted yarn	245,839,	245,007	Cwts.

The values of these articles were as follows:—

	1860	1861
Cloths of all kinds, coatings, &c. . . .	£2,996,091,	£2,999,548.
Mixed stuffs, flannels, &c.	„ 4,401,936,	„ 4,234,442.
Worsted stuffs	„ 4,101,918,	„ 3,416,738.
Other kinds (stockings, &c.)	„ 657,053,	„ 490,589.
Woollen and worsted yarn	„ 3,843,450,	„ 3,545,999.

The total export of woollen manufactures in 1861 was for £11,141,317, and of woollen and worsted yarn £3,545,999.

Exports of cloths of all kinds, coatings, &c.:—

	1860	1861
To United States	£629,017,	£393,423.
„ China and Hong Kong	„ 400,627,	„ 353,614.
„ British India	„ 212,910,	„ 251,537.
„ Australia	„ 152,701,	„ 234,520.
„ British North America	„ 175,207,	„ 213,806.

Exports of mixed stuffs, flannels, carpets, &c.:—

	1860	1861
To United States	£2,046,415,	£1,109,176.
„ Australia	„ 232,115,	„ 372,971.
„ France	„ 188,149,	„ 654,296.
„ British North America	„ 207,577,	„ 221,103.

Exports of worsted stuffs:—

	1860	1861
To United States	£1,091,721,	£469,813.
„ China and Hong Kong	„ 425,838,	„ 356,145.
„ The Hanse Towns	„ 954,523,	„ 805,855.
„ Holland	„ 258,831,	„ 274,250.

Exports of woollen and worsted yarn:—

	1860	1861
To Germany *viâ* the Hanse Towns	£2,061,293,	£1,901,259.
„ Holland	„ 705,036,	„ 643,982.
„ Russia	„ 362,842,	„ 340,206.
„ France	„ 233,828,	„ 229,902.

Silk.—The imports of silks were as follows:—

		1859	1860	1861
Raw silk	*Lbs.*	9,920,891,	9,178,647,	8,710,681.
Thrown silk	„	327,462,	224,335,	124,574.
Silk manufactures of Europe—broad stuffs	„	347,534,	539,947,	1,140,267.
„ „ „ —ribbons	„	479,106,	530,796,	854,223.
Silk manufactures of India—Bandannas, Corahs, Choppas, Tussore cloths, &c.,	*Pieces*	343,034,	233,910,	130,769.

Of the raw silk 2,752,540 lbs. were imported, in 1861, from China, and 162,121 lbs. from British India.

The exports of silk of all sorts were as follows:—

		1859	1860	1861
Raw silk	*Lbs.*	2,152,327,	3,153,993,	4,096,784.
Refuse	*Cwts.*	1,505,	1,506,	835.
Silk stuffs	„	8,200,	8,643,	10,240.
„ „ velvet	„	1,514,	959,	2,051.
Silk ribbons	„	25,580,	8,157,	8,363.
Indian silk manufactures	*Pieces*	249,360,	112,993,	134,849.

Silk handkerchiefs:—

To the United States	for	£230,835,	£124,206,	£ 95,733,
„ Australia	„	„ 182,250,	„ 117,267,	„ 136,365,
„ other Countries	„	„ 348,609,	„ 490,468,	„ 515,551,
	Total	£761,694,	£731,941,	£747,649.

Other silk stuffs:—

To the Hanse Towns	for	£ 67,301,	£ 65,637,	£ 33,551,
„ the United States	„	„ 164,851,	„ 114,600,	„ 24,305,
„ other Countries	„	„ 126,401,	„ 109,213,	„ 158,772.
Mixed silk stuffs	„	„ 441,905,	„ 565,912,	„ 429,478.

Thrown silk:—

To Belgium	for	£ 52,163,	„ 46,349,	„ 127,821,
„ France	„	„ 308,568,	„ 221,608,	„ 186,412,
„ Holland	„	„ 130,015,	„ 142,874,	„ 105,056,
„ other Countries	„	„ 93,223,	„ 118,682,	„ 133,540,
	Total	£583,979,	£529,513,	£642,829.
Silk twist and yarn	for	£207,581,	„ 296,594,	„ 275,604.

Iron and Steel.—The Scotch iron industry in 1861 maintained its well-earned reputation. There were in this part of the United Kingdom 123 iron-works, which produced some 1,050,000 tons of metal; of this 596,000 tons were exported, against 573,000 tons in 1860.

The total exports from the United Kingdom were as follows:—

		1859	1860	1861
Pig iron	*Tons*	316,376,	342,566,	387,546,
Bar, bolt, and rod	„	300,786,	311,459,	258,547,
Railroad iron	„	528,927,	453,445,	377,477,
Cast iron	„	81,302,	74,971,	74,969,
Wire	„	12,391,	13,957,	11,630,
Wrought of all kinds	„	200,665,	213,474,	190,533,
Steel, unwrought	„	24,744,	32,173,	21,796,
	Total Tons	1,465,191,	1,442,045,	1,322,498,

The total value of these exports amounted in 1859 to £12,314,437, in 1860 to 12,154,997, and in 1861 to £10,341,574.

Of cast iron India took for £140,733, against £217,591 in 1860. Of unwrought steel the United Staates took for £308,292, against £653,058 in 1860.

Exports of iron in blocks:—

		1860	1861
To Prussia	for	£ 55,989,	£ 80,168.
„ Holland	„	„ 135,566,	„ 158,258.
„ France	„	„ 201,359,	„ 308,325.
„ United States	„	„ 229,283,	„ 88,324.

Exports of bar iron:—

		1860	1861
To British India	for	£272,380,	£328,648.
„ United States	„	„ 735,121,	„ 176,598.
„ British North America . .	„	„ 140,914,	„ 153,341.
„ Australia	„	„ 105,207,	„ 67,850.

Exports of railway rails, &c.:—

		1860	1861
To British India	for	£996,748,	£916,787.
„ United States	„	„ 916,361,	„ 176,897.
„ Spain	„	„ 336,709,	„ 332,256.
„ Russia	„	„ 316,132,	„ 231,641.
„ Australia	„	„ 176,684,	„ 182,225.

Exports of wrought iron:—

		1860	1861
To British India	for	£583,426,	£461,115.
„ Australia	„	„ 402,012,	„ 312,233.
„ United States	„	„ 498,891,	„ 173,800.
„ British North America . .	„	„ 171,487,	„ 170,950.
„ Spain	„	„ 175,764,	„ 169,668.
„ Holland	„	„ 123,565,	„ 149,986.

Tin.—The exports of tin amounted in value to £907,590, against £1,500,812 in 1860.

		1860	1861
Exports of tin plate to the United States—	for	£1,018,536,	£417,360,
„ „ „ „ British India . .	„ „	15,382,	„ 31,638,
„ „ „ „ Australia . . .	„ „	19,012,	„ 27,712,
„ „ „ „ Other countries .	„ „	447,882,	„ 430,880,
	Total	£1,500,812,	£907,590.

The exports of unwrought tin amounted to £361,592 in 1860 and to £343,300 in 1861.

Copper.—Of unwrought copper for £436,087 was exported in 1861, against £749,879 in 1860. Of this France took in 1861 for £246,292, and for £515,533 in 1860. Of copper plate the value of the total exports was £1,426,031 in 1861, against £1,804,151. British India took for £606,538, against £908,576 in 1860; the Hanse Towns for £111,356 in 1861 and £103,835 in 1860. Of other wrought copper for £276,677 was exported in 1861, against £233,286 in 1860.

Brass.—The exports of brass amounted in worth to £173,722 in 1861, against £211,692 in 1860.

Lead.—The export of lead ore was for £147,311 in 1861, against £157,987 in 1860. The export of lead in blocks amounted in 1861 to £424,102, against £543,299. The principal customers for this latter,

in 1861, were—China and Hong Kong for £122,338, Russia £80,624, and British India £32,383.

Colonial Wares.—The import of sugar was as follows:—

			1859	1860	1861
Sugar first quality	total import	*Cwts.*	188,703,	86,516,	75,232.
" " "	paid duty	"	172,473,	48,470,	39,491.
" second quality	total import	"	3,666,888,	3,745,286,	4,228,790
" " "	paid duty	"	3,803,453,	3,462,517,	3,937,059.
" third quality	total import	"	5,242,953,	4,985,475,	6,101,711.
" " "	paid duty	"	4,929,476,	5,184,346,	5,179,399.
Refined sugar and candy	total import	"	262,461,	345,011,	245,854.
" " "	paid duty	"	243,584,	266,074,	244,764.
Molasses	total import	"	549,391,	606,503,	1,294,672.
"	paid duty	"	680,763,	559,953,	1,090,017.

The sugar exported in 1861 was: Unrefined 467,498 Cwts., refined sugar and candy 35,918 Cwts., molasses 104,548 Cwts.

The imports of coffee and cocoa were as follows:—

		1859	1860	1861
Coffee	total import *Lbs.*	65,353,030,	82,767,746,	83,532,525.
" paid duty for home consumption	"	34,492,980,	35,674,381,	35,375,675.
Cocoa	total import "	6,006,759,	9,009,860,	9,080,288.
" paid duty for home consumption	"	3,480,988,	3,481,484,	3,576,384.

The export of coffee in 1861 was 46,794,504 lbs.; of cocoa 4,508,297 lbs.

		1859	1860	1831
Tea	total import *Lbs.*	75,077,451,	88,946,532,	96,577,382.
" paid duty for home consumption	"	76,337,538,	76,859,428,	77,949,464.

The amount of tea exported in 1861 was 12,847,026 lbs., and the amount remaining in bond 68,741,973 lbs.

Wood.—The timber, &c., imported was as follows:—

		1859	1860	1861
Timber and planks	*Loads*	1,472,667,	1,452,806,	1,726,617.
Timber not sawn or split	"	1,141,959,	1,275,109,	1,334,519.

Of the former British North America furnished, in 1861, 849,888 loads, and of the latter 637,713 loads.

Values of different imports (1861) not mentioned above:—

Butter and Cheese	£ 6,539,193.	Indigo	£ 2,977,079.
Wine	" 3,862,233.	Hides, tanned and untanned	" 2,891,783
Tallow	" 3,311,717.	Guano	" 2,022,283.
Flax-seed and linseed	" 3,108,055.	Copper ore and regulus	" 2,008,246.
Clover-seed and rapeseed	" 1,234,929.	" wrought and partly wrought	" 1,413,652.
Tobacco, unmanufactured	" 1,917,731.	Rice	" 2,127,126.
Palm oil	" 1,579,953.	Brandy	" 928,482.
Fish oil	" 1,011,585.	Rum	" 790,010.
Olive oil	" 984,985.		

Values of different exports not mentioned above:—

Apparel, haberdashery and millinery	£5,977,064	Machines—other sorts	£2,976,221.
Coals, coke and culm	„ 3,593,076.	Leather and leather wares	„ 2,197,293.
Hardwares and cutlery	„ 3,425,260.	Brass and copper manufactures	„ 2,312,567.
Machines—steam engines	„ 1,243,467.	Earthenware and porcelain	„ 1,070,659.
		Beer and ale	„ 1,417,038.

Value of total imports into the United Kingdom from different countries in 1861:—

From the United States and California	£49,385,108.	North American Colonies	£8,664,250.
British East India	„ 21,958,947.	Egypt	„ 8,400,324.
„ France	„ 17,815,199.	Holland	„ 7,621,331.
„ Russia, northern and southern ports	„ 12,822,689.	Australia	„ 6,900,610.
China (incl. Hong Kong)	„ 9,070,980.	Prussia	„ 6,434,259.
		Hanse Towns	„ 6,060,887.
		West India Islands and Guiana	„ 5,855,713.

The values of the exports of British produce in 1858—61 were as follows:

1858	£116,608,756.	1860	£135,891,227.
1859	„ 130,411,529.	1861	„ 125,115,133.

The repartition of these products among the different countries of the earth was as follows:—

Countries.	1859.	1860.	1861.
Foreign:—	£	£	£
Russia—Northern Ports	3,491,808	2,885,576	2,665,328
Russia—Southern Ports	546,888	382,903	380,574
Sweden and Norway	1,042,441	1,044,717	1,096,405
Denmark	723,933	731,162	913,818
Danish West Indies	652,252	658,457	706,807
Prussia	1,492,088	1,884,403	2,495,664
Hanover	998,477	1,107,570	1,029,476
Hanse Towns	9,178,399	10,364,237	9,248,014
Holland	5,375,468	6,114,862	6,439,098
— Java and Sumatra	1,135,071	1,413,624	1,091,584
Belgium	1,479,270	1,610,144	1,926,965
France	4,754,354	5,249,980	8,896,282
— Algeria	21,977	43,754	20,987
— Possessions in Senegambia	10,740	862	3,638
— Possessions in India	—	1,416	—
Portugal	1,306,105	1,698,931	1,987,457
— Azores and Madeira	91,606	147,609	147,908
Spain and the Balearic Islands	1,945,482	2,471,447	2,936,903
— Canary Islands	135,267	131,210	123,219
— Fernando Po	5,422	20,166	8,371
— Cuba	1,526,525	1,418,475	1,273,078
— Porto Rico	149,071	111,537	90,385
— Philippine Islands	685,490	674,235	784,137
Sardinia	1,404,982	1,864,338	2,198,960
Austria	789,881	993,669	968,416
Tuscany	801,705	1,034,435	1,062,779
Papal States	260,077	294,175	447,719
Two Sicilies	1,162,335	1,321,339	2,071,522

Countries.	1859.	1860.	1861.
Foreign *cont.*:—	£	£	£
Greece	262,074	343,500	286,392
Turkey	3,750,996	4,408,910	2,988,443
— Wallachia and Moldavia	111,031	172,872	162,636
— Syria and Palestine	622,457	655,323	876,035
Egypt	2,175,651	2,479,737	2,278,799
Morocco	96,399	171,424	148,399
United States and California	22,553,405	21,667,065	9,058,326
Mexico	597,899	462,604	583,710
Central America	226,720	182,282	172,032
Haiti	198,791	412,939	305,062
New Granada	729,468	810,970	827,382
Venezuela	317,716	323,656	426,863
Ecuador	22,261	74,149	151,157
Brazil	3,685,718	4,446,776	4,558,067
Uruguay (Monte Video)	693,622	922,733	582,518
Buenos Ayres	958,677	1,782,447	1,383,903
Chili	1,474,606	1,702,800	1,368,722
Peru	857,568	1,381,357	1,195,110
China (exclusive of Hong Kong)	2,525,997	2,872,045	3,114,157
Western Coast of Africa, not particularly designated	696,027	951,295	865,804
Other Countries	543,336	326,275	510,152
Total of Foreign Countries	84,267,533	92,226,392	82,854,163
British Possessions.			
Channel Islands	615,330	655,948	666,325
Gibraltar	713,295	1,159,313	1,016,092
Malta	624,110	704,073	564,161
Ionian Islands	250,949	345,055	296,633
North American Colonies	3,616,236	3,727,350	3,696,646
Honduras (British Settlements)	115,699	142,544	201,135
West India Islands and Guiana	2,163,649	2,416,939	2,463,974
Australia	11,229,448	9,707,261	10,701,752
Hong Kong	1,931,576	2,445,991	1,733,967
East Indies	19,844,920	16,965,292	16,412,090
Singapore	1,421,067	1,671,092	1,026,018
Ceylon	667,387	671,219	485,659
Mauritius	567,159	538,303	551,797
Cape of Good Hope and Natal	1,934,970	2,065,523	1,986,629
Possessions on the Gold Coast	65,905	97,069	144,194
Possessions on the River Gambia	43,206	27,774	56,872
Sierra Leone	169,860	215,523	180,097
Other Possessions	169,230	108,566	76,929
Ports of the Crimea	—	—	—
Total of British Possessions	46,143,996	43,664,835	42,260,970
Total of Foreign Countries and British Possessions	130,411,529	135,891,227	125,115,133

Of the precious metals the imports for 1861 were—gold for £12,650,735 and silver for £6,497,526; together £19,148,261. The exports were—gold for £11,487,973, and silver for £8,695,755; together £20,183,728.

SHIPPING AND NAVIGATION.

The amount of shipping, exclusive of coasting vessels and vessels

with ballast, that entered and cleared out of ports in the United Kingdom, was as follows:—

		1859	1860	1861
Entering	*tons*	9,089,550,	10,055,287,	10,604,569,
Cleared out . . .	„	10,242,624,	10,784,536,	11,318,093,
	tons	19,332,174,	20,839,823,	21,922,662.

The number and tonnage of British vessels forming part of this total were as follows:—

	1859		1860		1861	
	Vessels	Tons	Vessels	Tons	Vessels	Tons
Entered . . .	19,909,	5,388,953,	20,104,	5,762,464,	21,060,	6,304,099.
Cleared out . .	23,701,	6,224,318,	23,713,	6,359,103,	26,454,	6,841,031.

The number and tonnage of vessels engaged in the coasting trade were as follows:—

ENTERED.

	1859		1860		1861	
	Vessels	Tons	Vessels	Tons	Vessels	Tons
Between Great Britain and Ireland—						
British . . .	33,165,	5,366,349,	34,536,	5,558,656,	35,046,	5,838,264,
Foreign . . .	91,	12,750,	157,	19,780,	98,	16,797,
Other coasters—						
British . . .	118,617,	11,094,214,	118,580,	11,342,532,	116,522,	11,423,515,
Foreign . . .	355,	58,804,	509,	82,443,	427,	76,659.
Total British	115,782,	16,460,563,	153,116,	16,901,188,	151,568,	17,261,779.
Foreign	446,	71,554,	666,	102,223,	525,	93,456.
Grand total	152,228,	16,532,117,	153,782,	17,003,411,	152,093,	17,355,235.

CLEARED OUT.

	1859		1860		1861	
	Vessels	Tons	Vessels	Tons	Vessels	Tons
Between Great Britain and Ireland—						
British . . .	32,528,	5,279,306,	34,211,	5,489,339,	34,766,	5,692,432,
Foreign . . .	114,	17,840,	176,	22,877,	93,	15,138,
Other coasters—						
British . . .	122,304,	11,164,483,	122,564,	11,425,004,	121,456,	11,626,135,
Foreign . . .	292,	47,842,	468,	77,179,	315,	54,839.
Total British	154,832,	16,443,789,	156,775,	16,914,343,	156,222,	17,318,567.
Foreign	406,	65,682,	644,	100,056,	408,	70,031.
Grand total	155,238,	16,509,471,	157,419,	17,014,399,	156,630,	17,388,598.

The number of vessels in the foreign trade that entered the port of Liverpool in 1861 was 5,041, of 2,943,166 tons; cleared out, 5,371, of 3,007,943 tons.

The merchant navy of the United Kingdom numbered in 1860 25,663 sailing vessels, of 4,204,360 tons; 2,000 steamers, of 454,327 tons.

belonging to the colonies 9,517 vessels, of 836,174 tons: total 37,180 vessels, of 5,494,861 tons. The crews amount to upwards of 200,000 men and boys.

PRINCIPAL TOWNS, THEIR POPULATION, INDUSTRY, &c.

London, (Fr. *Londres*, Ger. *London*, Span. and Ital. *Londra*, Dutch *Londen*).—The metropolis of the United Kingdom has a population of 2,805,000, or very nearly one-tenth of the total population of the whole country. It lies on both banks of the Thames, from 50 to 60 miles from its mouth. Immense trade: large breweries, sugar refineries, and soap-works; shipbuilding; manufactories of machines, carriages, pianos and other musical instruments; mathematical, astronomical, and physical instruments; watches, fire-arms, knives, glass, paper, paper-hangings, artificial flowers, colours, chemicals, leather, gloves, ropes, cottons, &c.; great book trade.

Liverpool.—Pop. 445,740, including that of immediate suburbs. It lies on the eastern side of the broad mouth of the river Mersey. Here are magnificent docks. Immense foreign trade. Liverpool is the great cotton market for the world. The industry of the place is almost exclusively confined to articles connected with the building and outfitting of ships. There is also a large earthenware and porcelain manufactory, iron and copper foundries, and sugar refineries.

Glasgow.—Pop., with suburbs, 446,395. Cottons, woollens, silks, linens, chemicals, faïence and earthenware, glass, leather, ropes, type, refined sugar, machines. In the neighbourhood there are rich mines of coal and iron, and stone quarries.

Manchester.—Pop., with immediate suburbs, 401,321. The seat of the cotton manufacture. There are also important manufactories of silk and woollen goods; large bleaching establishments, calico printing works and chemical works; iron-foundries, and paper-mills.

Birmingham (formerly *Bromwicham*).—Pop. 295,943. Manufactures: All sorts of articles of iron or steel, from the largest steam-engine to a steel-pen; articles cast from iron and brass, fire-arms, cutlery, saddlery; gold, silver, plated, or-molu, bronze and japanned wares; jewellery, electro-plated goods, articles of *papier-mâché*, buttons, pins, steel-pens, toys, glass wares; all kinds of tools and machinery, &c. &c.

Leeds.—Pop. 207,134. Large manufactories of cloth, flax spinning-factories; machines.

Sheffield.—Pop. 185,399. Cutlery, Britannia metal, and plated goods.

Edinburgh.—The capital of Scotland. Pop. 167,131. Coach-building, glass-making, brewing; engraving, printing, and bookbinding.

Newcastle-upon Tyne.—Pop. 110,753. Here are extensive coal mines: then malleable-iron works, blast-furnaces, flax-mills, manufactories of locomotives and other steam-engines, glass-works, chemical-works, &c. The export and coasting trade are considerable.

Bradford.—Pop. 106,203. Worsted and yarn fabrics, alpaca, mohair, and other similar stuffs; cloth; extensive dyeing-works; iron-works in the vicinity, where are also rich coal-beds.

Hull.—Pop. 105,000. One of the most important ports of the United Kingdom. Foreign commerce, shipbuilding, &c. Also foundries, cotton-mills, engine-works, tobacco factories, and distilleries.

EXCHANGE.

Bills of exchange are either *inland* or *foreign*. The former are those drawn in England and payable in England. Bills coming from abroad, or from Scotland or Ireland, or drawn on those parts, are foreign bills. All bills and checks not payable at sight enjoy three days of grace. If the third day is a Sunday, or Good Friday, or Christmas Day, the bill must be paid the day before. In case of non-acceptance or non-payment when due foreign bills are protested, but inland ones are only noted for protest. Blanco endorsements are not sufficient. Bills at sight must be paid at once, or immediately protested.

By *uso* is understood:

Between London	and	Vienna	14 days after sight.
"	"	" Frankfort-a.-M.	14 days after sight.
"	"	" Lisbon and Oporto	30 days after sight.
"	"	" Paris, Geneva, and Malta	30 days after date.
"	"	" Barcelona and Cadix	60 days after sight.
"	"	" New York	60 days after sight.
"	"	" Amsterdam, Rotterdam,	
"	"	" Antwerp, Altona, Bremen and Hamburg	at one month after date.
"	"	" Bilbao	2 months after date.
"	"	" Madrid and Gibraltar	2 months after sight.
"	"	" Livorno, Genoa, Venice Naples, and Palermo	3 months after date.

There exists no well-digested, regulated code of laws relating to bills of exchange, although many publicists have written ably on the subject.

MONEY.

Accounts are kept in *pounds, shillings* and *pence.* One pound sterling = 20 *shillings* of 12 *pence* of 4 *farthings.*

The *sovereign* (= one pound sterling) is a gold coin weighing $123\frac{11}{623}$ troy grains, $\frac{11}{12}$ fine: a sovereign weighing less than $122\frac{3}{4}$ troy grains is not legal tender. A full-weight sovereign is legal tender for 20 shillings. The *half-sovereign* is in proportion.

Silver coins are: the *crown* weighing $436\frac{4}{11}$ troy grains, $\frac{37}{40}$ fine, and being legal tender for 5 shillings; the *half-crown*, the *florin* (2*s.*), the *shilling, sixpence, fourpenny piece,* and the *threepenny piece,* are in proportion.

Copper coins are: the *penny, half-penny, farthing,* and *half-farthing.* These are being gradually supplanted by the new bronze-like coins, legal tender for the same amounts.

The mean value of a sovereign in some foreign moneys is as follows:—

In France	Francs	25	$27\frac{1}{2}$	centimes.
„ the United States (gold)	Dollars	4	85	cents.
„ Russia	Silver Rubel	6	4	kopeks.
„ Hamburg	Mark Banco	13	$3\frac{3}{4}$	schillinge.
„ Prussia, Saxony, Hanover, Hesse-Cassel, Saxe-Weimar, Saxe-Altenburg, Saxe-Gotha, Brunswick, Oldenburg, Anhalt-Dessau-Cöthen, Anhalt-Bernburg, Schwarzburg-Sondershausen, a part of Schwarzburg-Rudolstadt, Waldeck, Pyrmont, the two Reuss, Schaumburg-Lippe, and Lippe-Detmold	Thaler	6	$20_{.8}$	silbergroschen.
„ Austria and the principality of Liechtenstein	Gulden	$10_{.04}$		
„ Bavaria, Wirtemberg, Baden, Hesse-Darmstadt, Saxe-Meiningen, Saxe-Coburg, Hohenzollern (in Prussia), Nassau, part of Schwarzburg-Rudolstadt, Hesse-Homburg, and Frankfort a. M.	Gulden	11	$42_{.8}$	kreuzer.
„ Spain	Reales de Vellon	93	$18\frac{7}{16}$	maravedis.
„ Portugal (silver)	Milreis	4	$165\frac{1}{4}$	reis.

MEASURES.

Long Measure:—

The *foot* is divided into 12 *inches* of 12 *lines* or 3 *barley-corns:* the division of an inch into eighths is, however, perhaps more general.

100 *English feet* = $30_{.479}$ French mètres, = $96_{.421}$ Vienna fuss,
„ „ „ = $97_{.414}$ Prussian fuss, = $104_{.432}$ Bavarian fuss,
„ „ „ = $100_{.000}$ Russian feet, = $104_{.348}$ Hanoverian fuss.

The *yard* has three *feet*. It is divided into quarters and eighths, and also into 16 *nails*. The *English ell*, of 5 quarters of a yard, has therefore 20 *nails*: the *Flemish ell* has 3 quarters, or 12 *nails*: the *French ell* has 6 quarters, or 24 *nails*.

100 *English yards*	$= 91._{438}$	French mètres,
" " "	$= 109._{507}$	Span. Cast. varas,
" " "	$= 128._{571}$	Russian arschin,
" " "	$= 153._{694}$	Milanese bracce,
" " "	$= 137._{101}$	Prussian ellen,
" " "	$= 83._{126}$	Portuguese varas,
" " "	$= 117._{350}$	Vienna ellen,
" " "	$= 133._{333}$	Turkish pik,
" " "	$= 161._{838}$	Leipzig ellen,
" " "	$= 153._{988}$	Swedish aln.

For yarns the circumference of the reel is 1½ yard, or 54 inches: 80 such lengths make a skein: 7 skeins make a hank. The skein has therefore a length of 120 yards, the hank of 840 yards.

The common *rod*, *pole*, or *perch*, has 5½ yards: the *woodland pole* has 6 yards, and the *forest pole* 7 yards. The furlong has 40 of the common poles, or 220 yards. The *chain*, for measuring, has 4 poles, 22 yards, or 66 feet.

The *fathom* is 6 feet; the *geometrical pace* 5 feet: the *palm* is 3 inches; the *hand* 4; the *span* 9; the *cubit* 18 inches.

The *statute mile* has 8 furlongs, or 1760 yards, or 5280 feet. The *sea-mile*, or *geographical mile*, is the 60th. part of a degree, or $2025._{246}$ yards, and is identical with the French *mille marin*, or $1851._{852}$ *mètres*.

100 *English miles*	$= 160._{931}$	French kilomètres,
" " "	$= 21._{726}$	German geographical miles,
" " "	$= 21._{365}$	Prussian miles,
" " "	$= 150._{857}$	Russian werst.

Square Measure:—

The *square foot* has 144 sq. feet of 144 sq. inches. The *square yard* has 9 sq. feet.

100 *English square feet*	$= 9._{290}$	French sq. mètres,
" " " "	$= 91._{311}$	Prussian sq. feet,
" " " "	$= 115._{840}$	Saxon sq. feet,
" " " "	$= 119._{918}$	Span. Cast. sq. feet.

The *square* of roofing, &c., is 100 sq. feet. Ceilings, &c., are measured according to the square yard.

A superficies of 40 square poles makes a rood of land, or ¼ *acre*; an *acre* thus has 4 roods, or 160 square poles, or 4840 square yards.

100 *English acres* = $40._{467}$ French hectares,
" " " = $158._{494}$ Prussian morgen,
" " " = $73._{121}$ Saxon acker,
" " " = $70._{221}$ Vienna joch.

A *yard of land* = 30 acres; a *hide of land* = 100 acres.

The *square mile* has 640 acres, or 3,097,600 square yards, $258._{98945}$ French hectares.

The *chain*, for measuring land, is 22 yards long.

Plank Measure:—

Planks, &c., are reckoned according to their thickness: of one-inch planks 600 sq. feet make a *load*, of 1½-inch 400 sq. feet, 2-inch 300, 2½-inch 240, 3-inch 200, 3½-inch 170, 4-inch 150 square feet.

Cubic Measure:—

The cubic yard has 27 cubic feet of 1728 cubic inches, and is equal to $0._{76451342}$ cubic mètre.

100 *cubic feet* = $2._{8315}$ French cubic mètres,
" " " = $91._{588}$ Prussian cubic fuss,
" " " = $131._{319}$ Span. Castilian cubic pies,
" " " = $89._{648}$ Vienna cubic fuss,
" " " = $124._{677}$ Saxon cubic fuss.

The *load* of hewn timber is 50 cubic feet; of rough timber 40 cubic feet. The *ton* of shipping is 42 cubic feet.

Wood.—Of firewood there are five different sorts, viz. *logs* (or *shids*), *billets, faggots, fall wood,* and *cord wood.* The *shids* must be 4 feet long: shids of one notch must be 16 inches in circumference, of two notches 23, of three 28, of four 33, and of five 38 inches in circumference. *Billets* must be three feet long, and of either 7, 10 or 14 inches in circumference: they are sold by the hundred of 5 score. *Faggots* must be 3 feet long: 50 faggots make a load. Of *bavins* and *spray wood* 100 bundles make a load. The *cord* is either 14 feet long, 3 broad, and 3 high = 126 cubic feet; or 8 feet long, 4 high, and 4 broad = 128 cubic feet.

Dry Measure:—

The unity of this measure is the *imperial gallon,* which contains—the barometer marking thirty inches and the thermometer standing at 62° Fahrenheit—10 pound avoirdupois, or 70,000 troy grains. The gallon contains $277._{27384357}$ cubic inches.

A quarter has 2 coombs, or 8 bushels, or 32 pecks, or 64 gallons, or 128 pottles, or 256 quarts, or 512 pints, or 2048 gills.

100 *English gallons* = $454._{346}$ French litres, $396._{798}$ Prussian quart, $321._{154}$ Vienna maass, $470._{279}$ Danish pott.

100 *English quarters* = $290._{781}$ French hectolitres,
" " " = $529._{064}$ Prussian scheffel,
" " " = $530._{623}$ Span. Castil. fanegas,
" " " = $472._{915}$ Vienna metzen,
" " " = $551._{412}$ Hamburg fass.

Coals are sold by weight, and in many places wheat is also sold by weight. A *keel* of Newcastle coals is on an average 15½ London chaldrons of 36 bushels.

Lead ore is sold by the *ore-dish* = 1073½ cubic inches: 9 ore-dishes make a load, which weighs about 3 Cwts.

Fluid Measure:—

The imperial gallon is also the unity for fluid measure.

100 *English gallons* = $4._{54346}$ French hectolitres,
" " " = $2._{89335}$ Swedish ahm,
" " " = $5._{99085}$ Leipzig eimer,
" " " = $36._{94177}$ Russian wedra,
" " " = $6._{61330}$ Prussian eimer,
" " " = $2._{09132}$ Hamburg oxhoft.

The *gallon* has 4 *quarts* of 2 *pints* of 4 *gills*. For wine the *rundlet* has 18 gallons, the *tierce* 42, the *puncheon* 84, the *hogshead* 63, the *pipe* 126, the *tun* 252 gallons. The anker of brandy has 10 gallons. For beer the *firkin* has 9 gallons (the firkin of ale 8 gallons), the *barrel* 36 gallons, the *hogshead* 54, the *puncheon* 72, the *butt* 108 gallons.

WEIGHTS.

The unity of weight is the old imperial troy pound: the original was the brass pound made by Harris in 1758, but lost by the fire which destroyed the former houses of parliament. This troy pound is equal to $22._{8157}$ cubic inches of distilled water weighed against brass weights, with the barometer showing 30 inches and the thermometer 62° Fahr. It equals $373._{24}$ French grammes, $7765._{6}$ Dutch as.

The *troy pound* is divided into 12 *ounces* of 20 *pennyweights* of 24 *grains* = 5760 grains. The *grain* is subdivided into 20 *mites* of 24 *doits* of 20 *periots* of 24 *blanks*. The troy grain = $0._{064799}$ French gramme.

100 *Eng. troy pounds* = $82._{286}$ Eng. avoirdupois pounds,
" " " " = $81._{051}$ Spanish Cast. libras,
" " " " = $37._{324}$ French kilogrammes,

100 *Eng. troy pounds* $= 81_{\cdot 316}$ Portuguese arratels,
" " " " $= 74_{\cdot 648}$ Prussian pfund,
" " " " $= 87_{\cdot 819}$ Swedish Skålpund,
" " " " $= 74_{\cdot 648}$ Zollverein pfund,
" " " " $= 109_{\cdot 925}$ Tuskan libbre,
" " " " $= 91_{\cdot 143}$ Russian funda,
" " " " $= 77_{\cdot 019}$ Hamburg pfund.

Again, in proportion to the different continental weights for coining, &c.,

100 *Eng. troy pounds* $= 37_{\cdot 324}$ French kilogrammes,
" " " " $= 151_{\cdot 627}$ Dutch troy mark,
" " " " $= 159_{\cdot 602}$ Prussian mark,
" " " " $= 132_{\cdot 994}$ Vienna mark,
" " " " $= 159_{\cdot 602}$ Zollverein mark,
" " " " $= 162_{\cdot 102}$ Castilian marcos.

For assaying the troy pound is divided, for gold, into 24 *carats* of 4 *grains* of 4 *quarts;* for silver, into 12 ounces of 20 pennyweights. For jewels the carat is divided into 4 grains, or $\frac{1}{2}$, $\frac{1}{4}$, &c., and $= 3_{\cdot 168317}$ Eng. troy grains $= 0_{\cdot 997127}$ Dutch jewel carat. For pearls the troy ounce has 600 pearl grains: 5 pearl grains $= 4$ troy grains.

Apothecaries' Weight:—

The pound is the same as the troy pound, but divided into 12 *ounces* of 8 *drachms* of 3 *scruples* of 20 *grains* $= 5760$ grains.

100 *pounds Apoth. Weight* $= 104_{\cdot 300}$ Nürnberg medicinal pfund,
" " " " $= 104_{\cdot 164}$ Russian " funda,
" " " " $= 116_{\cdot 776}$ Turkish tschekis.

Avoirdupois Weight:—

This is the general trade weight. The pound has 16 *ounces* of 16 *drachms*. 144 avoirdupois pounds $= 175$ troy pounds; and 192 avoirdupois ounces $= 175$ troy ounces; 1 avoird. ounce $= 437\frac{1}{2}$ troy grains; 1 avoird. drachm $= 27\frac{11}{32}$ troy grains.

100 *pounds avoirdupois* $= 121_{\cdot 528}$ Eng. troy pound,
" " " $= 45_{\cdot 359}$ French kilogrammes,
" " " $= 90_{\cdot 718}$ Zollverein pfund,
" " " $= 122_{\cdot 976}$ Turin libbre.

The hundredweight has 112 pounds: the stone has 14 pounds in general, but 8 pounds for butchers'-meat: the todd of wool has 28 pounds: 20 hundredweight make a ton.

GREECE.

The area of the kingdom of Greece is variously estimated at 15,000 square miles (Eng. consul's Report), 19,070, sq. miles (*Almanach de Gotha* for 1862), at 15,250, and at 18,250 square miles. The total population in 1856 was 1,067,216. The great majority of the inhabitants belong to the Greek church, but all sects have equal civil rights. The government is a constitutional monarchy. There are two chambers, a senate and a house of representatives, the latter elected by universal suffrage.

Finance.—The expenses for the year are about 25,000,000 drachmas, or £885,400, covered by a like sum of receipts. It is difficult to obtain a correct statement of the amount of the national debt.

The army numbers about 11,000 men: in the navy there are about 1,225. The number of vessels belonging to the royal navy was, in 1860, 31 vessels, carrying a total of 154 guns: three were steamers, of a total of 415 horse-power.

Features of the Country.—Greece is naturally divided into three principal parts, viz.: the mainland of Northern Greece, Livadia; the peninsula of the Peloponnesus, or the Morea; and the islands. The first of these divisions is traversed through its whole length by a lofty, precipitous, and uninterrupted mountain-chain, a continuation of the Pindus range. Towards the south we arrive at the culminating point of all Greece, Mount Guiona, 8,240 feet in height. Mount Parnassus is 8,001 feet high. The principal mountain-chain of the Morea originates in the Isthmus of Corinth, running thence to Mount Cyllene, 7,745 feet in height. There are few open plains of any extent in any part of Greece: one of the largest is the valley of Bœotia, traversed by the Mavro-potamo, which falls into Lake Topolias, or Copais. Greece has a great extent of coast-land. The principal river of Greece Proper is the Aspro-potamo (Achelous), the upper part of whose course, however, is on Turkish soil. The largest river of the Peloponnesus is the Roufia (Alpheus), draining almost the whole of Arcadia. The largest lake is that of Topolais (Copais), which discharges itself by subterranean outlets, the temporary stopping-up of which has often caused inundations.

AGRICULTURE, &c.

Comparatively little of the ground is under cultivation, owing partly to the mountainous nature of the country, and partly to the backward and unsettled state of the inhabitants. The soil is in general thin and

light, and much better adapted for the cultivation of the vine and other fruit-bearing trees and shrubs than for the growth of cereals. Olives, figs, almonds, currants, and oranges are extensively grown.

Much of the surface is pasture-land for sheep, goats, and oxen, though these are mostly of inferior breeds.

COMMERCE, INDUSTRY, NAVIGATION, &c.

The principal products are currants, cocoons, figs, vallonea, tobacco, wine, and oil.

In 1851 the crop of currants in Greece amounted to 70,000,000 lbs. In 1852 the *oidium* appeared, and the production went back. In 1857, in spite of heavy rains, the amount was 60,000,000 lbs. In 1858 there were 55,000,000 lbs. In 1860 the crop amounted to 79,000,000 lbs. England takes about three-fourths of the entire crop.

The value of the cocoons exported to France in 1858 was estimated at 1,783,257 drachmas, or about £63,687. There are said to be more than 1,500,000 mulberry-trees in the country. Of fig-trees the number is said to be 300,000. The tobacco is good, but neither the wine nor the oil are of good quality, owing almost entirely to defective preparation.

Marble of superior quality abounds; and gold, silver, copper, lead, iron, and sulphur are found, but the mines are not properly worked.

On the subject of industry little can be said. A small quantity of silk goods are manufactured at Athens, Piræus, and Calamata, chiefly handkerchiefs, but of small value. Raw silk is sent to France.

The principal imports from England are—cotton, woollen, flaxen, silken, and hempen goods; raw and tanned hides, sugar, coffee, rice, spirituous liquors, raw and wrought iron. Turkey sends a considerable amount of corn, then cattle, vegetables, raw and tanned hides. Austria sends staves for casks, hardware, sulphur, lead, ship timber, and dyers' colours.

The *bona-fide* imports in 1859 amounted to 46,244,855 drachmas, or £1,637,800; the exports to 24,422,787 drachmas, or £865,000.

In 1858 the entries of vessels in all the Grecian ports were 72,097 vessels, of 2,157,138 tons. The effective of the Greek merchant navy consisted, in 1858, of 3,920 vessels, guaging 268,600 tons. Number of sailors 23,128.

CHIEF TOWNS.

According to a census taken at the beginning of 1861 *Athens* and the *Piræus (Porto Leone)* had together 60,000 inhabitants; viz. Athens 45,000, the Piræus 10,000, and 5,000 foreigners. Trade in fruits, wax,

honey, silk, wool, and oil.—*Patras*, an important port, with some 20,000 inhabitants.—*Nauplia* a port on the eastern coast of the Morea, with some 18,000 inhabitants: here is the royal arsenal.—*Syra*, on the island of the same name, is an important commercial port, with a population of about 17,000.

EXCHANGE.

The French "*Code de commerce*," with some few modifications, is here in force. There is no exchange place, properly speaking, in the kingdom.

MONEY.

Accounts are kept in *drachmas* of 100 *lepta*.

The only gold coin is the piece of 20 drachmas, weighing $89._{131}$ Eng. troy grains, $\frac{3}{10}$ fine. The silver coins are—pieces of 5 drachmas, 1 drachma, with $\frac{1}{2}$ and $\frac{1}{4}$ drachma. Of copper there are coins of 1, 2, 5 and 10 lepta. The gold drachma is worth about $8\frac{1}{2}d$, the silver drachma about $8\frac{2}{5}d$.

These gold and silver coins appear to have disappeared from circulation, and banknotes have taken their place.

MEASURES.

Long Measure:—The unity is the *piki*, the exact counterpart of the French mètre $= 3._{28090}$ Eng. feet. The *piki* has 10 *palms* of 10 *inches* of 10 *lines*. The *stadion* has 1000 pikis, and is thus equal to a French kilomètre. The Greek mile is 10 stadions.

Square Measure:—The square *piki* = the Fr. square mètre. The *stremma* has 1000 square pikis = 1 Fr. décare.

Dry Measure:—The *litre* is the same as the French litre, and has 10 kotylis of 10 mystras of 10 cubus. The *kilo* of 100 litres = the French hectolitre.

Fluid Measure:—The *litre* is the same as the French litre.

WEIGHTS.

The unity is the *drachma*, the same as the French gramme. It is divided into 10 *oboles* of 10 *gran*. The *mine* = 1500 *drachmas*: the *talent* = 100 *mines*: the *tonne* = 10 *talentes*. The *oka*, or *stadera* = 1280 *drachmas*.

HOLLAND.

Holland occupies an area of about 13,580 English square miles, with a population of 3,522,000, of whom some 2,000,000 are protestants. The government is a constitutional representative monarchy. The foreign possessions and colonies of Holland are more extensive than those of any other country except Great Britain. In Asia they extend over some 520,200 square miles, in America 54,200, and in Africa 10,625 square miles: population of these colonies 17,980,000.

The budget for 1861 was: receipts 91,262,000 gulden (about £7,757,700); expenses 84,185,145 gulden (about £7,155,738). The public debt amounted in 1861 to £88,026,953, for which interest had to be paid annually amounting to nearly £2,550,000. The colonies and foreign possessions contribute largely to the support of the mother country.

The European army of Holland consists of about 60,600 men of all arms: the effective of the army for the Indian possessions is about 27,000, with 770 horses. The war navy consists of 160 vessels of all classes, carrying some 1866 guns.

With the exception of some trifling elevations in Utrecht, Gelderland, and Ober-Yssel, the whole country is a continuous level plain. From the northernmost point of North Holland to the mouth of the Meuse (or Maas), a distance of 78 miles, the coast is lined with sand dunes 40 or 50 feet high, which form a natural barrier against the inroads of the sea, the interior being at a lower level. From the Meuse southward it is protected by dykes. In many parts of the country also the rivers are above the level of the surrounding country, and here also large dykes are necessary to guard against inundations. Many of these are 60 feet high, formed of earth, with at times a facing of masonry. Inundations, however, do occur, as, for instance, successive irruptions of the sea formed the Zuyder Zee; and the Lake of Haarlem was formed in the same way, in the 16th. century: the draining of this latter was completed in 1855. The southern parts of Holland are rich and fertile, but the corn produced is insufficient for home consumption. Other things largely cultivated are: vegetables, madder, horseradish, hemp, rapeseed, chicory, mustard, hops, beetroot, and tobacco. Gardening is carried on to comparative perfection; dairy work is the principal branch of rural industry. Butter and cheese figure largely on the list of exports, and vast quantities of honey are made. Great numbers of the people take to a seafaring life. The manufactures are—fine linens, woollens, paper, silk velvet, leather, cordage, hats, ribbons,

tobacco, chemicals, &c.: sugar refining, the distillation of Hollands, bleaching, and brick and tile making, are also important branches of industry. The canals are numerous, the most important being that of the Helder, connecting the estuary of the Y at Amsterdam with the channel between the mainland and the Texel. This canal is 50 miles long, 125 feet broad at the surface, and 21 feet deep.

Commerce.—The total imports amounted in value, in 1859, to 399,670,200 gulden, or about £33,930,000; in 1860 they were still more considerable. Some of the principal imports in 1860 were—Cotton yarn 15,491,834 lbs., against 13,808,447 lbs. in 1859; manufactures of silk, cotton, linen, &c., for £1,546,700, against £1,460,000 in 1859; indigo 1,314,990 lbs., against 1,247,371 lbs. in 1859.

The total exports in 1859 amounted in value to 356,049,124 gulden, or about £30,412,529. Exports in 1860: manufactures of silk, cotton, linen, &c., £1,222,051; manufactures of iron £62,864; butter 39,207,180 lbs.; twisted or dyed cotton yarn 774,505 lbs.; druggists' stores £111,900; coffee 1,057,375 Cwts.; cheese 569,180 Cwts.

Of course a considerable quantity of both imports and exports are transit goods.

Shipping.—The number of vessels entering Dutch ports in 1860 was 8,217, of 1,591,419 tons; of which 3,699 vessels, of 639,399 tons, were under Dutch colours; then 497 vessels in ballast, guaging 66,415 tons. Clearances 5,016 vessels, of 1,062,385 tons; of which 2,644 vessels, of 508,611 tons, under Dutch colours; then 3,985 vessels, of 674,761 tons, in ballast.

Principal Towns.—*Amsterdam*, on the Amstel at its entrance into the Y, an arm of the Zuyder Zee, has a population of about 244,000 souls. The trade is considerable, and a good business is done in bills of exchange, foreign securities, bullion, &c. The manufactures comprise —silk, linen, cotton, and woollen fabrics; jewellery, gold lace. There are also sugar refineries, distilleries, and soap, oil, glass, iron, dye, and chemical works.—*Rotterdam*, pop. 106,000; at the influx of the Rotte into the Maas. Great trade: the manufactures are—tobacco, corks, vitriol, soap, leather, hats, earthenware, liqueurs, needles and pins, paper, sugar of lead; here are also sugar refineries.—*The Hague* (Dutch *'s Gravenhagen*), pop. 79,000, is the residence of the royal family, the seat of government, &c.: it is one of the finest cities of Europe; gold and silver wares, porcelain, hats, and sealing-wax.—*Utrecht*, pop. 54,000; a noted university; silk, linen and woollen goods; fire-arms, pins, earthenware; dyeing and bleaching works, and sugar refineries.—*Leyden* (Dutch *Leiden*), pop. 37,000; celebrated university: trade in grain, butter and cheese.

The code of laws relating to bills of exchange is based upon the French *Code de Commerce*. There are no days of grace. A bill falling due on a Sunday is paid on Monday. Bills not paid must be protested the following day, or, is this a Sunday, on the Monday.

MONEY.

Accounts are kept in *gulden* of 100 *cents*. The gulden is worth about 1*s*. 8½*d*. Formerly gold coins of 10 and 5 gulden were in circulation, but these were called in on Holland's establishing an exclusively silver currency. For the requirements of commerce, however, gold *ducats* have been issued, worth about 9*s*. 3*d*. a-piece. The other coins are—*silver* pieces of 2½ and 1 gulden, ½, ¼, $\frac{1}{10}$ and $\frac{1}{20}$ gulden;—*copper:* 1 cent, ½ cent.

MEASURES AND WEIGHTS.

Long Measure:—The *mijl* is 1,000 Dutch *el* = 1 Fr. kilometre, $0_{.621382}$ English mile: the *roede* has 10 *el:* the *el* equals 1 Fr. mètre, or $3_{.2809}$ Eng. feet: the *palm* is $\frac{1}{10}$ of the *el:* the *duim* (thumb) $\frac{1}{100}$ of the *el:* the *streep* $\frac{1}{1000}$ of the *el* = 1 millimètre.

Square Measure:—The *bunder* is the Fr. hectare, and has 10,000 square *el* = $2_{.47114}$ Eng. acres.

Cubic Measure:—The *wisse*, for firewood, equals the Fr. stère, and is one cubic *el* = $35_{.3166}$ Eng. cubic feet.

Dry Measure:—The *kop* is the Fr. litre = $1_{.76}$ Eng. pint: the *mudde* is the Fr. hectolitre, the *zak* is also a hectolitre: the *schepel* has 10 koppen (litres), the *last* 3,000 koppen.

Fluid Measure:—The *vat* is the Fr. hectolitre (about 22 Eng. gallons); the *kan* is the litre, the *maatje* $\frac{1}{10}$ litre, the *vingerhoed* $\frac{1}{100}$ litre.

Trade Weights:—The *pond* = 1 kilogramme, $2_{.20462}$ Eng. pounds: the *ons* is $\frac{1}{10}$ pond, the *lood* $\frac{1}{100}$ pond, the *wigtje* $\frac{1}{1000}$ pond (= 1 Fr. gramme), the *korrel* $\frac{1}{10000}$ pond.

Apothecary's Weight:—The *pond* has 375 *wigtjes* (or Fr. grammes), and is divided into 12 *ons* of 8 *drachmen*, of 3 *skrupel* of 20 *greinen*.

The Dutch *troy pond* had 10,240 *as:* 100 Dutch troy pond = $131_{.8636}$ Eng. troy pound.

I T A L Y.

The present kingdom of Italy (1863) is said to cover an area of 96,674 Eng. square miles, and to have an aggregate population of near upon 22,000,000, of whom nearly all are catholics. The form of government is a constitutional monarchy. The revenue for 1861 amounted to 490,870,036 lire, or francs: the expenditure exceeded it by about 400,000,000 lire. The public debt amounts to some 2,300,000,000 lire, or francs. The Italian army now numbers about 323,000 men of all arms, of which number 19,000 cavalry, 31,000 artillery. The war fleet consists of 1 steam liner; 8 screw frigates, 3 in dock being plated, 5 building; 2 iron-sheeted batteries; 3 screw corvettes, 5 building; 10 paddle corvettes; 55 minor vessels, transports, &c.

FEATURES OF THE COUNTRY.

The Alps form, in the north, north-west, and north-east, the boundary between Italy and France, Switzerland, Tyrol, Carinthia, Krain, Görz, and Trieste. Italy is a mountainous country throughout: the Apennines run down south through the peninsula, and are continued in the island of Sicily. The mountains all bear a volcanic character. The valley of the Po, with its tributaries, forms a large more or less marshy lowland; and there are fertile though unhealthy tracts of country on the west coast of the Pontifical States, such as the Pontine Marshes. The lakes of Italy are celebrated on account of their beauty; such as the Lake of Como, of Garda, Lugano, Iseo, the Lago Magggiore; then the Lakes of Albano, and Nemi (Diana's Mirror), Bolsena, &c. &c. The coasts of the peninsula have no good, sure, ports, although there is no want of bays. With the exception of the Po, and in some degree the Tiber, there are no navigable rivers in Italy. The soil is fruitful, producing corn, wine, rice, and figs and other fruits. Great quantities of silk are produced. The principal sea-ports are Genoa, Venice, Leghorn, Naples, Messina, Palermo, Civita-Vecchia, Spezzia, Annoca.

COMMERCE AND INDUSTRY.

The principal exports to England consist of raw and thrown silk, silk manufactures, rice, olive oil, cheese, sulphur, fruits, kid and lamb skins, sheep and lambs' wool, oak and cork bark, straw hats, paper, linseed, shumac, and rags. The imports from Great Britain are principally cotton and iron manufactures, cotton yarn, and colonial produce.

The trade and shipping of Italy are now unimportant compared with the rank they occupied in Europe in the Middle Ages.

PRINCIPAL TOWNS.

Turin (Ital. *Torino*) is the present capital, with a population of about 180,000. Manufactures: silk and silk twist, velvets, cotton and woollen fabrics and hosiery, iron and steel wares, glass, porcelain, liqueurs.—*Naples* (Ital. *Napoli*) has a population of 417,500: silk stuffs, lace, gloves, porcelain; linen, cotton, and woollen fabrics; musical instruments, tobacco, carriages, chemicals, glass and iron wares, types, &c. —*Palermo*, pop. 186,000: silk and cotton goods, oil-cloth, glass, leather, gloves. Trade in silk goods, wine, oil, fruits, sulphur, skins, oils, essences, shumac, cream-of-tartar, liquorice, and manna.—*Milan* (Ital. *Milano*), pop. including the Corpi Santi, 219,500; here is a wonderful cathedral. Manufactures:—silks, printed cottons, plate-glass, braid, jewellery, artificial flowers, lace, carpets, soap, leather, and tobacco.—*Genoa* (Ital. *Genova*), pop. 120,000; velvet, broad-cloth, hosiery, lace, perfumes, and articles in marble, gold, and silver.—*Florence* (Ital. *Firenze*), pop. 114,500: celebrated for its two magnificent picture galleries, and for works of art in general.—*Messina*, pop. 94,200: trade in wine, lemons, oranges, almonds, currants, raisins, liquorice, lamb and kid skins, linseed, sulphur: manufactures of damasks and silks.—*Leghorn* (Ital. *Livorno*), pop. 80,000: extensive trade.

EXCHANGE.

The code of laws relating hereto is almost point for point the same as the French *Code de Commerce*.

MONEY.

In Piedmont, Modena, and Parma, accounts are kept in *lire* of 100 *centesimi*. This *lira* is of the same value as the Fr. franc: a silver lira thus equals $9\frac{6}{57}d$. The coins hitherto issued are—gold: pieces of 100, 50, 40, 20, and 10 lire:—silver: pieces of 5 and 2 lire and 1, $\frac{1}{2}$, and $\frac{1}{4}$ lira:—copper: pieces of 5, 3, and 2 centesimi and 1 centesimo.—The Lucca *lira* for accounts is or was $\frac{3}{4}$ franc, but the coins are the same as those of Turin.—In Tuscany accounts were kept in *lire* of 100 centesimi; the *lira* $= 8\frac{1}{6}d$. The coins are or were—gold: pieces of 80 *fiorini*, the *ruspone* (= 60 paoli or 40 lire), and the *zecchino* (= 20 paoli):—silver pieces of 5 and 10 *paoli*, or 4 *fiorini*, or $6\frac{2}{3}$ *lire*, of 10 and 5 *lire*; the *fiorino* (= $1\frac{2}{3}$ lire): then $\frac{1}{2}$ *fiorino*; *lira*, $\frac{1}{2}$ and $\frac{1}{4}$ *lira*; 2 *paoli*.—In Naples accounts are or were kept in *ducati di regno* o

10 *carlini* of 10 *grani* of 10 *cavalli*, or in *ducati* of 100 *grani*. The *ducato* is about 3*s*. 5½*d*., but is generally taken in other parts of Italy for 4½ *lire italiane*. In Sicily the *ducato* has 100 bajocchi of 10 piccioli. The coins are or were:—gold: pieces of 30, 15, 6 and 3 *ducati* (3 *ducati* = 1 oncetta):—silver: *scudo, ducato, carlino*, and pieces of 2 *scudi*, 2 *ducati*, and 2 *carlini*. (In Sicily the *carlini* are called *tari*.) The copper coins are pieces of 10, 8, 6, 5, 4, 3, 2, *tornesi*, and 1½ and 1 *tornese*, and the *grano* of 2 *tornesi*. No doubt Piedmontese reckoning and coins will soon be employed in all the different parts of of the Kingdom of Italy.

MEASURES AND WEIGHTS.

Piedmont.

Long Measure:—The *metro* is the Fr. mètre = $3._{2809}$ Eng. feet. The *metro* has 10 *decimetri* of 10 *centimetri* of 10 *millimetri*. The *miriametro* has 10 *chilometri* of 10 *ettometri* of 10 *decametri* of 10 *metri*.

Square Measure:—The *ara* in the Fr. are: the *ettara*, or 100 *are* = $2._{47114}$ Eng. acres. The *ara* is divided into 100 *centiare*.

Cubic Measure:—The *stero* in the Fr. stere, or cubic metre, and = $35._{3166}$ English cubic feet. The *stero* has 10 *decisteri*. The *decastero* has 10 *steri*.

Measures of Capacity.—The *litro* is the Fr. litre = $1._{76}$ Eng. pints. 10 *litri* = 1 *decalitro*; 100 *litri* = 1 *ettolitro*; 1000 *litri* = 1 *chilolitro*. The *litro* has 10 *decilitri*.

Weights:—The *gramma* is the Fr. gramme = $15._{43242}$ Eng. troy grains. 10 *gramme* = 1 *decagramma*; 100 *gramme* = 1 *ettogramma*; 1000 *gramme* = 1 *chilogramma* = $2._{20463}$ Eng. pounds avoirdupois. 10 *chilogramme* = 1 *miriagramma*; 100 *chilogramme* = 1 *quintale metrico* = $1._{9684}$ Eng. Cwt. The *tonnellata di mare* = $1._{1023}$ Eng. ton of shipping. The *gramma* in divided into 10 *decigramme* of 10 *centigramme* of 10 *milligramme*.

For Milan and Lombardy in general the same measures and weights are in force, only under other denominations.—Long Measure:—The *metro* has 10 *palmi* of 10 *diti* of 10 *atomi*: the *miglio* has, 1000 *metri*.—Land Measure:—The *tornatura* (*ettara*) has 100 *tavole* of 100 *metri*.—Measures of Capacity:—The *soma* (*ettolitro*) has 10 *mine* of 10 *pinte*

of 10 *coppi*.—TRADE WEIGHT:—The *libbra* has 10 *once* of 10 *grossi* of 10 *denari* of 10 *grani*: the *quintale*, or *centinajo*, has 10 *rubbi* of 10 *libbre*. The Apothecary's weight has long been the Viennese.

The measures and weights of Modena are those of Milan.

In Tuscany and Lucca the measures and weights were the following:—LONG MEASURE:—The *braccia da panno* = $1._{91482}$ Eng. foot: the *miglio* (mile) has 2833¼ *bracce*.—SQUARE MEASURE:—The *quadrato* has 100 *tavole* of 100 *bracce*: 100 *quadrati* = $84._{478}$ Eng. acres.—DRY MEASURE:—The *sacco* has 3 *staj* of 2 *mine*: the *staio* = $5._{3632}$ Eng. gallons.—FLUID MEASURE:—The *barile da vino* = $10._{03298}$ Eng. gallons; the *fiasco da vino* = $2._{00656}$ Eng. quarts.—WEIGHTS:—The *libbra* has 12 *once* of 24 *denari* of 24 *grani* = 6912 *grani*: 100 *libbre* = $74._{855}$ Eng. pounds avoird. For medicines, &c., the *libbra* has 12 *once* of 8 *dramme* of 3 *scrupoli* of 24 *grani*. The *carate*, for jewels, has 4 *grani*.

The measures and weights for Naples are the following:—LONG MEASURE:—The *palmo* has 10 *decimi* of 10 *centesimi*; or 12 *once* of 5 *minuti* of 2 *punti*: 100 palmi = $86._{796}$ Eng. feet: the *canna*, or ell = $2._{89321}$ Eng. yards: the *miglio* has 1000 *passi*, or 7,000 *palmi*: = 60 *miglia* make a degree.—SQUARE MEASURE:—The *moggio* has 100 square *conne*: 100 *moggia* = $17._{2947}$ Eng. acres.—CUBIC MEASURE:—The *canna da legno* (wood *canna*) has 256 cubic *palmi*.—DRY MEASURE:—The *tomolo* has 2 *mezzetti* of 2 *quarti* of 2 *stoppelli* of 3 *misure*: the *tomolo* = $1._{528}$ Eng. bushel.—WINE MEASURE:—The *barile* has 60 *caraffe*, and = $9._{60178}$ Eng. gallons.—OIL MEASURE:—The *salma* has 16 *staj* of 4 *quarti* of 6 *misurette*: the *salma* = $35._{562}$ Eng. gallons.—WEIGHTS:—The *libbra* = $0._{707156}$ Eng. pound avoirdupois: 9 *rotoli* = 100 *libbre*. The *cantaro grosso* has 100 *rotoli* = $196._{43}$ Eng. pounds avoird. The *cantaro piccolo* has 100 *libbre* = $70._{7156}$ Eng. pounds avoird. For gold, silver, and silk the *libbra* is divided into 12 *once* of 10 *dramme* of 3 *trapesi*, or *scrupoli*, of 2 *aboli*, of 10 *grani*. For medicines the *libbra* has 12 *once* of 10 *dramme* of 3 *scrupoli* of 20 *grani*.

For Sicily the measures and weights are as follows: LONG MEASURE:—The *palmo* has 12 *once* of 12 *linee* of 12 *punti*: 100 *palmi* = $67._{263}$ Eng. feet. The *canna* has 8 *palmi*; the *possetto* 2 *palmi*; the *corda* 128 palmi; the *catena*, for land-measuring, has 32 *palmi*. The *miglio* (mile) = 5760 *palmi*.—SQUARE MEASURE:—The *salma* has 4 *bisacce* of 4 *tumoli* of 4 *mondelli* of 4 *carozzi* of 4 *quarti* of 4 *conne*: the *salma* = $4._{31526}$ Eng. acres.—DRY MEASURE:—The *salma* has 16 *tumoli* of 4 *mondelli* of 4 *carozzi* of 4 *quarti*: the *tumolo* = $3._{7841}$ Eng. gallons.—FLUID MEASURE:—The *salma* has 8 *barili* of 2 *quartari* of 20 *quartucci* of 2 *caraffe* of 2 *bicchieri*. 100 *barili* = $756._{827}$ Eng. gallons: 100

quartucci = $18._{921}$ Eng. gallons.—Weights:—The *rotolo* has 30 *once*: 1 *cantaro* of 100 *rotoli* = $174._{92}$ Eng. pounds avoird. For gold, silver, raw silk, &c., the *libbra* is used: 100 *libbre* = $85._{0305}$ troy pound. The *libbra* is divided into 12 *once* of 8 *dramme* of 3 *scrupoli* of 20 *grani* of 8 *ottavi*.

M A L T A.

Malta is an island in the Mediterranean, 60 miles S S.W. of Sicily, and 179 miles from Cape Demas, in Tunis. Its area is 98 square miles. There are no lakes or rivers on the island; but springs abound, and there is no want of water. Vegetable products are—vines, figs, olives, oranges, wheat, barley, oats, cotton, &c. Manufactures—cabinet-work, jewellery, soap, leather, and coarse cotton cloth. Maltese honey is fine, and fish are plentiful. Malta is a British possession, ruled by a governor and seven other persons, all appointed by the English government. Not only is the island important as a stronghold, but it is also a good commercial dépôt. Round Valetta and its ports nearly 1200 guns can be mounted. The prevailing religion is the Roman catholic, but some 5,000 protestants reside on the island. Valetta is the port and chief town of the island.

Money. Accounts are kept either in pounds, shillings, and pence; or in *once* of 2½ *scudi* of 12 *tari* of 20 *grani*. The *oncia*, or *pezza*, is generally reckoned at 50 pence, the scudo at 20 pence: This value, however, is variable.

Long Measure:—The *piede* is 11⅓ Eng. inches: the *canna* $2._{2835}$ Eng. yards.—Dry Measure:—The *salma* contains 63½ Eng. gallons; the heaped *salma*, or *salma colma*, contains 73⅔ gallons.—Fluid Measure:—The wine *barile* has $9._{35}$ Eng. gallons: the oil *barile* has 8¾ gallons.—Trade Weight:—The *cantaro* of 100 *rotoli* equals 174½ Eng. pounds avoirdupois, but 175 pounds are generally calculated.—For gold and silver, and some other things, the *libbra* is used, divided into 12 *once* of 16 *parti* of 2 *trapesi* of 18 *grani* = 6912 *grani* = 4886 Eng. troy grains.

PORTUGAL.

According to a recent survey, the Kingdom of Portugal, exclusive of the islands, covers an area of 37,513 Eng. square miles; the population of this part is about 3,580,000. Madeira and the Azores are said to occupy an area of 1,488 square miles, with a population of 338,700. Possessions in Africa 530,112 sq. miles, pop. 1,060,000: in Asia and the Indian Seas 29,064 sq. miles, pop. 1,289,000.

The form of government is a constitutional monarchy. The established religion is the Roman catholic. The budget for 1861-62 was as follows:—Estimated revenue 13,251,262 milreïs, or £2,941,779; Expenditure 14,303,686 milreïs, or £3,175,418. Total public debt somewhere about £32,775,000. The European army consists of about 19,000 men, with 1820 horses. The fleet numbers 50 vessels, with 389 guns, and 2832 men and boys.

Portugal has a long coast line, generally low and swampy, but occasionally rising into bold cliffs: the interior is traversed by several mountain-ranges, between which are many extensive plains, romantic ravines, and wide and fertile valleys. The loftiest range of mountains the Serra d'Estrella, stretches across the country N.N.E. and S.S.W., its highest peak being one a little east of the town of Covilha, and rising 7,500 feet above the level of the sea. The loftiest summit in Portugal is Mount Gaviarra, in Serra Estrica, which attains a height of 7,881 feet. The chief rivers are the Tagus, Guadiana, Douro, and Mondego. The climate is on the whole both salubrious and agreeable, the temperature in many places continuing so moderate throughout the year, that vegetation is scarcely interrupted, and in many parts two crops are raised. Vegetation is both varied and luxuriant. The mountain-heights are clothed with magnificent forests, where the cork tree abounds. The olive, mulberry, and vine are successfully cultivated. Other fruits are also abundant. Lead, copper, tin, iron, gold, and silver are found in the country, but the mines are negligently worked. But few large industrial establishments exist. The principal articles manufactured are—woollens, cottons, and silks; stoneware, earthenware, and porcelain; copper and tin ware, corks, oil, soap. The principal exports are port wine, cork, olive oil, and fruit; the imports, grain, ordinary tissues, salt fish, hardware, and colonial produce. The total imports amount to about 22,000,000 milreis, or £4,888,888; the exports to about one-fifth less. The countries most engaged in this traffic are England and its colonies, France and its colonies, and the Portuguese colonies. The number of

vessels entering the port of Lisbon in 1859-60 was 1,433 sea-vessels, of 382,765 tons; and 1166 coasters, of 95,592 tons; the number of clearances was—sea-vessels 1401, of 401,373 tons; and 1097 coasters of 103,836 tons.

Principal Towns:—*Lisbon* (*Lisboa*), pop. about 285,000. Silks, porcelain, jewellery, hats, faïence, knives, ribbons, soap, tobacco, furniture, articles of gold and silver, articles of turnery, trimmings, brandy and liqueurs, ropes, &c.; dye-works, metal-casting establishments, tanneries, and sugar-refineries.—*Oporto*, pop. 85,000. Silks, woollens, cottons, linens, shawls, tobacco, soap, leather, iron, ropes. The great importance of the town is chiefly due to its export trade in wine.

Exchange.—The laws relating to bills of exchange form a code similar to the French *Code de Commerce*. Bills due on a Sunday are payable the day before.

MONEY.

Accounts are kept in *milreïs* of 1000 *reïs:* $4\frac{1}{2}$ milreïs in gold are rekoned to an English pound sterling, so that a milreïs = $53\frac{1}{3}$*d.* 1000 *milreïs* are called a *conto*, 1000 *contos* a *conto de contos*. Coins issued since 1855: gold: *corôa*, or crown, weighing about $273._{7}$ Eng. troy grains, $\frac{11}{12}$ fine, passing for 10 milreïs, and worth about £2 4*s.* $5\frac{1}{3}$*d.* Of this *corôa* there are pieces of $\frac{1}{2}$, $\frac{1}{5}$, and $\frac{1}{10}$, all in proportion. The silver coins are pieces of 5 *tostões* (= 500 reïs) and 2 *tostões* (= 200 reïs), then 1 *tostão* and $\frac{1}{2}$ *tostão* in proportion. The piece of 5 *tostões* weighs as near as possible 193 Eng. troy grains, $\frac{11}{12}$ fine: the other coins in proportion.

MEASURES AND WEIGHTS.

A good system of weights and measures in use throughout the country is wanting in Portugal. Different attempts have been made to introduce a universal decimal system. The measures and weights differ in every province, almost in every village. We give the predominant.

Long Measure:—The *pé* has 12 *polegadas* of 12 *linhas* of 10 *puntos* = $1._{0827}$ (some say $1._{0788}$) Eng. foot. The *palmo* has 8 *polegadas:* the *vara* has 5 *palmos:* 100 *varas* = $119._{862}$ Eng. yards: a *covado* has 3 *palmos:* the *braça* has 10 palmos. In trade it is generally reckoned that 5 *varas* = 6 Eng. yards, and 20 yards = 27 *covados*. The *milha* has 8 *estadios*, or $9389\frac{1}{3}$ *palmos*: the *legoa* 24 *estadios*, or 28168 *palmos*: $17._{93}$ *legoas* go to a degree.—Land Measure:—In some parts of the country land is measured by the *geira* of 4840 square *varas*

$=58._{564}$ Fr. ares, $1._{4472}$ Eng. acre. (Some say 1 *geira* $=58._{139}$ Fr. ares only.)—Dry Measure:—The *moyo* has 15 *fangas* of 4 *alqueires*. The *alqueire*, the supposed unity, is divided into halves, quarters, &c.: its capacity differs considerably in different parts of the country being on an average 3 gallons.—Fluid Measure:—The *almuda* has 2 *alquieres*, or 12 *canadas*: the *almuda* contains on an average $3._{685}$ gallons. For wine the *tonelada* has 2 *pipas* of 26 *almudas*: the *baril* has 18 *almudas*. The *pipa* of oil has 30 *almudas*. Of wine 18 *almudas* of Oporto equal 100 *almudas* in Lisbon: 100 *almudas* of oil in Faro equal 47½ *almudas* in Lisbon: 1 *canada* in Brazil equals 5½ *canadas* in Lisbon.—Trade Weight:—The *quintal* has 4 *arrobas* of 32 *libras* (or *arratels*) of 16 *onças*. The *libra* $=1._{0119}$ Eng. pound avoirdupois, $458._{976}$ Fr. grammes. —For gold and silver the *marco* has 8 *onças* of 8 *oitavas* of 3 *escrupulos* of 24 *granos* = ½ *libra*: 100 *marcos* $=61._{489}$ Eng. troy pounds.—For medicines the *libra* is generally taken to weigh ¾ *libras* of trade weight.—For diamonds 151⅓ *quilates* = 1 Eng. troy ounce.

ROMAN STATES.

The territories at present (1863) under the government of the Roman pontiff are—the Comarco (Rome and environs), Viterbo, Civita-Vecchia, Velletri, and Frosinone; altogether an area of about 4,540½ Eng. square miles, with some 690,000 inhabitants. The revenue of these states amounted in 1860 to about 14½ million of scudi, or about £3,156,770; the expenses to some £110,000 more. The debt is large, and the interest of it swallows up a great part of the incomings. Peter's pence have, however, of late been a fruitful source of revenue. The army of the sovereign pontiff consisted in 1861 of some 9,500 men. The French garrison numbers (1863) about 25,000 men.—Rome, the capital, contains some 180,000 inhabitants.

MONEY.

Accounts are kept in *scudi* of 100 *bajocchi*—or of 10 *paoli* of 10 *bajocchi* of 5 *quattrini*. The silver scudo is worth about 4*s*. 4½*d*, the gold scudo about 4*s*. 3½*d*. The legal currency consists of gold coins of 10, 5, 2½ *scudi* and 1 *scudo*: in silver pieces of 1 *scudo*, ½ *scudo*, *testone*, *papeto* (= 2 *paoli*), *paolo* (of 10 *bajocchi*), and ½ *paolo*; in copper coins of 5 *bajocchi*, 2 *bajocchi*, *bajocco*, ½ *bajoccho*, *quattrino* (⅕ bajocco).

MEASURES AND WEIGHTS.

Long Measure:—The *piede* = $11._{72}$ Eng. inches: 100 *piedi* = $97._{67}$ Eng. feet: the trade *canna* has 8 *palmi* = $78._{24}$ Eng. inches or $2._{176}$ yards: the building *canna* has $87._{96}$ Eng. inches: the *passo* has 5 *piedi*. The new Roman *miglio* is $2022._{12}$ Eng. yards.—Land Measure:—The *rubbio* equals $4._{567}$ Eng. acres.—Dry Measure:—The *rubbio* has 2 *rubbiatelle* of 2 *quarti* of 8 *quartarelli:* $1._{01265}$ Eng. quarters.—Fluid Measure:—The *barile* of wine has 32 *boccali* of 4 *fogliette* of 4 *quartucci* = $12._{8408}$ Eng. gallons: the *botta* has 16 *barili:* the oil *barile* has 28 *boccali* of 4 *fogliette* of 4 *quartucci* = $12._{65}$ gallons. Oil is sold wholesale by the *soma* = $36._{146}$ Eng. gallons.—Trade Weight:—The *libbra* has 12 *once* of 24 *denari* of 24 *grani* = 6912 *grani*. The *centinaio*, of 100 *libbre* = $74._{7714}$ Eng. pound avoirdupois, $90._{868}$ pounds troy.—For medicines the above *libbra* is divided into 12 *once* of 8 *dramme* of 3 *scrupoli* of 24 *grani* = 6912 *grani*.

R U S S I A.

The celebrated Russian statistician Privy-Councillor von Köppen gives the area of the Russian empire, inclusive of Poland (49,133 Eng. sq. miles) and Finland (144,942 Eng. sq. miles), but exclusive of the newly-acquired Amur territory (said to cover 160,950 sq. miles) and the smaller islands, at 8,322,950 Eng. square miles. If we add the Amur territory, we shall get 8,483,900 sq. miles as the total area of the Russian empire. From other quarters we are informed that European Russia, including Poland and Finland, occupies an area of 2,061,014; and Asiatic Russia, including the Trans-Caucasian provinces (71,662 sq. miles), some 5,668,544 sq. miles; so that European and Asiatic Russia together occupying 7,729,558 sq. miles, the Russian possessions in North America must have an area of 754,342 English square miles, if Mr. v. Köppen's statistics are to be relied upon. The total population is some 67,500,000, divided as follows:—European Russia 52,317,836, Poland 4,852,055, Finland 1,636,915, Asia 8,601,302 (3,734,584 in the Trans-Caucasian provinces and 4,866,718 in Siberia, &c.), American possessions 54,000. In 1856 there were (according to Privy-Councillor Troinitzky, member of the board of statistics) 23,069,631 serfs: *viz.* 22,558,748 in European Russia, 4338 in Siberia, &c., and 505,545 in the Trans-Caucasian provinces. The great majority of the inhabitants

of Russia and its territories profess the Greek catholic faith; but there are also some 2,750,000 Roman catholics, 14,000 American catholics, 380,000 united Greeks, 2,000,000 Lutherans, 2,750,000 Mahometans, 1,250,000 Jews, 200,000 Buddhists: a total of 9,344,000 dissenters from the state religion.

The government is an autocracy, the emperor being the head of the state and chief of the religion, and master of the lives and fortunes of all his subjects.

FINANCES.

The revenue for the year 1860 is calculated to have been altogether—ordinary and extraordinary—305,307,388 silver rubels (about £48,341,108); the expenses amounted to 305,890,843 silver rubels, or about £48,432,626. The public debt amounts to upwards of £270,000,000.

ARMY AND NAVY.

On the 1st. Jan. 1860 the Russian army was reported to consist of 35,055 officers and 1,329,529 privates. The navy consisted, in 1861, of 247 steamers of all sizes, of 36,935 horse-power, and carrying 2374 guns: and 71 sailing vessels, carrying 1477 guns.

FEATURES OF THE COUNTRY.

European Russia, by far the most important part of the empire, is a compact territory lying between the Caucasus and Black Sea in the south, and between the Ural Mountains on the north-east and the Carpathians on the south-west. Within this great area there is not a single elevation deserving the name of a mountain. A low range of hills runs away from the frontiers of Poland through the governments of Minck, Smolensk, Tver, Novgorod, and Vologda, and forms a watershed, which gives off many navigable rivers, such as the Volga. The northern slope, or Arctic basin, consists of two parts quite distinct in feature, the one consisting of a low level tract of swampy ground and regions permanently frozen, the other being a slightly elevated district of some 150,000 square miles in extent, covered with forests of pine, larch, and birch. The central governments on the southern slope have much good arable land, which yields good crops of cereals. The southern region, from the Manytch to the Don, is called the Great Steppe, in winter covered with snow, in spring bringing forth a coarse grass, and in summer becoming a vast arid dusty plain. Near Kremenitz is the greatest elevation in European Russia, a hill 1328 feet high. The Baltic

provinces have a general elevation of from 200 to 300 feet. Finland is a table-land of about 400 to 600 feet above sea-level, with a low range of hills running nearly due north and south. The coasts are rocky and deeply indented. Lapland is traversed by a continuation of the great Norwegian chain, some of the peaks rising to a height of 6000 feet. The country north of this chain is occupied by innumerable wood-covered offshoots from it, while in the south the country slopes away in an extensive plain to the head of the Gulf of Bothnia. Poland consists of immense plains, here and there alluvial and of great natural fertility, and producing heavy crops of grain, particularly wheat. The Ural Mountains separate Europe from Asia, and extend from the steppes of Orenberg, in lat. 51° N., to the shores of the Arctic Sea, some 1300 miles. The highest peaks of this range do not rise above 600 feet. On the eastern side of this range are found most of those mineral productions which constitute such a source of wealth to Russia. Here are found gold, magnetic iron, and copper; and quantities of malachite, serpentine, and marble are here quarried for exportation. In low north and south ridges gold has been found in such quantities as to yield upwards of £2,250,000 in a year.

Asiatic Russia extends from the Ural Mountains to the Pacific, and from the Arctic Ocean to Chinese Tartary and Turkestan; thus occupying the whole of Northern Asia. The western part of this region, viz. from the Ural to the meridian of Irkutsk, is a vast plain gradually rising southward till it attains a height of about 1200 feet along the base of the Attai Mountains, and is the buttress of the great table-land of Central-Asia. The seaward region is one of swamps and frozen ground, wholly desolate, and incapable of improvement; the central region produces grass, shrubs, and a few trees; the southern is covered by dense forests of fine trees, with intervening fertile tracts of country. Between the Jenissei and the Lena the surface of the country is irregular. To the north of this eastern region there is a deep alluvial cover containing gold, and farther north fossil skeletons and bones of the mammoth and rhinoceros. In the north the soil is frozen to a great depth below the surface, in some instances to 300 feet and even to 400 feet. The climate is very severe, the mercury in the thermometers at Yakutsk being generally frozen for two or three months in the year.

The territory on the banks of the Amoor lately acquired by Russia contains many large fertile tracts of country, especially to the south of the river, and towards its mouth. The upper basin is a barren uninhabited country. The Trans-Caucasian provinces are finely diversified with mountain and plain, and mostly very fertile. Russian America is

mostly an inhospitable, barren region, chiefly valuable for its fur-bearing animals.

MEANS OF COMMUNICATION.

In spring, summer, and autumn the roads are none of the best; but in winter, when the snow lies deep on the ground, communication is easy and rapid. There are a few railroads, constructed and maintained by the government mostly with a view to strategetic purposes in time of war. Such are the lines between St. Petersburg and Moscow, Warsaw, and the Prussian frontier. Russia has several large rivers navigable in summer for the greater part of their course, and connected by a grand system of canals: but the whole are locked up by ice some five months of the year.

SHIPPING AND NAVIGATION.

The number of vessels which entered Russian ports in 1859 was 10,713, of 2,122,712 tons; of these 5952 vessels of 1,100,600 tons with cargoes, 4761 of 1,022,112 tons in ballast. Cleared out—10,684 vessels of 2,087,032 tons, viz. 9,317 of 1,858,122 tons with cargoes, 1367 of 228,910 tons in ballast. Of this total 1,057 vessels, of 187,264 tons were English. The Russian merchant navy was composed in 1859 of 1416 vessels, of 172,605 tons, with about 1000 to 1100 sailors. The principal ports are—Cronstadt (for St. Petersburg), Riga, Odessa, Taganrog, and Archangel.

COMMERCE AND INDUSTRY.

The total value of imports in 1859 (exclusive of the precious metals) was £25,227,910; exports £26,230,240. With respect to the imports it may be said that quantities of things are admitted duty-free when imported for government use, and such things are not included in the amount given above. The principal imports are:—wine, dye-stuffs, machinery, &c.; cotton, silk, and woollen stuffs; fruit, linen, goods, &c. The chief exports are:—grain (for £8,000,000 to £9,000,000), timber, hides, flax, tallow, hemp, wool, linseed and hempseed, copper, potash. The specie exported considerably exceeds that imported. The commercial relations of Russia with Great Britain far exceed its commerce with any other country, being four times that between it and France, and more than four times that between it and Prussia.

In some branches of manufacture Russia has of late made great progress: vast quantities of raw material and a great deal of machinery

have been imported into Russia, and extensive establishments set up. Common leather and Morocco leather (the latter the best in Europe) are made at Kazan, Astrakhan, &c.; cotton, linen, and silk goods at Moscow, St. Petersburg, Kaluga, &c.; sailcloth and cordage, at Archangel, Novgorod, &c.; cashmere shawls in Penza, Jekaterinoslaw; carpets at Koursk, Smolensk, &c.; then fire-arms, cutlery, glass, jewellery, &c.

The exports of Russia in 1861 amounted in value to 177,179,985 silver rubels (against 181,383,281 silver rubels in 1860). The European trade figured for 159,860,299, the Asiatic for 13,458,122, and the exports, to Finland for 3,861,564 silver rubels.

The imports in 1861 amounted to 167,111,131 sil. rub., not reckoning the different articles imported duty-free for the use of the government or of different privileged companies. The European trade figured for 142,750,300, the Asiatic for 22,139,340, from Finland for 2,221,491 silver rubels.

Coined metal exported: 15,790,353 sil. rub. (5,914,809 rubels more than in 1860); of this 11,751,962 across the European frontier, 4,038,391 across the Asiatic. Of bullion for 7,138,396 silver rubels was imported (8,713 rub. less than in 1860): of this for 6,967,748 was from Europe, 171,154 from Asia.

The principal articles of export in 1861 were:—

Corn	69,161,601	silver rubels.
Different woods	5,947,363	" "
Raw hides	1,294,060	" "
Prepared hides	1,325,490	" "
Flax (or line)	3,419,911	pud weight.
Hemp	2,977,656	" "
Tallow	2,546,325	" "
Wool	1,045,664	" "
Linseed and hempseed .	1,237,458	tschetwert.

Then iron, copper, potash, and silk. The export of flax (line), hemp, tallow, iron, wool, silk, and seeds has fallen off.

The principal articles of import are: sugar, oil, coffee, cotton and cotton goods, wool and woollen wares, silk and silk stuffs, linens, pig and cast iron, wine, dye-stuffs, machines, fruits.

The number of ships entering Russian ports in 1861 was 10,634, viz. 5804 laden and 4830 in ballast; cleared out 10,739, viz. 9364 laden, and 1375 in ballast. Of the vessels entering 1956 were British.

AGRICULTURE.

In agriculture Russia is far behind the rest of Europe. In spite, however, of this and of many natural obstacles, sufficient corn is produced to allow of the export of enormous quantities. Cultivation does not extend beyond the 65th. degree of north latitude, and crops cannot be depended upon northward of 62 degrees. Owing in a great measure to the system of tillage, the cattle live to a great extent upon straw; and are therefore subject to terrible ravages by certain epidemic diseases.

MINERAL PRODUCTIONS.

The mineral treasures of Russia are mostly confined to the Ural Mountains or drawn from her Asiatic territories. The gold now produced is valued at from £3,500,000 to £4,000,000 per annum. Silver is also found in considerable quantities, as also platina, copper, iron, lead, mercury, zinc, antimony, cobalt, salt, coal, malachite, serpentine, marble; then the topaz, amethyst, onyx, carnelian, jasper, &c. Fossil ivory the teeth and tusks of innumerable long defunct mammoths and rhinoceroses—forms an important article of the commerce of Siberia.

CHIEF TOWNS.

St. Petersburg.—Pop. 586,283, of these only 212,649 females. Here are numerous manufactures of articles of gold and silver; sugar, linen, and cotton stuffs, oilcloth, glass, tapestry, paper, fire-arms, &c. In 1861 the number of vessels entering this port was 2147; clearing out 2159.—*Moscow* (Russ. *Moskwa*).—Pop. about 400,000. The principal manufactures are—cottons, woollens, silks, carpets, and jewellery.—*Odessa.*—Pop. about 115,000. Great export trade, principally of wheat; then of tallow, hides, wool, iron, linseed, caviar, &c. Odessa is a free port.—*Riga,* with a population of about 85,000, has a trade in hemp, flax, grain, seeds, tallow, potash, and timber: it has also large sugar refineries and tobacco factories.

EXCHANGE.

The Russian laws of Exchange date from 1832.—The endossers as well as the drawer of a bill are liable for the same. The presentation of a bill must take place the day after receipt: also the declaration of the drawee. Bills at sight become invalid if not presented within a twelvemonth. Bills at date become invalid after a lapse of two years, if no demand for payment is made. For accepted bills at sight there

are three days of grace; for bills payable at a certain date, ten days. Fair bills are payable the evening before the last day.

MONEY.

In Russia accounts are kept in silver *rubels* of 100 *kopeks*. The $\frac{1}{2}$-rubel pieces are called *poltins*, the $\frac{1}{10}$-rubel pieces *griwes*, the 3-kopek pieces *altins*, the half-kopeks *dengas* or *denuschks*, the quarter-kopeks *poluschks*. The rubel silver is worth about 3*s*. 3*d*.

Coins now issued are—gold: half-imperials of 5 rubels, weighing 1 solotnik 51 doli, $\frac{11}{12}$ fine, and worth now something more than 5 rubels silver;—silver: pieces of 1 ruble, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$, $\frac{1}{20}$ ruble;—copper: pieces of 3, 2, 1, $\frac{1}{2}$, and $\frac{1}{4}$ kopek, the value of 32 rubles being made out of a pfund (pound) copper.

MEASURES.

Long Measure: The integer is the *saschehn*, equal to 7 English feet; it is divided into 3 *arschin* of 16 *werschok*: the *arschin* is equal to 28 English inches. The Russian foot is the same as the English foot.

100 *arschin* = $77._{778}$ Eng yards . . . . = $106._{634}$ Prussian ellen.
" = $71._{119}$ French mètres . . = $91._{272}$ Vienna "

The *werst* has 500 *saschehn*, or 3,500 feet: $104._{1555}$ werst make a degree.

Land Measure:—The *dessätine* has 2,400 square *saschehn*, equal to 117,600 square feet. The so-called *larger dessätine*, has 3,200 square *saschehn*.

Cubic Measure:—The cubic *saschehn* equals 343 Eng. cubic feet. Firewood is sold by the cubic *saschehn*.

Dry Measure:—The *tschetwerik* legally contains 64 Russian pounds of distilled water weighed in a vacuum by $+13\frac{1}{3}^{\circ}$ Réamur, and = $1601._{21185}$ Russian or English cubic inches = $26._{2377}$ French litres. The *tschetwerik* has 4 *tschetwerka* of 2 *garnitzi*: 8 *tschetwerik* make a *tschetwert* = $12{,}809._{6948}$ Russian or English cubic inches.

100 tschetwert = $72._{185}$ Eng. imp. quarters
" = $209._{902}$ French hectolitres
" = $595._{196}$ Constantinople kiló
" = $381._{907}$ Prussian scheffel
" = $341._{279}$ Vienna metzen
" = $383._{032}$ Castilian fanegas.

In trade the *weight* of a *tschetwert* is thus reckoned: of wheat 380 Russian pounds; of rye 354 pounds; of barley 290 pounds; undried

oats 240 pounds. The *kuhl*, or sack, is supposed to contain a *tschetwert*. Its *weight* is thus calculated:—rye flour 300 Russian pounds including sack, 290 without sack; grist 320 pounds with sack, 310 without sack; then, with the sack—rye 360, barley 260, oats 220, undried oats 237 Russian pounds.

Chalk, sand, and stones for building are sold by the cubic *saschehn*. Lime is generally sold by weight: the lime ton = 10 *pud*, or 400 pounds. The cuc *saschehn* of hay has legally 20 *pud*, or 800 pounds.

Fluid Measures: The *wedro* contains 30 Russian pounds of distilled water, weighed in a vacuum, by +13¼° Réamur, or 62° Fahr., and equals $750_{.568}$ Russian or English cubic inches. The *wedro* is divided into 10 *kruschka*, and also into 8 *stoof*: the *kruschka* is also sometimes called *stoof*, though really less than the real *stoof*: 40 wedro make one *botschka*.

100 *kruschka*	=	$27_{.070}$	Eng. imp. gallons
" "	=	$122_{.989}$	French litres
" "	=	$127_{.302}$	Danish pott
" "	=	$107_{.411}$	Prussian quart.

The wedro therefore equals $2_{.707}$ Eng. imp. gallons = $12_{.2989}$ French litres.

WEIGHTS.

The integer is the *pfund*, of 9216 *doli*. The Russian (or English) cubic inch of distilled water weighs—in a vacuum, and by 62° Fahr.—$368_{.361}$ *doli*; and the Russian *pfund* equals in weight $25_{.018935}$ Russian or English cubic inches of distilled water. The pfund is divided into 96 *solotnik* of 96 *doli*.

The *pud* has 40 pfund = $36_{.1129}$ Eng. pounds avoird., or $16_{.3805}$ Fr. kilogrammes. The *berkowetz* has 10 *pud*, or 400 pfund. The *dwoinik* is 2 pfund, the *troinik* is 3 pfund, the paeterik 5 pfund, the *desaeterik* 10 pfund.

100 *Russian pfund*	=	$90_{.2323}$	Eng. pounds avoird.
" " "	=	$109_{.7180}$	" " troy.
" " "	=	$40_{.0512}$	French kilogrammes.
" " "	=	$81_{.9023}$	German Zollverein pfund.
" " "	=	$96_{.2534}$	Swedish pund victualie-vigt.
" " "	=	$32_{.0211}$	Constantinople oke.

The apothecary's *pfund* is ⅞ of the general *pfund*.

For jewels the Dutch weights are employed.

The *last*, for ships, differs according to the article. In shipping to England the English *ton* in bargained for, which ton = $55_{.382}$ Russian

pud. This of course also differs according to the article; *e. g.* 63 pud hemp, flax, iron, tallow, &c. = 1 ton; 3500 hareskins, 8 tschetwert of wheat or linseed, or 60 pieces of sailcloth = 1 ton.

SPAIN.

Continental Spain covers an area of 177,781 Eng. square miles; the Balearic Isles 1,757, and the Canaries 3,220 square miles; total 182,758. The population of Spain may be taken at 16,000,000; that of the Balearic Isles 267,000, and the Canaries 227,200; total 16,494,200. The Spanish colonies are: Cuba, with an area of 48,489 square miles and a total population of 1,449,462 persons, viz. whites 564,698, free mulattoes 216,177, slaves 668,587; Porto Rico, with an area of 3,700 square miles and about 500,000 inhabitants, of whom some 35,000 slaves.

The religion of Spain is Roman catholic, and no other is tolerated. The form of government is a constitutional monarchy.

The revenue is about £23,000,000; expenses the same. The national debt is about £148,000,000.

The army numbers about 235,000 men, of whom some 20,000 are cavalry. The navy comprises 46 sailing vessels, 29 paddle-wheel steamers, and 65 screw steamers. A number of ironsides, gunboats &c., are in course of construction.

FEATURES OF THE COUNTRY.

The Pyrenees, a huge rampart along the north-east frontier, cut Spain off from the rest of Europe. This wall is so continuous and unbroken, that there are only two passes practicable for wheel-carriages, one at either end. The greatest elevations of these mountains are 10,910 feet (Pena de Penaranda), 9000 to 11,000 feet (Sierra de Penamarcha), 6,900 and 5,700 feet (Sierra Alba and Sierra Sejos). Many other chains of mountains intersect parts of Spain in various directions, with elevations of 10,000, 8,000, 5,000 feet, &c. The rock of Gibraltar is 1450 feet high. Between the Cantabrian chain on the north and the Sierra Morena on the south the country forms a table-land of a mean elevation of 2,300 feet, with a general slope westwards, as indicated by the course of the larger rivers. The valley of the Guadalquivir, south of this table-land, is 1000 feet lower than the valley of the Guadiana. This valley of the Guadalquivir and the basin of the Ebro in its central and

lower part, form the only lowlands of the kingdom. The southern part of the kingdom, bounded by a line running from Cape Palos to Cape St. Vincent, has a tropical climate and corresponding vegetation, being sheltered on the north by high lands. Here we find the sugar-cane, and cotton-plant, banana and fig, palm, pomegranate, lemon, citron, &c.: the olive and the mulberry abound. On the table-land the extremes of climate are very great: in winter the piercing winds from the snowy and ice-clad mountains, combined with the general elevation, render the cold severe: while in summer the heat is intense and untempered, and scorching droughts are frequent. Galicia and Asturias have a more temperate climate, owing to their proximity to the sea. The plains of Andalusia and the basin of the Douro have the richest soil, the latter especially yielding abundant crops of fine wheat. It is estimated that scarcely one-fourth of the country is improved: three-fifths are pasture lands, and only one-twelfth is covered with wood. The forests that remain are chiefly in Asturias and Catalonia: in the former are fine oak forests. The coast-line of Spain extends some 2000 miles.

Spain is very backward in means of communication: the roads are bad: the navigation of the rivers is very imperfect, and many of the canals made in former days of prosperty have been suffered to go to ruin; of railways there are as yet comparativaly few, although efforts are now being made to put this means of communication upon a more satisfactory footing, and some 1800 Eng, miles have been opened.

COMMERCE, INDUSTRY, NAVIGATION, &c.

The whole commercial movement of Spain—import and export—for 1859 was represented by a sum of 2287.; millions of reales, equal to about £24,000,000; of which imports £13,200,000, exports £10,800,000. The principal articles of import were: Cotton and cotton stuffs; iron and iron and steel goods of all sorts, machines, materials for railways, &c.; sugar, woollen goods, cod-fish, coals; gold and silver in bars and wrought; spirits, guano, and watches. The chief exports were: Wine, lead, raisins, flour and meal, olive oil, wool, corn, salt and minerals of different kinds, oranges, cattle.

The manufactures of Spain are of little account, and confined to a few leading districts. The principal are: Linen in Galicia; silks, cotton, and woollens in Valencia, Barcelona, Saragossa, Guadalaxara; iron, copper, and brass wares in Biscay; leather in Sevilla, Malaga, &c., jewellery, paper, gunpowder, fire-arms, porcelain, at Madrid; tobacco at Seville and Malaga; shipbuilding and manufacture of sailcloth, cordage, &c.

at the different sea-ports, such as Ferrol, Coruña, Cadiz, Barcelona, Valencia, &c. On the coasts of the Mediterranean large quantities of barilla are manufactured from sea-weed.

The liquorice plant is largely cultivated in the south-eastern parts of the country; hemp and flax are grown in Arragon; saffron and other dye-stuffs in the interior. The apple grows only in Asturias, and there large quantities of cider are made. The sheep are of the merino breed, and yield much and fine wool.

The quicksilver mine of Almaden is a very rich one, and is the source of much revenue; most of the cobalt used in Europe comes from Galicia; in Murcia and round about there are masses of lead sufficient to supply the world for ages; silver is found at Guadalcanal. Tin, copper, and antimony are also found, but the mines are not worked. Exhaustless stores of rock-salt exist in Catalonia.

The amount of tonnage entering Spanish ports in 1859 was 1,795,654 tons; clearing out 1,366,190 tons. Of the former 716,318 tons, of the latter 487,769 tons under Spanish flag.

PRINCIPAL TOWNS.

Madrid, on the Manzanares, with a population of some 265,000. Here are government establishments for the manufacture of porcelain and carpets; then others for silks, hats, printed linens, paper, gold articles, hardware, &c.—*Barcelona*, on the Mediterranean, has a population (incl. Barcelonetta) of 125,000. It carries on an extensive trade.—*Sevilla*, on the Guadalquivir; pop. 90,000; trade in wool, skins, oil, and silk; manufactures of silk stuffs, ribbons, hats, combs, leather, porcelain, and snuff and cigars for government account.—*Granada*, pop. 82,000; manufacture of silk goods and gunpowder. Here stands the Alhambra, or rather its ruins.—*Valencia*, pop. 75,000; silk and linen goods, guazes, camlets, artificial flowers, hats, paper, printed flooring tiles; much rice is exported.—*Malaga*, pop. 70,000; sea-port with important trade; manufactures of soap, leather, paper, hats; there are iron mines in the vicinity; exports of wines, fruits, oil, silk, iron, lead, &c.—*Cadiz*, pop. 60,000, is a seaport, with some trade; it is a strong place, and the chief station of the Spanish fleet.—*Cordova*, pop. 45,000; silver filagree work, silks, paper, hats.—*Ferrol*, pop. 16,000, has a magnificent harbour, and is one of the chief naval stations of Spain.

EXCHANGE.

The Spanish laws of Exchange were last revised in 1829. By *uso* the following is understood:—Inland bills two months; on inland

places from France 30 days; from England, Holland, and Germany two months; from Italy and all places of the Mediterranean and Adriatic three months; for other places the *uso* of those places themselves is adopted. There are no days of grace. Protest, if necessary, must be made at the latest on the day after the bill falls due.

MONEY.

Accounts are kept in *reales:* a *real* = $2\frac{11}{16}d$. The coins issued since 1848 are—gold: the *doblon de Isabel*, of 5 *duros* of 20 *reales* = 100 reales;—silver: the *duro* (of 20 reales), the *escudo* (10 reales), the *peseta* (4 reales), the half *peseta*, the *real;*—copper (since 1854): pieces of $\frac{1}{4}$ real (*cuartillos*), $\frac{1}{10}$ real (*decimas*), $\frac{1}{20}$ (half *decimas*). French five-franc pieces (taken for 19 reales) circulate in great numbers.

MEASURES.

Long Measure:—The *vara* is the standard measure, and is equal to 3 *pies*, or 4 *palmos* (*cuartos*), or 36 *pulgadas*, 48 *dedos*, 432 *lineas*, or 5184 *puntos;* but is also divided into *tercias* (thirds), *sesmas* (sixths), *octavas*, or *medias cuartas* (eighths), and *medias sesmas* (twelfths).

100 *Castilian varas* = $91._{318}$ Eng. yards = $125._{199}$ Prussian ellen.
" " = $83._{500}$ French mètres = $107._{170}$ Vienna ellen.

The *legua*, or league, has 8,000 varas: the *geographical legua* has but $7603._{84}$ varas: the *legua maritima* has $6653._{36}$ varas.

Square Measure:—The *estadal* has 16 square *varas*. The general *fanega* for land has 576 *estadales* = $1._{58786}$ Eng. acres = $64._{256}$ French ares. The *yugada* has 50 *fanegas*. In some provinces the *fanega* has only 500 *estadales* = 8,000 square varas. The *aranzada*, for vineyards, has 400 *estadales*.

Dry Measure:—The *fanega* has 4 *cuartillas* of 3 *celemines* of 4 *cuartillos* of 4 *ochavillos* = $12._{061212}$ Eng. imp. gallons. The *cahiz* has 12 *fanegas*.

Fluid Measure:—The *arroba mayor*, or *cantara*, has 4 *cuartillas* of 2 *azumbres* of 4 *cuartillos* of 4 *copas:* 100 *arrobas mayores* = $355._{173}$ Eng. imp. gallons. The *moyo* has 16 *arrobas mayores*. The *arroba menor*, used for oil, is supposed to contain a weight of 25 libras.

WEIGHTS.

The ordinary *quintal* has 4 *arrobas*, or 100 *libras:* the *quintal macho* has 150 *libras*. The *libra* has 16 *onzas*, or 128 *drachmas*,

or 256 *adarmes*, or 9216 *granos:* 100 *libras* = $101._{442}$ Eng. pounds avoirdupois or $0._{46014}$ Fr. kilos. The shipping ton is 20 quintales.

Gold and silver are weighed by the *marco* of 8 *onzas* of 8 *ochavas* of 2 *adarmes* of 3 *tomines* of 12 *granos* = 4608 granos, or ½ libra. For assaying the same *marco* is used, divided, for gold, into 24 *quilates* of 4 *granos* of 8 *partes;* for silver, into 12 *dineros* of 24 *granos* = 288 granos. For jewels the *onza* has 140 *quilates* of 4 *granos* = 560 granos. For medicines the mark is divided into 8 *onzas* of 8 *drachmas* of 3 *escrupulos* of 2 *obolos* of 3 *caracteres* of 4 *granos* = 4608 granos. The mark = $0._{50721}$ Eng. pound avoird.

SWEDEN.

The kingdom of Sweden has an area of 168,042 Eng. square miles, with a population of about 3,920,000; Norway 121,779 sq. miles and 1,550,000 souls.

The annual revenue of Sweden amounts to about 30,000,000 riksdaler riksmynt (£1,687,500) pretty evenly balanced by the expenditure. The public debt amounts to about £1,700,000. It must be remarked that not only the major part of the land troops, but also a great number of civil functionaries, are paid from the proceeds of certain royal domains not mentioned in the budget.

The annual revenue of Norway is about £713,300, and the expenditure is about the same. The debt of this portion of the kingdom amounts to some £1,550,000.

The Swedish army, with the militia, &c., numbers 144,000 men; that of Norway 23,500. The Swedish fleet numbers 10 ships of the line, 6 frigates, 4 corvettes, 160 smaller vessels, then 120 cannon yawls, 590 small sailing vessels, and 594 rowing sloops. The Norwegian fleet consists of some 140 vessels with 450 guns.

The government is a constititional monarchy.

FEATURES OF THE COUNTRY.

The physical features of Sweden are remarkably uniform; Gothland, in the south, has for the most part a level surface, the hills nowhere rising above some 1,100 to 1,130 feet: the rest of the country consists of two plateaux, both sloping away gently towards the east; one of which extends along the low rocky shore of the Gulf of Bothnia, while

the other lies between this plateau and the high mountain-ranges on the Norway frontier. The scenery is tame compared to that of Norway. Some of the lakes, however, are very picturesque: the principal are the Wener, Wetter, and Mäler, which are among the largest in Europe. The coast is everywhere fringed with rocky islets, but the only islands of any importance are Gothland and Öland, in the Baltic. The extremes of heat and cold are greater than in Norway. The soil is in general poor and thin. The forests are very extensive.—Norway is divided into two parts, the broad southern region and a small tract in the north. In the south the mountains form vast plateaux, with an average height of some 4000 feet. From these rise the more elevated peaks, Store Galdhöpiggen reaching a height of 8,400 feet, the peaks of the Skagtolstind 8000, and the Sneehättan 7620 feet. Mount Sulitelma, in the north, rises to a height of 6,200 feet. The whole country is, in fact, mountainous, and has no plains of any extent. The finest scenery is on the coast and in the narrow fyords, which run into the land for some 40 or even 80 miles, hemmed in by mountain precipices, glaciers, &c. The coast scenery is especially beautiful near the Lofoden Isles. Lakes are very numerous. The climate of Norway is in general equable and mild for its latitude.

COMMERCE, INDUSTRY, NAVIGATION, &c.

The value of the total imports of Sweden (including those from Norway) amounted in 1860 to 82,469,000 riksdaler (£4,638,800); the exports (including those to Norway) to 86,496,000 riksdaler (£4,865,400). Then gold and silver for £170,312 imported, and for £2362 exported.—England took for £2,346,187 of the exports, and contributed for £930,881 of the imports of Sweden.

The principal import articles of Sweden are: cotton (19,226,177 lbs.), cotton yarn and stuffs, wool and woollen goods, coals, skins and leather, coffee and tea, sugar, raw tobacco and cigars, salt, butter, cheese, vinegar. The more important exports are: iron, steel, copper, alum, corn, timber and planks, tar.

The imports of Norway in 1856 (more recent accounts are wanting) amounted to £3,610,650, the exports to £5,918,500. Import articles are: cotton, cotton yarn and stuffs; wool, woollen yarn and stuffs; hardware, corn, sugar, coffee and tea; tobacco. Export articles: timber and deals, fish, copper. England does a large trade with Norway.

The great industry of the country is the production of iron. The fisheries along the coast of Norway are of great value, and afford employment to great numbers of people.

The number of vessels entering Swedish ports in 1859 was 9,225, of 506,001 *lasts* of 2 Eng. tons; cleared out 9134 vessels, of 528,249 *lasts*. Vessels entering Norwegian ports 10,379, of 467,518 *lasts* of $2_{\cdot 55}$ Eng. tons; cleared out 10,600 vessels, of 491,169 *lasts* of $2_{\cdot 55}$ Eng. tons.

The number of vessels in the Swedish merchant navy in 1860 was 3364, of 157,456 *lasts* of 2 tons. The Norwegian merchant navy consisted of 5,278 vessels of 263,041 *lasts* $2_{\cdot 55}$ tons.

AGRICULTURE, &c.

Agriculture, although almost the only occupation of the people in general, is, both in Sweden and Norway, in a very backward condition. In the more fertile districts potatoes, wheat, rye, oats, hemp, flax, hops, tobacco, &c., are grown: farther north potatoes and barley are almost the only crops. The pastures of Norway are everywhere excellent, and cattle abound. The forests of both kingdoms are extensive, and furnish excellent timber.

MINERAL PRODUCTIONS, &c.

These are one of the great sources of wealth to the country. Iron is very abundant, especially in the central provinces and Dalecarlia, and is reckoned the finest in Europe; copper also abounds; then cobalt, lead, nickel, silver, zinc, antimony and a little gold, sulphur, &c., are found.

CHIEF TOWNS.

Stockholm (capital of Sweden); pop. 117,000: silks, linens, woollens, cottons, machinery, iron and steel wares; sugar, tobacco, glass; dye-works, tanneries. Large foreign trade.—*Christiana*, (capital of Norway); pop. 40,000: woollens, hardware, paper, tobacco; breweries, distilleries; considerable trade in timber, fish, &c.—*Gothenburg*, pop. without suburb 33,000; extensive trade and shipping.—*Bergen*, pop. 26,000; tobacco, rope, sails, candles; shipbuilding and distilling; but fishing, is the chief occupation of the people.

EXCHANGE.

For Sweden: The acceptance of a bill or the refusal to accept must take place within twenty-four hours. Inlands bills payable a certain time after sight must be presented for acceptance within three months from the day of drawing. All bills from abroad must be sent for acceptance by the first post, except any particular arrangement to the contrary is made. Usance is one month after sight. Bills at sight

enjoy no days of grace. All other bills payable on a certain date enjoy six days of grace. Blanco endorsement is only allowed for bills from or on foreign places.—*For Norway:* There is no usance. Every bill has eight days of grace and then two extra days.

MONEY.

Accounts are kept in *riksdaler riksmynt* of 100 *öre* each: a *riksdaler* = 1*s.* 1½*d.* Coins now issued are: gold—the *ducat,* worth 9*s.* 3⅝*d.*, and pieces of two and four ducats; silver—pieces of 4 *riksdalers riksmynt,* equal to the former *riksdaler silfver,* and current for 400 *öre;* pieces of 2 *riksdalers riksmynt* and 1 *riksdaler riksmynt;* then ½, ¼, and $\frac{1}{10}$ *riksdaler riksmynt,* current for 50, 25, and 10 *öre;* copper—pieces of 5, 2, 1, and ½ *öre.*

MEASURES.

Long Measure:—The *fot* has 10 *tum* of 10 *linier,* and = $0_{\cdot 974102}$ Eng. foot. The *stang* has 10 *fot,* the *ref* 10 *stänger.* The *famn* has 6 *fot;* the *aln* has 2 *fot* = $1_{\cdot 9482}$ Eng. foot. The *mil,* or mile, has 36,000 *fot,* or 6,000 *famn,* and = $6_{\cdot 6416}$ Eng. statute miles.

Square Measure:—The *tunnland* has 14,000 square *aln* = $1_{\cdot 2198}$ Eng. acre, $49_{\cdot 3641}$ French ares. The *koppland* has 1750 square *fot.*

Cubic Measure:—For firewood the *famn* is 4 *aln* high and 3 *aln* broad, and the logs are either 1½ or 1¼ *aln* long. The *stafrum* has 33⅓ cubic *aln.*

Dry Measure:—The cubic *fot* has 10 *kannor* of 100 cubic *tum.* The *kannor* = $2_{\cdot 304}$ Eng. quarts: 100 cubic *fot* = $9_{\cdot 0005}$ Eng. imp. quarters, or $26_{\cdot 1719}$ Fr. hectolitres. 10 former corn *tunna* = 63 cubic *fot* = $5_{\cdot 6703}$ Eng. imp. quarters, $16_{\cdot 488}$ Fr. hectolitres. The *stig,* for charcoal, has 12 of these tunna = $6_{\cdot 804378}$ Eng. quarters, or $1_{\cdot 9786}$ Fr. cubic mètre.

Fluid Measure:—The *kannor* has $2_{\cdot 304}$ Eng. quarts: 60 *kannor,* or 6 cubic *fot,* make an *am* = $34_{\cdot 56}$ Eng. imp. gallons, or $157_{\cdot 0212}$ Fr. litres: 1½ *am* = 1 *oxhufvad;* 2 *oxhufvad* = 1 *pipor;* 2 *pipor* = 1 *fuder.*

WEIGHTS.

The *pund* has 100 *orst* of 100 *korn* = $0_{\cdot 937151}$ Eng. pounds avoird., or $1_{\cdot 128898}$ pounds troy. The *centner* has 100 *pund:* the *nyläst* 100 *centner.* The *sten* (stone) of wool has 32 *pund.*

The pound for making up medicines has 12 ounces of 8 drachms, of 3 scruples of 20 grains = 5760 grains = $5413_{.4379}$ Eng. troy grains.

For assaying gold and silver the pund is divided, for gold, into 24 carats of 12 grains; for silver, into 16 *lod* of 18 grains.

NEW SYSTEM OF MEASURES.

This system, valid from 1st Jan. 1863, is as follows: The *fot* has 10 *tum* of 10 *linier:* the *ref* has 10 *stänger* of 10 *fot.*—The square *ref* has 100 sq. *stänger* of 100 sq. *fot;* the sq. *ref* = $0._{217}$ Eng. acre, $8._{815}$ French ares.—The cubic *fot* has 10 *kannor* of 100 cubic *tum.*

SWITZERLAND.

The area of Switzerland is said to be 15,261 square miles. It consists of twenty-two cantons, with an aggregate population of about 2,400,000 souls, of which some 1,500,000 are protestants, the rest catholics. The constitution of all the cantons are democratic, excepting perhaps Neuchâtel.—Of the whole population only some one-ninth live in towns.

The expenses of the federal government amount to about £880,000 annually, which sum is accordingly raised, more than one-third proceeding from the customs. The public debt is not more than about £120,000.

The *regular* army *(Bundesauszug)* is about 81,000 strong, and is reckoned to consist of about 3 per cent. of the total population. With the reserve and militia, a force of 186,380 can be raised.

There are some 570 miles of railway in working order.

FEATURES OF THE COUNTRY, &c.

The surface of Switzerland is exceedingly mountainous. The whole of the country, except the Italian canton Ticino, or Tessin, and a small part of the canton of the Grisons, lies on the north of the main chain of the Alps, and the country therefore slopes away to the north. Of the Alps there are here four principal chains. The loftiest and longest bears the different names, according to its divisions, of the Pennine, Helvetic, and Rhœtic Alps, and forms two-thirds of the boundary between Switzerland, Sardinia, and Austria. The centre of this chain, as indeed of the whole range of the Alps, is at Mount St. Gotthard, where the Rhine, Rhone, Reuss, Ticino, and Toccia rise within a few miles of

each other. From this point branch off two principal ranges, one of which, called the Bernese Oberland, is of great breadth, everywhere covered with snow, and having several peaks over 13,000 feet in height, the Finsteraarhorn rising to even 14,106 feet. The loftiest summits on Swiss territory are—Monte Rosa 15,208 feet, Monte Cervin 14,771 feet, Weisshorn and Saasgrat 15,000, and several others over 14,000 feet. On account of the mountainous nature of the country, only a small extent is cultivable. The principal rivers are the Rhine, the Aar, the Rhone, and the Ticino. The lakes are also celebrated for their grand scenery. The northern and western parts of Switzerland enjoy on the whole a pretty equable and moderate climate: the southern part of the canton Ticino has an Italian temperature. Many of the valleys, where narrow and enclosed by high mountains, are very unhealthy, owing to the heat, moisture, and stagnation of the atmosphere. The chief wealth of Switzerland lies in its mountain pastures: and vast quantities of cheese are exported.

In 1860 it was calculated that the inhabitable soil of Switzerland was distributed as follows: Fields 582,000 hectares, value *frs.* 969,000,000; meadows 686,000 hectares, value *frs.* 1,591,540,000; vineyards 27,720 hectares, value *frs.* 138,000,000; forests 712,800 hectares, value *frs.* 297,000,000; pasturage 792,000 hectares, value *frs.* 165,000,000.

COMMERCE, INDUSTRY, &c.

Agriculture has been carried on of late in a much improved style, and in good years Switzerland does not need to import corn.

The principal branches of industry are: watches and jewellery, cottons and cotton lace, silk goods, woollens, paper, leather, linen, damasks, straw plait.

The import of cattle, sheep, &c., in 1861 was 211,372 head; export 84,716 head. Of things reckoned according to their worth—imports, *frs.* 457,102; exports, *frs.* 7,187,736. Of things calculated by weight—imports, 15,697,931 Swiss hundredweight; exports, 1,720,484 Swiss hundredweight.

The principal import articles are: corn, rice, beer, wine, oil, spirits, coffee, sugar, tobacco, iron, cotton, twist, silk, wool and woollen goods, flax and hemp, linen, glass, dye-stuffs, colonial goods, dry and salted fish, iron, steel, copper, tin, zinc, &c. Articles of export: cattle, cheese, butter, skins, and wood: cotton goods; silk goods, particularly ribbons; watches, watchmaker's utensils, jewellery; straw-hats, paper, embroidered goods, cotton lace, wooden wares, machines, fine steel goods, mathematical instrumens, &c.

The mineral productions of Switzerland are unimportant.

CHIEF TOWNS.

Bern:—The seat of the federal government: pop. 31,000. Cotton, linen, and woollen goods; fire-arms, gunpowder; philosophical instruments, clocks and watches, straw hats, paper, leather.—*Basle*:—Pop. 30,000; silk ribbons, and other silk fabrics, cottons, gloves.—*Geneva*:—Pop. 31,000; watches, jewellery, *articles de vertu*.—*Zurich*: pop. 18,000; cottons, silks, and mixed goods.

LAWS OF EXCHANGE.

The laws of Exchange in most of the cantons of Switzerland are very indefinite and incomplete. Some of the places near the French frontier have adopted the French *Code de Commerce* more or less modified. There are generally no days of grace, and a bill must, as a rule, be paid on the day it is due, or, is this a Sunday or holiday, either the day before, as in some cantons, or the day after, as in others. In cases of non-payment protest must be made forthwith.

MONEY.

In Switzerland accounts are kept in *francs*, or *franken*, of 100 *rappen*, or *centimes*. This franc is the same as the French franc, that is, about 10*d*. The currency of Switzerland is a silver one. Coins issued: silver—pieces of 5 and 2 francs and 1 and ½ franc, and 20, 10, and 5 rappen: bronze—pieces of 2 and 1 rappen.

French, Sardinian and Belgian money circulates in large quantities.

MEASURES.

Long Measure:—The new Swiss *fuss*, or *pied* = $0._{98427}$ Eng. foot, or $0._{3}$ French mètre. The *elle*, or *aune*, has two *fuss*, or *pieds*, the *stab* 4 fuss, the *klafter* 6 fuss, the *ruthe* 10 fuss; the *wegstunde*, or league, 16,000 fuss = 4,800 French mètres, $2._{98}$ Eng. miles.

Square Measure:—The *juchart* has 400 square *ruthen* = 36 French ares, or $0._{889}$ Eng. acre.

Cubic Measure:—The cubic *klafter*, for stones, hay, &c., has 216 cubic *fuss*, or *pieds* = $205._{96645}$ Eng. cubic feet, $5._{832}$ cubic mètres. For firewood the front surface of the mass measures 1 square *klafter*, or 36 square *fuss* or *pieds* = $34._{876}$ Eng. square feet; but the length of the wood varies in the different cantons.

Dry Measure:—The unity is the *quarteron* = $3._{30145}$ Eng. imp. gallons, 15 French litres. The *quarteron* is divided into 10 *immi*, or into 4 *vierling* of 4 *mässlein*: 4 *quarteron* make 1 *mütt*, or *sack*; and

10 *quarteron* make 1 *malter*. (The *quarteron* and the *malter* are the same as the Baden *sester* and *malter*.)

Fluid Measure:—The *pot*, or *maass*, contains $1._{32}$ Eng. quart, $1._{5}$ Fr. litre. It is divided into 4 schoppen: 100 *pots* make a *saum*.

WEIGHTS.

The unity is the *pfund*, or *livre*, of 500 Fr. grammes = $1._{10229}$ Eng. pound avoird. For scientific purposes this *pfund* is divided into 500 *grammes;* but for general use it has 32 loth, or 16 unzen, which are then halved and quartered *ad libitum*. The *centner* has 100 *pfund*.

For making up prescribed medicines the old weights and denominations are allowed to be used, but in all other cases the new system is to be employed. The old pound for medicines was the Nürnberg *pfund* of $357._{58}$ Fr. grammes, or 5,522 Eng. troy grains.

TURKEY.

Turkey has possessions or tributaries in Europe, Asia, and Africa. Its territories in Europe are variously estimated at from 197,697 to 202,885 Eng. square miles, with a population of some 15,500,000; those in Asia at 650,000 Eng. sq. miles, with some 16,050,000 inhabitants; those in Africa at 930,000 Eng. sq. miles, with about 5,050,000 inhabitants. Some of the territories in European Turkey are tributary principalities or states, and so are all those in Africa. Of the total population some 25,000,000 are professed Musselmans.

The income for that part of the empire under the immediate rule of the Turkish government is said to amount to 290,000,000 of francs. The home and the foreign debt together amount to nearly £33,000,000.

The army numbers about 160,000 men; the contingents drawn in time of war from Bosnia, Albania, Servia, and Egypt amount to another 120,000 men.

The fleet under the command of the high-admiral at Constantinople numbers some 46 armed vessels and about 18 unarmed.

The government is a mild despotism.

European Turkey comprehends, besides Turkey Proper, the principalities of Servia, Wallachia, and Moldavia, which render but a nominal subjection: they pay a small tribute. Asiatic Turkey comprises Asia Minor, Armenia and Kurdistan, Syria and Palestine, Mesopotamia, and

a narrow belt of Arabia on the Red Sea coast. The African territories comprise Tunis, Tripoli, Barca, Fezzan, Egypt, Nubia, and Sennaar.

The area of Egypt is about 127,000 Eng. sq. miles, with a population of some 2,800,000. It is governed by a pasha. The pashalik is hereditary in the family of Mehemet Ali. The revenues of Egypt are said to amount to about £4,000,000. The debt is about £9,800,000. Army 15,000 men, of whom 3,000 garrison troops. Navy, 26 vessels and 23 transports.

COMMERCE, INDUSTRY, NAVIGATION, &c.

The total value of the imports on the markets of Constantinople are about as follows: For some 140 millions of francs from England, for 50 millions from France, for 15 from Germany, for 3 from Italy, for 10 from Italy, for 5 from Belgium, and for 2 millions of francs from the Netherlands. The number of vessels entering the port of Constantinople in 1859 was 15,588 of 3,051,229 tons, of which 5,692 vessels of 644,915 tons under Turkish flag; clearances 15,232 vessels of 3,002,066 tons, of which 5,251 vessels of 580,988 tons under Turkish flag.

The manufactures are mostly for domestic use: silk goods are made in various towns of Thessaly and Roumelia; carpets in Servia and Bulgaria; shawls in the Asiatic provinces; cottons, linens, and woollens; copper, brass, and tin wares; fire-arms, swords, &c. Sheep-farming and cattle-rearing are important branches of industry in the Principalities and Bosnia: goats are abundant everywhere and the buffalo in the southern provinces. Many valuable mines are known to exist, but they are either very imperfectly worked or not at all.

The industry of Egypt is unimportant. Agriculture is very backward; but cotton is grown in considerable quantities. Cotton, flax, and pulse of different kinds, are the principal exports. The imports of Egypt viâ Alexandra in 1860 were valued at 248,212,795 piasters; exports 268,893,302 piasters. England sent of the imports for 109,889,736 piasters, and took of the exports for 172,826,735 piasters.

PRINCIPAL TOWNS.

Constantinople (Stambul, Istambul): pop. 700,000. Foreign trade, carried on mostly by the Greeks.—*Alexandria, (Skandria, Iskenderieh):* pop. in 1859 about 400,000. Extensive foreign trade.—*Bukarest (Bukureschti):* pop. 100,000: important trade with articles of foreign extraction.—*Jassy:* pop. 65,000, of which 30,000 Jews; trade.—*Smyrna*

(Ismir): pop. 150,000; manufactures of woollen, cotton, and silk stuffs; extensive trade; principal exports raw and spun cotton, goat and camel's hair, wool, silk, leather, drugs, wax, dried fruits, rye, madder, and opium. *Trebizonde (Tarabozan):* pop. 45,000; manufactures of linens and cottons, and articles of copper; extensive trade; export of silk, wool, tobacco, carpets, Cashmere shawls, opium and other drugs, wax and honey; import of European manufactures, wine, colonial produce, &c.

EXCHANGE.

The laws of exchange are, in all important points, the same as those of the French *Code de Commerce.* In Smyrna European bills enjoy three days of grace.

MONEY.

Accounts are kept in piasters *(grusch)* of 40 *paras* of 3 *aspers.* The piaster is worth about 2⅜*d.* *Gold coins:* Pieces of 100 piasters and 50 piasters: the former weigh $111._{35}$ troy grains, $\frac{916}{1000}$ fine; the latter are in proportion. *Silver coins:* Pieces of 20, 10, 5, 2 piasters and one piaster. *Copper coins:* Pieces of 5 paras and 1 para. An immense amount of paper money is in circulation. In Smyrna the *beschliks,* or two-piaster pieces are most in circulation, together with Spanish dollars, French twenty-franc pieces, &c. In Egypt circulate piasters of 40 *paras* or *medinis:* 11 Egyptian piasters are equal to 10 Turkish.

MEASURES.

Long Measure: The *pik* is equal to about 27 Eng. inches, and in trade is always reckoned so: the *endaseh* is something less. 100 *pik* = 75 Eng. yards: 100 *endaseh* = $71._{4}$ Eng. yards. The *halebi* is used for land-measuring, and is $27._{9}$ Eng. inches: 100 *halebis* = 77¼ Eng. yards. Corn Measure: The legal *kiló* = $7._{94}$ Eng. gallons.—Fluid Measure: Fluids are generally weighed; wine, for instance, by the *oka;* but in retail a measure is used supposed to contain an *oka,* two *oke,* &c. The *alma,* for oil and some other things, is considered to contain 8 *oke:* 100 alma = $114._{55}$ Eng. gallons, $520._{466}$ French litres. In Smyrna rum is often sold by the old English gallon, which is then reckoned = 2½ oke.

In Alexandria, Cairo, &c. the *pik* is about $26._{8}$ Eng. inches, so that 100 *pik* = $74._{438}$ Eng. yards. The *feddan,* for land-measuring, has 400 square *great kasab* = $1._{465}$ Eng. acre. The tax *feddan* has 333⅓ *little kasab* = $1._{4}$ Eng. acre. In Alexandria the *ardeb,* for corn, contains 271, sometimes 279 French litres; in Kairo 179, sometimes 174 French litres.

WEIGHTS.

The *oka* = $2_{\cdot 824}$ Eng. pounds avoird. The *kantar* has 100 *rottel* and = $123_{\cdot 71}$ Eng. pounds avoird. For gold, silver, &c., there is the *tscheki* of 100 *derhem*, or drachms, of 16 carats of 4 grains = 4932½ Eng. troy grains. In Smyrna the *oka* is really a little heavier: 100 *oke* = $283_{\cdot 286}$ Eng. pounds avoird. The *kantar* has 45 of these *oke*.

In Egypt the *kantar (cantaro)* has 100 *rottels (rotoli)*; but there are different sorts. For instance a *cantaro* of the government = 98 English pounds avoird., the common *cantaro* 95½ Eng. pounds avoird. The *derhem*, or drachm, is the unit of the Egyptian weights, and = $47_{\cdot 6615}$ Eng. troy grains. An *oka* = $2_{\cdot 1235}$ Eng. pounds avoird. The *derhem* has 16 carat of 4 grains, and is used for silver, gold, &c.

A S I A.

ANNAM, or COCHIN CHINA.

Annam is a despotic state in south-eastern Asia, on the eastern coast of the great tongue of land stretching out between the Gulf of Siam and the Gulf of Tonquin towards the north-western coast of Borneo. The northern part of the country is called Tong-king, then comes Cochin China Proper, and still more southward Camboja. Cochin China is divided into three parts, northern, central, and southern. In the northern lies the chief town, Hué. The area of the country is computed at about 98,000 Eng. square miles: the population variously at from 5,000,000 to 30,000,000.

Tong-king and Camboja are moist and fruitful countries: Cochin-China is mountainous, but has some fertile valleys. In Tong-king iron, copper, silver, and gold, marble, alabaster, saltpetre, and salt, are found. The productions of the vegetable kingdom are: rice, maize, sweet potatoes, cashoo-trees, oranges, pineapples, sugar, pepper, cardamoms, anise, cotton, tobacco, the mulberry-tree, and different kinds of valuable wood. In Camboja the cotton-tree grows as high as the houses. Of rice there are two crops in the year. The principal trading-places are Kangkao and Saigôn, in Camboja; Nathrang, Phuyen, Quin-hon, Faïfo, and Hué, in Cochin China; Kecho in Tongking. Hué, the capital, is fortified, and is said to have a population of 60,000.

The medium of commerce and trade in Hué, Saigôn, &c., is the *kwan* of 10 *mus* of 60 *sapeks*. These *sapeks* are strung on a cord, each cord having 600, or 1 *kwan*. This *kwan* passes for about 2*s*. 4*d*. to 2*s*. 10*d*, The Spanish dollar circulates largely in the trading seaports. Golo and silver ingots are also used as money.

The *covid* is a measure equal to about 15 Eng. inches.

The *pecul*, or *picol*, equals 100 *cattys* of 16 *taels* = 133⅓ Eng. pounds avoirdupois: 1 catty = 1⅓ pound: 1 tael = 1⅓ oz.

For sugar 150 *cattys* (instead of 100) make a *picul*. In some places there is a *picul* in use of 112 *cattys*.

CHINA.

China (Tschin, Tschan-Ku, Schin) comprises China Proper, Chinese Tartary, and Tibet, with the islands of Formosa and Haiman. The total area of the empire is about 5,500,000 Eng. square miles, with a population of some 410,000,000. It is governed by an emperor residing at Pekin, in China Proper.

China Proper is divided into eighteen provinces, of a total area of 1,300,000 Eng. sq. miles, and a population estimated at 370,000,000.

Of the state of the finances little or nothing is known with certainty. The army, with the reserve, is said to number, 1,500,000 men, viz 700,000 Chinese, 300,000 Mongols, and 500,000 Mandtschus. The fleet at the disposal of the government is considered to comprise some 820 vessels, with 58,600 men and boys.

FEATURES OF THE COUNTRY.

The Chinese empire is bounded on the south by Annam, Laos, Birman, Assam, Butam, Nepal, and Hindostan; on the west by Western Tibet, Western Turkestan; on the north by Siberia. China Proper is bounded by Mandschuria, Mongolia, Kokonor, Tibet, Birman, Laos, Tongkin, and the sea. Of the features of the country inland little is known. It is intersected in various directions by different ranges of mountains, and has many fertile valleys. The two great rivers, the Yang-tsche-kiang (blue river) and the Hoang-ho (yellow river), rise at but a short distance one from the other: one runs away far to the north, the other far to the south; but they both eventually turn and draw nearer, till at their influx into the sea they are comparatively close to each other again. These two rivers may be said to drain the whole of China Proper. The coast has abundance of bays, of which some are very fine. The inland communication is greatly facilitated by these rivers and their affluents, and the numerous large and magnificent canals connecting them one with the other.

COMMERCE AND INDUSTRY.

The inland trade is very lively. Foreign commerce is carried on principally at the ports Canton, Shanghae, Amoy, Foochowfoo, and Ningpo. The commerce of England with China (including Hongkong) in 1859 amounted to — imports from, £9,014,310; exports to, £4,586,236. The principal and almost only articles England imports from China are silk and silk stuffs and tea. China takes from England cotton and woollen goods, lead, &c.

CHIEF TOWNS.

Pekin (Be-dsing): Pop. said to be 2,000,000; it is the seat of government; the manufactures are insignificant; important fairs.—*Canton:* pop. 1,000,000; immense foreign trade.—*Nanking:* pop. 500,000; manufactures of crape, satin, paper, artificial flowers, Indian ink and nankeen. —*Foochoofow:* pop. 500,000; silk and cotton fabrics; extensive trade.—*Amoy:* pop. 250,000; tea, silk; porcelain, umbrellas, paper, grass-cloths: extensive trade.—*Shanghai:* pop. 200,000; flourishing home and foreign trade.—*Hang-choo-foo:* pop. 1,000,000; a great industrial city situated on the Imperial Canal, with also an extensive trade.—*Ningpo:* pop. 380,000; important manufactories of silk stuffs; extensive trade.

MONEY.

The Chinese have no gold and silver coins, but pay in these metals according to weight. Accounts are kept in *taels:* a *tael* of pure silver, reckoning at 60*d.* the ounce for standard silver, is worth 78½*d.* The *sycee* silver is of different degrees of fineness: the commercial *sycee* is supposed to contain $\frac{96}{100}$ pure silver, and is worth 75¼*d.* the tael. The worth of a *tael* of gold $\frac{98}{100}$ fine is about £5. 0*s.* 6½*d.* The *tael,* or *lieng,* has 10 *mace,* or *tsien,* of 10 *cash,* or *candarihns,* or *fans,* of 10 *kesch,* or *li.* The *candarihn* in money varies from 10 to 14 or 15 copper kesh; therefore the mace from 100 to 140, the dollar from 720 to 1000 kesh. As weight the *kesh* is invariably $\frac{1}{10}$ Candarihn.

10 *hwuh*	equal	1 *sze*
10 *sze*	„	1 *haou*
10 *haou*	„	1 *li,* or *kesh*
10 *li*	„	1 *fan,* or *candarihn*
10 *fan*	„	1 *tsien,* or *mace*
10 *mace*	„	1 *lieng,* or *tael*

A Spanish dollar is equal to 7 mace and 2 candarihn.

WEIGHTS.

The *tael* = about 1⅓ oz. avoird.; the *catty* = about 1⅓ pound; the *picol* = about 133⅓ pounds avoird. 84 *cattys* = 1 Cwt.: 1 *tael* = 583⅓ troy grains.

10 *schu* = 1 *lin*
10 *lin* = 1 *tschu*
24 *tschu* = 1 *tael*
16 *taels* = 1 *catty*
2 *cattys* = 1 *yin*
30 *do.* = 1 *kinn*
100 *do.* = 1 *picol.*

In Macao the *picol balança* has 100 cattys; the *picol seda* $111_{.15}$ *cattys;* the *picol chapa* 150 *cattys.* The first is used for cotton and things of considerable value; the second for alum, pepper, &c.; the third for rice. 90 *cattys seda* = 1 Canton *picol,* or *picol balança.*

MEASURES.

Long Measure:—

10 *fan* make 1 *tsun,* or *pant.*
10 *tsun,* or *pants* make 1 *chih,* or *covid.*
10 *chihs,* or *covids,* make 1 *yin,* or *chang.*
5 *chihs,* or *covids,* make 1 *pu.*

About 300 *pu* = 1 *li,* or Chinese mile.

The *covid* of Canton = 14⅔ Eng. inches; that of the Mathematical Academy, and used by seafaring people, 13⅓ Eng. inches; that of the office of public works, and for land-measuring, $12_{.65}$ Eng. inches; the common foot for ordinary work is 13⅓ inches. The *li,* or mile is reckoned to be 1,800 of these last *covids,* or about 632⅓ yards, but differs considerably in the various provinces of the vast empire.

Land Measure:—

5 *chihs,* or *covids,* make 1 *pu,* or *kung.*
240 *pu,* or *kung,* make 1 *man,* or acre.
100 *man,* or acres, make 1 *ring.*

The *man* is also sometimes divided into 10 *fan* of 24 *li.*

Measures of Capacity:—

6 *suh*	= 1 *kwei,*	10 *ho*	= 1 *tsching*	= 31⅓	cubic *pants,*
10 *kwei*	= 1 *tschau,*	10 *tsching*	= 1 *tau*	= 316	„ „
10 *tschau*	= 1 *tsuy,*	5 *tau*	= 1 *hwo*	= 1580	„ „
10 *tsuy*	= 1 *tscho,*	2 *hwo*	= 1 *schih*	= 3160	„ „
10 *tscho*	= 1 *ho.*				

The more general measures are: 2 *yo* = 1 *ho*; 10 *ho* = 1 *sching*, or *pinte*; 10 *sching* = 1 *tau*; 10 *tau* = 1 *hwo*.

These measures are used almost exclusively for corn, &c.; but rice is generally sold by weight.

HINDOSTAN.

This large promontory, or peninsula, of Southern Asia has an area of 1,485,942 Eng. sq. miles, with a population of 165,000,000. It is well defined by natural boundaries: north and north-west the Himalaya and Solyman mountains; on other sides the Arabian Sea and Bay of Bengal, and the river Brahmaputra. Two great river basins and a central table-land occupy almost the entire surface. The river basins are those of the Ganges and Indus. The coast-line is about 3,200 miles in extent.

Rice, wheat, and millet are largely cultivated: indigo, cotton, and opium are very valuable crops. The cultivation of tea is on the increase. The sugar-cane is also grown, but more as an article of food than for the manufacture of sugar.

The mineral resources of Hindostan are in a great measure undeveloped. Diamonds are found at Punnah (in Bandelkhand), at Golconda (near Hyderabad), and in some other places. Gold is found in the sands of some rivers; iron, copper, &c., abound; large coal tracts exist.

Railways are in course of construction almost all over the country. The line of the East Indian Railway Company is 1310 miles long, extending from Calcutta to Delhi: it is finished as far as Benares. The principal line of the Madras Railway Company is 405½ miles long, running from Madras to Beypore, a port on the Malabar coast; the continuation is 440½ miles, altogether 846 miles. The line of the Great Indian Peninsula Railway Company is 1266 miles long, of which some 500 miles are already opened. Different other railway companies are intersecting the country in all directions: and an Indus Steam Flotilla Company maintains the communication between the Scinde and Punjab railways.

Calcutta has a population of nearly half a million, and, including the immediate neighbourhood, of upwards 1,500,000 souls. Here are manufactories of cotton and silk goods, and articles of gold and silver. The town is a vast emporium of trade for a great part of the East.—*Bombay:* pop. 567,000; the foreign trade, especially with England, is

immense.—*Madras:* the population is said to be nearly 700,000; it is a place of great trade, being the principal emporium on the Coromandel coast.

MONEY.

Accounts are kept in *rupees* of 16 *annas* of 12 *pice*. The *rupee* (*i. e.* the so-called Company's rupee) weighs 180 troy grains, $\frac{11}{12}$ fine, and is worth 1*s.* 11*d.* The currency is a silver one: double, whole, half, and quarter rupees of silver are coined. Gold *mohurs* of 15 rupees are coined for any person furnishing the requisite bullion; they weigh 180 troy grains, $\frac{11}{12}$ fine, and are worth about £1 9*s.* 0$\frac{3}{4}$*d.* each. Copper pieces, of 3 *pice*, or quarter anna, and 1 *pie*. 100,000 rupies make a *lac*, 100 *lac* = 1 *crore*; 100 *crore* = 1 *mas*.

MEASURES.

The fathom has 4 arms, or cubits, of 18 inches: the *göss* = 1 yard. (The Bengal *göss* is $1\frac{1}{3}$ *göss* of Bombay.) For land the *biggah* = $\frac{1}{5}$ Eng. acre. Corn is sold by the *kahoon*, a measure supposed to contain in weight 40 factory *maunds*, or 2986$\frac{2}{3}$ Eng. pounds avoird. Fluids are sold wholesale by the Eng. gallon, retail by weight.—There are two sorts of weights, bazaar weight and factory weight: the bazaar *maund* = 82$\frac{2}{7}$ Eng. pounds avoird.; the factory maund = 74$\frac{2}{3}$ pounds avoird. The maund has in both cases 40 *seers* of 16 *chittacks*. The *tola* for gold, silver, jewels, &c. = 180 Eng. troy grains.

For Bombay:—The *hath, covid,* or *cubit* = 18 Eng. inches: the *gös*, or *guz*, has $1\frac{1}{2}$ *hath*; 2 haths = 1 Eng. yard. The *candy* of corn = 358$\frac{2}{3}$ Eng. pounds avoird.; of rice 215$\frac{13}{16}$ pounds avoird. The *para*, for salt, &c. = $1607_{\cdot 61}$ Eng. cubic inches. 1 *anna* of salt = 2$\frac{1}{2}$ Eng. tons. The *seer* = 16,740 Eng. troy grains; a *maund* = 28 pounds avoird.

For *Madras:*—The *ady* = $10_{\cdot 46}$ Eng. inches: the *kjuli*, or *culi*, has legally 24 *adies* = $20_{\cdot 92}$ Eng. feet; but in general 26 culis, or $22_{\cdot 663}$ Eng. feet. The *cawney*, for land = $1_{\cdot 3223}$ Eng. acre; 121 *cawneys* = 160 acres.—The para, for corn = $1_{\cdot 6906}$ Eng. bushel; the *gars* = $16_{\cdot 906}$ quarters. When corn is sold by weight the *gars* = 9256$\frac{1}{2}$ Eng. pounds avoird. The *merkal* = $2_{\cdot 70496}$ Eng. gallons.—Fluids are sold according to the old English measures.—The Madras *maund* = 25 Eng. pounds avoird.; the *candy* = 500 pounds.

J A P A N.

The empire of Japan consists of the three principal islands, Nippon, Kiusiu, and Sikok, and some 4000 other large and small islands, with an aggregate area variously estimated at from 159,000 to 260,000 Eng. sq. miles. The population is said to be about 25,000,000.

The government is a dualism, consisting of the ecclesiastical sovereign (the Mikado, or Dairi Sama, residing at Miako) and the military sovereign (the Siogun, or Tycoon), living at Yeddo.

Farming is the principal occupation of the people, employing more than two-thirds of the population. Rice is the chief food of the Japanese, and there are some 5,464 square miles of rice-fields. Formerly the mines were diligently and judiciously worked, and yielded large quantities of gold, silver, and copper. Copper only is now exported in any quantity. Iron is much more abundant. The manufacture of porcelain employs many thousands of people. Large numbers are also active in the preparation of salt from sea-water.

The islands are volcanic: Kinsia, for instance, has four volcanoes.

The principal ports open to foreigners are:—Yokohama (Kanagawa), Nagasaki, Kakodadi, and Hiojo.

The chief imports into Japan are cotton stuffs, as shirtings, chintzes, &c.; woollen goods, as cloths, camlets, &c.; common glass articles, watches, zinc, rhinoceros and hippopotamus horns, &c. The chief exports to Europe are: silk, tea, copper, colza oil, rapeseed.

Yeddo, one of the two capitals, and the seat of the military sovereign, covers a very extensive area, with a population variously estimated at from 700,000 to 2,000,000, now most likely much less numerous, in consequence of ordinances lately passed doing away with the forced residence in this town of the nobles and their families. It has an excellent and capacious harbour.—*Miako* is the residence of the spiritual sovereign.

The Japanese coins in circulation are the gold *kobang* and the silber *itzibu*. The original kobang was worth about 18*s*. 3¾*d*. to 18*s*. 5*d*. The gold itzebu is about one-third the value of the kobang. The silver itzebu is worth about 1*s*. 4*d*.

At the opening of the trade between England, America, &c., and Japan, the kobang circulated throughout the country at 4 itzebus, although its European value was nearly 14 itzebus. At first the Europeans profited by this, and gained large sums by buying up kobangs wherever

they could meet with them; till at length the Japanese government did the like; and the kobangs seem now to have disappeared from circulation.

The *tael*, an imaginary money, formerly used for all accounts, was worth about 5*s*. 10¾*d*.; but of late it has sunk to 2*s*. 3¼*d*.

Besides the itzebus there is a silver coin called the *itacane*, worth about 12*s*. Of the copper or iron *sen*, or *cash*, about 376 pieces are or were equal nominally to 1*s*.

Measures:—The *inck*, *ickje*, or *tsjov*, is equal to $74._9$ Eng. inches: the *tsune sasi*, for cloths, &c., is about 15 inches. The *zjoo* has 2 *kee*, and is about 150½ inches. About 27 Japanese *ri*, or miles, make an equatorial degree.—The square *tsjov* is said to be $2._7$ Eng. acres.—The *kock* is reckoned at about $4._8$ imperial bushels. The *picul*, or *pecul*, has 100 *catties*, and equals, it is said, 130 pounds avoird. The *kin* has 160 *monme*, and is equal to $0._{617285}$ pound avoird. The *rjoo*, for medicines $= 1._{93548}$ Eng. drachms apothecary's weight: the *rjoo* has $4\frac{3}{10}$ *monme*.

N E P A L.

Nepal, or Nepaul, is an independent state lying north of British India and west of Sikkim. Its area is said to be 54,000 Eng. sq. miles; and it has a population estimated at 2,600,000 souls, of different tribes, of which the dominant race are the Ghoorkas. The government is despotic.

Where the wood has been cleared away cotton, rice, maize, wheat, barley, cardamoms, ginger, sugar, &c., are cultivated. The mountains, mostly of granite, abound in streams, and contain much iron, lead, copper, sulphur, and some zinc; and in the rivers gold is found, though not in large quantities.

The interior of the country has been but little visited. The chief towns are Gorkha and Katmandu, and then Dipal, Dschumilah, &c.

M Y S O R E.

Mysore, or Maissur, is a protected state of southern India, with an area of some 31,000 sq. miles, and a population of about 3,000,000. The revenues amount to £700,000 to £800,000. The country is a triangular table-land. Mysore, the capital, has 65,000 inhabitants.

PERSIA.

Persia, or Iran, is a country lying to the east of Asiatic Turkey, covering an area of some 450,000 sq. miles, and having a population of about 8,000,000. Persia forms part of the great table-land of Iran, as it is called, and has an elevation of 3,000 to 4,000 feet above sea-level. There are some tracts of considerable fertility, but much of the surface of the country is waste and sterile, three-tenths of the whole area, for instance, being nothing but one large salt desert. The highest mountain, 14,600 feet is the Demavend. There are few rivers and these allow of but little navigation of importance.

The manufactures are silk stuffs, carpets, shawls, fire-arms, and sword-blades. The trade of the interior is carried on wholly by caravans. The government is despotic.

In the last few years the annual arrival at Tabris of productions of Persia has amounted annually to 50,000 horse-loads. These consist of woollen and cotton goods from Tesd and Kirman; sugar, spices and drugs, tea, tembeki, saf-flower (or bastard saffron), and silk from Schiraz, Ispahan, and Kashar. Other export articles are gall-apples, cotton, madder, and dried fruits.

Chief Towns:—*Teheran*, the capital, in a sandy plain, with about 80,000 inhabitants.—*Ispahan* had formerly a population of 1,000,000, now 150,000; manufactures of satin, velvet, calico, gold and silver wares, guns and pistols, swords, earthenware and glass, jewellery.—*Shiraz*, pop. 40,000; wine and tobacco.

MONEY.

Accounts are kept in *tomans*, or *tumans*, of 10 *sachibkiran*, or *zabkran*, of 2 *penebads*, or *papabats*, of 10 *schahi* = 200 schahi. A toman is worth about 9*s*. 1*d*. to 9*s*. $3\frac{3}{4}$*d*. Gold coins are the *toman*, the *half-toman*, and the *Feth-Ali-Schahi*; this latter is worth 14 zabkran. Silver is at a premium. Silver coins are the *zabkran* of 20 *schahi* = 11*d*., and *papabat* of 10 *schahi*. Copper coins are: the *schahi*, $1\frac{1}{10}$*d*., and *half-schahi*; the *kasbegi* = $\frac{1}{10}$ schahi; the *pul* differs in almost every town; that of Teheran is $\frac{3}{4}$ schahi. The different old and modern moneys and their relation one to the other are as follows: a *toman*, or half gold *mohur* = 8 *rupees*; a *rupee* = $1\frac{1}{4}$ *sachibkiran*; a *sachibkiran* = 2 *penebads*, or *papabats*; a *papabat* = $2\frac{1}{2}$ *abassis*; an *abassi* = $1\frac{3}{5}$ *larins*; a *larin* = $1\frac{1}{4}$ *mahmudis*; a *mahmudi* = 2 *schahis*; 1 *schahi* = 5 *dinari*, or *dinarbisti*; a *dinarbisti* = 2 *kasbegis*, or *kash*.

Moneys for reckoning in sometimes used in business transactions are: the *rial* of 30 *schahi;* the *abasi* of 4 *schahi;* the *senar* of 2 *schahi;* the *dinar*, of which 1000 go to the *zabkran*. Russian and Turkish coins circulate. The *berats* are a sort of paper money, cheques on the government; and in this money the officials are paid.

MEASURES.

The *guz* is divided into 2 feet of 24 fingers of 7 barley-corns: the *guz schah*, for woollen goods, = 40 Eng. inches; the *guz mokasar*, in detail and particularly for Persian manufactures, = 36½ Eng. inches; the Tauris *guz* = 40⅔ Eng. inches; another *guz* in the province of Aserbeidschan = 44 Eng. inches; another in the province Irak Adschemi = 42 Eng. inches. The *farsang*, or *parasange*, is in general 6,000 *guz*.—The *karwar* has 100 *batman* of 125 *guz;* the guz = 1936 Eng. sq. inches; the karwar = $3._{858}$ Eng. acre.—Firewood is sold by weight. —The *artaba* has 8 *collothun*, or 25 *capichas*, or *heminas*, of 2 *chenicas* of 4 *sextarios:* the *legana* has 15 *capichas*, the *sabbitha* 22 *sextarios*. The *artaba* is said to be $1._{18}$ Eng. quart. Corn, and such like, are generally sold by weight.—Fluids are mostly sold by weight.—The *miskal* is said to be the same all over Persia, and to be $71._{814}$ Eng. troy grains: 100 miskals = $1._{02593}$ pounds avoird. A *batman*, or *maund*, has 6 *rattels* of 50 *derhams* of 2 *miskals* of 24 *grains*. A *kalvar* has 100 *batmans*. The *great batman*, or *maund*, of Tauris has 500 *derhams*, and is equal to $10._{0337}$ Eng. pounds avoird.; the *little maund* of Tauris has 470 *derhams;* 50 little *maunds* make 47 great *maunds:* a Maranda *maund* has 640 *derhams:* 5 Cherray *maunds* = 6 great *maunds* of Tauris. The *seer*, or *sir*, for gold and silver, has 16 *miskals*. The *abbas*, for pearls and precious stones, is 2¼ Eng. troy grains.—English merchants generally use English weights and measures.

AMERICA.

THE ARGENTINE CONFEDERATION.

The Argentine Confederation, formerly the La Plata States, occupy a territory variously estimated at from 540,000 to 1,482,000 Eng. sq. miles, with a population stated by some to be 600,000, by others 1,100,000. It is composed of fourteen states, of which Buenos Ayres is the largest.

The country appears, on looking at a map, to be well watered by numerous rivers; unfortunately, however, most of these streams are in summer either dry or shallow, and in winter overflow the surrounding country. The Paraguay, the Parana, and the Uruguay, which together form the broad mouth of the Rio de la Plata, are the only important rivers. The greatest part of the country is a series of vast treeless plains, called *pampas*, stretching away southwards towards Patagonia and Cape Horn. The only port is Buenos Ayres.

Agriculture is neglected; but large herds of cattle are reared on the pampas, the flesh of which is dried and sent to Buenos Ayres: the hides form the principal article of export. Flour is imported from the United States of North America.

The receipts in 1860 were some 3,000,000 piasters, the expenses a trifle less. The public debt was 5,541,000 piasters. The army numbered 4,684 men nominally, but the effective was certainly much weaker. The fleet consisted of 8 vessels.

The total exportation from the custom-house port, Rosario, was, in 1859, for 4,405,180 pesos, of which for 851,875 pesos to England.

The principal articles of import are: woollen cloths, linens, glass, leather, fire-arms, colours, quicksilver, silks, watches, instruments of

different kinds, medicines, &c. Exports: hides, horsehair, horns, tallow, pickled meat, wool, gold and silver.

Buenos Ayres has a population of about 120,000; manufactures: carpets, cigars, furniture, boots and shoes; extensive inland and foreign trade.—*Cordova*, pop. 25,000.

Accounts are kept in *pesos* of 100 *centesimos*, in silver and in paper nominally the same, but the paper losing in trade some 70 per cent. The general rate of exchange on London is the *peso* to 3½*d*. The silver *pesos* of 1838 and 1839 are worth about 4*s*. 4*d*. The gold doblons, or onças, of 1823—32 are worth about £3. 0*s*. 3½*d*.

Weights and Measures are the same as those in use in Mexico.

B R A Z I L.

Brazil occupies more than half of South America; its area is roundly estimated at 3,200,000 Eng. sq. miles, the population at 7,750,000. With the two new provinces, Amazonas and Parona, Brazil is divided into twenty provinces. The state religion is the Roman Catholic. The revenue is about £4,500,000. The amount of the public debt is about £12,000,000. The army numbers 18,000. The fleet consists of 28 sailing vessels and transports, and 22 steam-vessels.

The land is partly mountainous partly lowland. There is a high mountain table-land north of the Amazon and Rio Negro. An immense lowland is formed by the great river-system of the Amazon. In the rainy season these rivers inundate the country far and wide, so that immense tracts are nothing but morasts covered with impenetrable forests. Brazil has a long eastern coast line, but few good harbours: the exceptions are Bahia, Rio de Janeiro, Porto Saguro, Espiritu Santo, Pernambuco, Angrados-Reis, Os Santos, Maranhaõ.

Vegetation is luxuriant: here grow different sorts of wood used for dyeing; and coffee, sugar, rice, tobacco and cotton are produced in large quantities. The mineral treasures are very great, but the mines are as yet imperfectly worked: here are found gold, silver, platinum, copper, and iron; diamonds, topazes, and other gems. The diamonds are chiefly found in the province of Minas-Geraes. The yield of gold is now less than formerly. The principal exports are sugar, coffee, cotton; then cabinet and dye-woods, drugs, gums, hides, horns, and tallow, and also some rice, tobacco, tapioca, manioc, and cacao.

The imports in 1860-61 amounted to £13,424,175, of which Great Britain and dependencies sent for £6,660,675, or $49_{\cdot 7}$ per cent. The exports in the same year were for £14,050,575, of which for £5,324,850 to Great Britain and dependencies.

The number of vessels entering Brazilian ports in the above-mentioned year was 2,764, of 878,598 tons. Cleared out: 2,469, of 916,491 tons. The Brazilian flag covered about 18 per cent of the vessels entering, and a little over 10 per cent of the clearances.

The capital of the country is *Rio de Janeiro*, situated on a magnificent bay, with 216,000 souls, of whom one-third are slaves. It has an extensive foreign trade. *Bahia* has a population of some 110,000, one-third of whom are slaves. It has an extensive home and foreign trade.

EXCHANGE.

Bills payable on a holiday must be honoured the day before, or at once protested. Only bills to order are endorsable.

It must be mentioned in the endorsement whether it is for "value received" or "value in account." Blanco endorsements are allowed, but the date must be mentioned. Protest must be made the day on which a refusal to accept is notified. Inland bills are called *letras da terra*, own bills *notas promissorias*. There is no mention in the code of days of grace or usance. A bill payable at sight, or a certain time after sight, must be forwarded for acceptance by the very first opportunity.

MONEY.

Accounts are kept here, as in Portugal, in *reis*. A so-called *milreis* = 1,000 *reis*; 1000 *milreis* = 1 *conto*. The *milreis* is also called *peso*, and is worth about 2*s*. 3*d*. The paper-money of the same nominal worth, and which forms the principal circulating medium of the country, is at a great discount.

The coins are: gold—*peças* of 16 milreis, *dobras* of $12\frac{4}{5}$ milreis, *half-dobras* of $6\frac{2}{5}$ milreis; silver—*patacons* of 1,920 reis; then double, half, and quarter *patacons*. The silver coins of 1834-38 have a nominal value of 1,200, 800, 400, 200, and 100 reis. There are no copper coins.

MEASURES.

The measures of length are the same as in Portugal, except the *legoa* (league), which has 2,842 braças = $3_{\cdot 871}$ Eng. miles. The Eng. *yard* and the French *aune* are also in use for some articles; 5 varas being reckoned 6 yards, 4 covados 3 yards, and 170 covados 100 aunes.

—Corn and salt are sold by the *alqueire*, 100 of which $= 99._{785}$ Eng. bushels.—The *pipa* is 120 Eng. imp. gallons; 100 *canadas* $= 30._{7}$ Eng. imp. gallons. A *pipa* of rum has 60 to 75 canadas; a *pipa* of molasses 100 canadas. Many things are sold by the old Eng. gallon.—The *arroba* has 8 *arratels* of 2 *marcos* of 2 *quartas* of 2 *onças:* 100 *arratels*, or *libras*, $= 101._{49}$ Eng. pounds avoird. For gold and silver the *marco* has 8 *onças* of 8 *outavas* of 3 *escrupulos* of 24 *granos:* 100 marcos $= 61._{48}$ Eng. troy pounds.

C H I L I.

Chili has an area of 139,335 (some say 170,000) Eng. sq. miles, with a population of 1,500,000. It is an independent republic. The country is a long strip of coast-land on the western coast of South America. The revenue—ordinary and extraordinary—amounts to about £1,700,000. The public debt—home and foreign—is some £1,556,000. The army numbered in 1861 only 3,251 soldiers of the line; but the militia is 35,600 strong. The fleet consisted, in 1860, of 7 vessels, with 58 guns.

In the north of the country there are mountains, but the south consists of a series of plains: in some places these plains are separated by ranges of hills. The immediate sea-line is mostly bold and rocky. Santiago, the capital, stands upon a vast plain 1,750 feet above sea-level. In the northern part of the country water is scarce, and good farming impossible, or nearly so: and mining is here the principal employment of the people. Large quantities of copper are obtained here; but the price is now so low that it will hardly pay for the working. The southern part of the country abounds in tropical products, and yields also all the European cereals and fruits. Here are forests of fine timber: the potatoe is indigenous. In metals Chili is one of the richest countries of the world, particularly in silver, gold, and copper: other minerals are quicksilver, zinc, antimony, tin, arsenic, magnesia, sulphur, nitre, salt, alum, coals, &c. Iron and lead abound, but the mines are little worked.

The imports are chiefly woollens, cottons, silks, linens, metal goods, glass, earthenware, wine and brandy, olive oil, sugar, cocoa, coffee, rice, tea, paper, &c. The value of the imports in 1859 was £4,944,973; that of the exports £3,911,851. The principal exports are corn, flour, biscuit, copper, gold, silver, guano, hides, tallow.

The ships entering Chilian ports in 1860 were 2,301, of 727,031

tons: clearing out, 2,202, of 679,319 tons. Of these nearly one-half came from and went to Valparaiso. The merchant fleet numbers 266 vessels, of 60,434 tons; 7 only of these are steamers, of an aggregate of 1,367 tons.

Santiago (de Chile) is the capital and seat of government, with a population of some 80,000: it is the central dépôt of Chili, and as such has a very extensive trade.—*Valparaiso,* the port of Santiago, has a population of some 42,000: extensive import and export trade.

MONEY.

Accounts are kept in *pesos* of 100 *centavos:* a peso = 4*s.* 0½*d.* The coins are: gold—the *condor* of 10 pesos but worth only £1. 17*s.* 8¼*d.*; the *doblon* = 5 pesos, the *escudo* 2 pesos; silver—pieces of 1 peso, 50 centavos, 20, and 10, and 5 centavos; copper 1 centavo and ½ centavo.

MEASURES AND WEIGHTS.

Most of the weights and measures are the same as those in use in Spain.—The *fanega* = $1._9$ imp. bushel; the *arroba* = $6._7$ imp. gallons.—The *libra* = $1._{014}$ pound avoird.; the *marco* is ½ libra; the *arroba* = $25._{36}$ pounds avoird.; the *quintal* = $101._{44}$ pounds avoird., the *carga* has 3 quintales.

The decimal system of weights and measures is becoming general.

E C U A D O R.

Ecuador is one of the three states which composed the republic of Columbia. It has an area of some 300,000 Eng. sq. miles. The great cordillera of the Andes here forms a large table-land, in which the three valleys of Quito, Riobamba, and Cuenca are longitudinal depressions. Besides these there is a narrow strip of land on the Pacific, in some places thickly wooded, in others a sandy desert, but everywhere extremely hot; and a vast wilderness which stretches away towards the alluvial plain of the Amazon and its tributaries. The declivities of the cordilleras are clothed with almost impenetrable forests. On the table-land of Quito, which is 10,000 feet above sea-level, there is perpetual spring, and the temperature is on the whole equable, interrupted at times by storms of wind and snow and by earthquakes. The Cotopaxi, the most terrible among the surrounding volcanoes, at times disturbs the country round. In 1738 it threw up a column of fire to a height

of 3,000 feet, and discharged immense masses of rock. In 1744 an eruption took place scarcely inferior in violence to that of 1738.

The forests consist, one may say, of valuable woods of all kinds, such as the mangrove, the scarlet oak, the mahogany tree, &c., dy-woods, sarsaparilla, a sort of cinnamon, caoutchouc, palms, coffee, cocoa, cinchoa (Peruvian bark), &c. Other productions are: the pineapple, vanilla, pepper, cascarilla, the aloe; then corn, maize, potatoes, rice, tobacco, cotton, sugar. A great deal of cocoa is exported.

The revenue amounted in 1858 to about £212,500; the expenditure to the same. Foreign debt £2,820,446; home debt £156,950. The political events of the last few years have no doubt modified things considerably.

The imports amounted in 1856 to £549,750; the exports of products of the country and precious metals amounted in value to a trifle less.

Quito, the capital, lies 9,500 feet above sea-level. Manufactures: coarse woollens and cottons, lace, hosiery; trade in agricultural produce: pop. 60,000.—*Guenca*, pop. 20,000.—*Guayaquil*, a sea-port, with a fine harbour; brisk trade: pop. 22,000.

The *peso* has 100 *centavos*. The general rate of exchange on London for this piaster is 4*s*. 1*d*.

The weights and measures are the Spanish-Castilian. According to a decree of 1857 the French system was to be adopted throughout the country within a certain number of years.

H A Y T I.

Hayti, or St. Domingo, is an island in the West Indies, with an area of 28,500 Eng. sq. miles, and 945,000 inhabitants. The island is very fruitful, and the mountains are mostly covered with forests of oaks, cedars, mahogany trees, Campeachy wood, pines, rosewood, iron-wood, &c. Vanilla, ginger, manioc, and patates abound. Cocoa, cotton, tobacco, sugar, and coffee are cultivated with great success. Minerals: gold, platina, silver, copper, tin, excellent iron, salt.

The principal articles of export are: coffee, Campeachy wood, cotton, rosewood, cocoa, tobacco, ginger, sugar, cigars, hides, &c.

The Spainards have lately taken possession of part of the island, on pretence of its once having been under their domination.

The revenue in 1858 was 1,762,500 dollars, expenses something less. Debt to France 60 millions of francs.

The value of the imports is said to be about £1,350,000 annually, of which for about £90,000 to Great Britain. The value of the exports is calculated at £1,687,500.

The vessels entering Haitian ports in 1859 numbered 310, of 61,420 tons.

Port-au-Prince has an extensive trade; pop. 25,000.—*San Domingo*, pop. 20,000; limited trade.

Accounts are kept in *gourdes* of 100 *centimes*. The worth of the gourd, this money being now represented by paper, varies considerably: in 1857 a pound sterling was worth about 72 gourdes. Copper coins of 6 and 2 centimes, and 1 centime have been issued by the government; Spanish and American dobloons of 16 piasters circulate here.

Measures:—The measures are the old French ones, with the exception of the *pas*, or pace, of 3½ old French pieds: the *pied* = $1_{.065}$ Eng. foot. The *toise* = 6 pieds: the *perche* 18 pieds; the aune about $3_{.89}$ Eng. feet.—The *carreau* has 10,000 square *pas*, or 122,500 old Paris sq. pieds. The *cabelleria* has 10 *carreaux*, or just upon 32 Eng. acres.—The *boisseau* = $2_{.863}$ Eng. imp. gallons.=For fluids the old English wine gallon is mostly used, which = $0_{.8331114}$ imp. gallons. The *pot* of 2 old Paris *pintes* of 2 *chopines*, is reckoned as a half gallon, although in reality it is not quite so much.—The weights are the old French ones. The *livre* = $1_{.075}$ Eng. pound avoird.

M E X I C O.

Mexico, or Mejico, has an area estimated at 834,140 Eng. sq. miles, with a population of about 7,400,000, of whom 4,000,000 are Indians, 1,000,000 whites, 6,000 negroes, and the rest various mixed races. With the exception of a narrow strip of land on the east, and occasional patches of plain on the west, the whole of this magnificent country is a table-land of some 6,000 to 8,000 feet mean elevation. From this rise lofty peaks from 6,000 to 10,000 feet high. All the highest mountains lie close together: Popocatepetl is 17,720 feet high, Arizaba 17,344 feet, Iztaccihuatl 15,703 feet, Pico del Frayle 15,250 feet. The higher plains are barren and inhospitable, the low coasts unhealthy and subject to frequent hurricanes. The soil, except in the high plains, is very

fertile, yielding sugar, coffee, cotton, the banana, yams, manioc, pepper, cocoa, vanilla, wheat, barley, and maize. The wheat gives twenty to sixty-fold, while in England we get but twelve-fold. The banana is so productive, that it supports twenty-five times as many people as the same area sown with wheat. The low shores produce mahogany, Brazil wood, and other valuable woods. Gold, silver, mercury, copper, antimony, tin, and zinc abound. The mines of silver and gold are very rich, yielding, with very imperfect working, £6,000,000 yearly. The manufactures are: cotton, woollen, and silk goods; glass, paper, delft; sugar-refineries, tanneries, distilleries, &c. The exports to England are Brazil wood, fustic, indigo, sarsaparilla, jalap, quicksilver, cochineal. Imports from England are mostly cotton goods.

The country has been so long in a state of anarchy that nothing certain can be said of its revenue, expenditure, debt, trade, commerce, army, &c.

The chief town, *Mexico*, stands in a magnificent, mountain-girt plain of some 1,700 sq. miles, 7,471 feet above sea-level. Manufactures are gold and silver lace, jewellery, coaches, woollen goods, cigars. Population 220,000.—*Puebla* has a population of some 70,000; manufactures are earthenware, soap, hats, and cotton goods.—*Vera Cruz* has an extensive foreign trade; pop. 8,000 to 9,000,—*Guanajuato*, close to the silver mines; it has extensive works in connexion with the mines, and also manufactories of soap, leather, cloth, tobacco, and powder. Pop. 50,000.—*Guadalajara* is beautifully situated near the Rio Grande de Santiago, with a population of 64,000.—*San Luis* and *Merida* have each a population of about 40,000.—*Tampico* has a considerable export trade, although the harbour is very unsafe: pop. 9,000.—*Colima* is a port on the Pacific, with a considerable trade, and a population of 32,000.

Exchange.—There are no days of grace: the old Spanish exchange regulations are here in force.

MONEY.

Accounts are kept in *pesos* (piasters) of 8 *reales* of 4 *cuartillos*. The *peso* = 4*s*. 3.$_{96}$*d*. Coins: gold—*onças*, or *doblones*, of 8 *escudos de oro*, or 16 silver *pesos*; then $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, and $\frac{1}{16}$ *onça*: silver—*peso*, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, and $\frac{1}{16}$ *peso*. The $\frac{1}{4}$, $\frac{1}{8}$, and $\frac{1}{16}$ peso do not contain so much silver in proportion as the whole and $\frac{1}{2}$ peso: copper—*cuartillos* ($\frac{1}{4}$ *real*) and *tlacos* ($\frac{1}{8}$ *real*).

MEASURES AND WEIGHTS.

Measures and weights are the same as the Spanish-Castilian, with a few modifications and additions. 108 varas = 100 Eng. yards.—A *carga*

has 12 *fanegas* of 12 *almudas* = $2._{261}$ Eng. quarters.—The *quintal* has 4 *arrobas* of 25 *libras* of 16 *onças* = 101 Eng. pounds avoird. For cocoa the *fanega* has 110 *libras*, except in Maracaibo, where the fanega of cocoa has only 96 libras.—The *baril* contains 19 or 20 Eng. gallons.

NEW GRANADA.

New Granada is a part of the former republic of Columbia, with an area of 379,928, or, according to others, 515,235, Eng. sq. miles; with a population of 2,400,000.

Revenue about £400,000. The debt appears to be about £8,800,000, of which £6,938,000 to Englishmen. The regular armed force is about 500 men. The importations in 1857 amounted in value to about £703,200, the exportations to £1,526,000. Of the importations England contributed for £35,000; and took of the exportations for £69,300.

The country is traversed by mountain chains, alternating with luxuriant plains and valleys, and is well watered by different streams. It is rich in minerals. Gold is obtained to the value of some £500,000 annually, although the mines are but imperfectly worked; the silver mines are neglected; mercury, emeralds, and diamonds are also found. The principal products are rice, cotton, tobacco, cocoa, sugar, maize, wheat, cinchona, mahogany, fustic, and ipecacuanha; these, with beef and hides, form the chief exports.

Bogota, the capital is situated on an elevated plain, 8,860 feet above sea-level: the population is about 43,000.—*Cartagena* has a safe and commodious harbour. The town lies low and is unhealthy; pop. 11,000.—*Popayan* has a population of about 8,000. The gold mines in the vicinity were once very productive, but now scarcely pay the working.—*Panama* is a rising port on the Pacific, with a trade in gold dust, coffee, and horses.

Money.—Accounts are kept in silver *pesos* of 100 *centavos*. The *peso* = 4*s*. $3._{96}$*d*. For detail the so-called Macuquina peso is employed, which has a silver worth of about 3*s*. 5*d*. The *onças de oro* should be equal to 16 piasters, but are something less.

Weights and Measures.—These are the Spanish-Castilian; sometimes English and North-American are used.

P E R U.

Peru occupies an area of 502,761 Eng. sq. miles, with a population of 2,500,000.

The revenue is about £3,900,000, of which something like five-sixths is from the sale of guano. The debt is about £8,000,000. Peru keeps up an army of 9,500 privates, 2,037 officers; and about 4,000 gendarmes. The fleet consisted in 1861 of 14 vessels, of an aggregate of 74 guns.

The coast-line has a length of 1,500 miles, and immediately beyond it the country begins to rise, and at last reaches an apparently impassable barrier in the lofty and magnificent cordillera of the Andes. A considerable tract along the coast and behind it is rainless, and but for heavy mists and the streams from the Andes, would be absolutely barren. Beyond this tract, to the height of 2,000 feet, the banana, sugar-cane, and other tropical plants flourish; and still farther beyond, to a height of 10,000 feet, all the ordinary European cereals thrive well. Earthquakes are frequent, and have often caused fearful devastation. The forests are magnificent, and would furnish inexhaustible supplies of timber, were there any tolerable means of transport. Important products are cinchona, cocoa, tobacco, sugar, and cotton. Gold is found in the sands of different streams; quicksilver, lead, copper, iron, common coal are also found; but silver is by far the most important of minerals in Peru. The principal exports are: guano, the precious metals, soda and saltpetre, Peruvian bark, wool, hides, skins, sugar, and cotton. The imports in 1859 amounted to £2,936,183; the exports to £3,203,836. Guano formed more than the half of the exports. The merchant navy of Peru in 1861 numbered 110 vessels, of 24,234 tons.

Lima, the capital, has a population of 70,000. It has suffered very much from earthquakes: its port is Callao.—*Cuzco* is situated on a high plain between two cordilleras, and lies 11,380 feet above sea-level; pop. 48,000, most of whom are Indians.—*Arequipa* lies 7,797 feet above sea-level: woollens and cottons, establishments for cutting and polishing precious stones; considerable trade, as dépôt of European and American goods. Pop. 30,000.

Money:—Since 1857 accounts are kept in *pesos*, or piasters, of 100 *centesimos*. The currency is now a gold one, and gold piasters are issued, worth 3*s.* 10*d.* a-piece. Coins: gold—the *sol*, of 20 silver piasters; the *medio-sol*, of 10 piasters; the *doblone*, of 5 piasters; the

escudo, of 2 piasters, the *medio-escudo* of 1 piaster: silver—*peso-duro*, of 100 centesimos; *medio-peso*, of 50 centesimos; *peseta*, of 20 centesimos; *dinero*, of 10 centesimos; *medio-dinero*, of 5 centesimos: copper—the *centesimo*.

Weights and Measures.—These are the Spanish-Castilian.

UNITED STATES.

On the 1st. January 1861 the United States of North America consisted of 34 states, 7 territories, and the district of Columbia, with a population of 31,445,000. Of these 3,955,000 were slaves. The area occupied by these states, &c., is variously estimated by American authorities at 2,983,153 and 3,230,572 square miles. The country is marked out into three great natural divisions by the Rocky Mountains in the west and the Alleghanies in the east. The one range of mountains slopes down towards the Pacific, the other towards the Atlantic; between them is an immense valley, the sides of which form a gentle incline down to the bed of the Mississipi.

The river system of the central part is magnificent; here are the Mississipi, the Missouri, the Ohio, &c., with their numerous tributaries, forming a great natural net of communications superior to any other in the world; and rendering the whole country round highly fertile. The Mississipi is, excepting the Amazon, the largest river in the world, flowing some 3,200 miles, or, reckoning from the source of the Missouri, 4,400 miles, and draining an area of not less than 1,300,000 square miles. The Niagara is celebrated for its magnificent waterfall.

The vegetable productions of the United States may be enumerated as follows:—Maize chiefly in Ohio, Kentucky, Illinois; rice in South Carolina, which produces more than two-thirds of the whole; tobacco in Virginia, Kentucky, Maryland, Tennessee, Missouri, North Carolina, and Ohio; cotton in Alabama, Georgia, Mississipi, South Carolina, Tennessee and Louisiana; cane-sugar in Louisiana; molasses in Louisiana, Texas, and Florida; maple sugar in New York, Vermont, Ohio, Indiana, Michigan, and Pennsylvania; hemp in Kentucky, and Missouri; flax in Kentucky, Virginia, New York, North Carolina, Indiana, Pennsylvania, and Missouri; wine in California, Ohio, and Pennsylvania. Cotton grows south of latitude 38°; tobacco between 34° and 41°; cane-sugar, oranges, figs, bananas, south of 33°; barley, apples and pears north of

38°; hemp, hops, and flax north of 34° peaches south of 41°; wheat, rye, and oats are the chief products of the western states; maize of the southern and western. Many useful and magnificent forest trees are indigenous.

Minerals of various sorts are found, such as gold, silver, cobalt, zinc, antimony, gypsum, rock-salt, nitre, sulphur, mercury, copper, coal, &c. The gold mines of California are too well-known to need comment. Gold is also found in small quantities in a narrow ridge of rocks running from Maryland to Alabama. The coal-field on the west of the Alleghanies is the largest known, its whole area exceeding that of Great Britain. The coal found on the eastern side of these mountains, in Pennsylvania and Virginia, is of the anthracite variety, which burns without smoke. Silver is found in North Carolina and New Mexico. Vast deposits of lead exist in Illinois, Wisconsin, and Iowa. Copper is found in Michigan and in California.

The exports of America consisted principally of cotton, corn, tobacco, and gold.

Up to 1861 the financial position of the United States was, compared to the states of the Old World, a brilliant one. The moneys required for the federal government were raised by the customs and the sale of public lands. Most of the states, however, had their debt, which was in some cases, considerable.

The army consisted of some 20,000 men, whose almost only work was to keep watch over the Indians on the borders. The fleet was composed of but very few vessels, perhaps a score worth anything.

Railways.—In 1832 the total of railway opened was 131 miles; in 1851 it was 8,856 miles, and increased progressively till we find that in 1861 there were 31,179 miles of railway in operation. The most important lines for the immense traffic from the west to the great emporiums in the eastern states are: 1. The New York Central Railway, 555 miles long, reckoning its branch lines; 2. The New York and Erie Railway, connecting the great city with Lake Erie; 3. The Baltimore and Ohio Railway, from the valley of the Ohio to Chesapeake Bay; 4. The Pennsylvanian Central Railway, connecting Philadelphia with Pittsburg, and joining at this latter town the line that goes viâ Fort Wayne to Chicago.

The commerce of the United States in 1859-60 was as follows: Imports for 362,166,296 dollars; exports for 400,122,296 dollars. Of the articles imported, for 177,784,785 dollars came from Great Britain and colonies (including India); of the exports, for 234,767,830 dollars were taken by Great Britain and colonies (including India). Of gold and silver for 8,462,340 dollars was imported, for 56,946,851 exported.

The total capacity of vessels entering American ports was 8,275,196 tons, of which American vessels of 5,921,285 tons, British 1,811,362 tons; cleared out, total 8,789,929 tons, of which 6,165,924 tons American, 2,166,627 tons British. The total capacity of American vessels amounted to about 5,150,000 tons.

CHIEF TOWNS.

The commercial capital, *New York*, had in 1860 a population of 814,277; with Brooklyn (273,425) and Jersey City (29,256) it had 1,116,958 inhabitants. Its foreign and inland trade is immense: it is in direct communication with all the great sea-ports in the world, and is connected with all parts of the United States by railway, canal, &c.—*Philadelphia:* pop. 568,034. Extensive trade: then woollen and cotton factories; foundries; machines, cutlery, and hardware; tanneries, saw-mills; shipbuilding.—*Baltimore*; pop. 214,037; extensive trade; it is the greatest flour market and the largest tobacco mart in the States.—*Boston;* pop. 177,902. It may be called the literary capital of the United States. It has a fine harbour, and the trade in extensive.—*New-Orleans;* pop. 170,766: great trade: export of cotton, flour, sugar, molasses, tobacco, &c.—*St. Louis;* pop. 162,179. It is the great centre of the Mississipi steam navigation, and has extensive trade. Manufactures: iron goods, chemicals, oils, tobacco, ropes, &c.; flour-mills, sugar-refineries, distilleries.—*Cincinnati;* pop. 160,060. Immense trade, large export of pork. Manufactures: household furniture, clothing, boots and shoes, stearine, lard, tools and agricultural implements, iron and brass articles, type, bells, hats, paper, tobacco, soap and candles. Great quantities of wine are made in the vicinity. Half the population is German.—*Chicago,* pop. 109,420. Thriving and increasing trade, mostly in corn, cattle, and pigs.—*Buffalo,* pop. 84,000. It is the great entrepôt of the trade between the east and the west.—*Louisville,* pop. 75,196. Important trade, and many manufactories of cottons, woollens, tobacco, and machines.—*Newark,* pop. 72,055. Silk ribbons, carriages, leather, machines, soap and candles.—*San Francisco,* chief town of California; pop. 66,000. The bay is the largest and finest on the Pacific coast, and the harbour is admirable. The trade is considerable.—*Washington,* the federal capital and seat of government; pop. 61,400.

EXCHANGE.

Among other regulations are the following:—Bills payable at sight enjoy no days of grace; other bills enjoy three days; the 1st. January, 4th. July, and 25th. December are holidays. The expenses connected

with the protesting of a bill amount to 10 per cent. No bill is valid that is dated on Sunday or on a legal holiday.

MONEY.

Accounts are kept in dollars of 100 cents. A gold dollar is worth 4*s.* $1_{,41}$*d.* Gold coins: pieces of 20 dollars (double eagles), 10 dollars (eagles), 5, 3, 2½ dollars, and 1 dollar. Silver coins: dollar, half-dollar, quarter-dollar, dime, half-dime: since 1853 only the half-dollar, quarter-dollar, dime, and half-dime. Copper coins: cent, half-cent.

An immense mass of paper money from the hundreds of private banks of the country circulated in the neighbourhood of their emission, but were at a greater or less discount in the other states.

MEASURES AND WEIGHTS.

These are mostly the same as in England: We give the modifications. In the state of New York the *rod* for land, has only 5 square yards, but the furlong 220 yards.—The bushel is the old English bushel $= 0_{,96944}$ imp. bushel. The old Eng. wine gallon $= 0_{,8321114}$ Eng. imp. gallon: the old beer gallon $= 1_{,017045}$ imp. gallon. In many places 100 lbs. are reckoned a hundredweight.

Leipsic, printed by Bär & Hermann.

NEW ILLUSTRATED MANUAL

OF THE

CURRENT GOLD & SILVER COINS

OF

ALL CIVILIZED NATIONS OF THE GLOBE:

GIVING THEIR

WEIGHT, STANDARD, & VALUE,

TOGETHER WITH THE SYSTEMS OF

MONEY, WEIGHTS, & MEASURES,

AND

STATISTICS, COMMERCIAL GEOGRAPHY, & INDUSTRY

OF THE DIFFERENT COUNTRIES.

BY

H. P. SKELTON.

PART II. — PLATES.

LONDON.

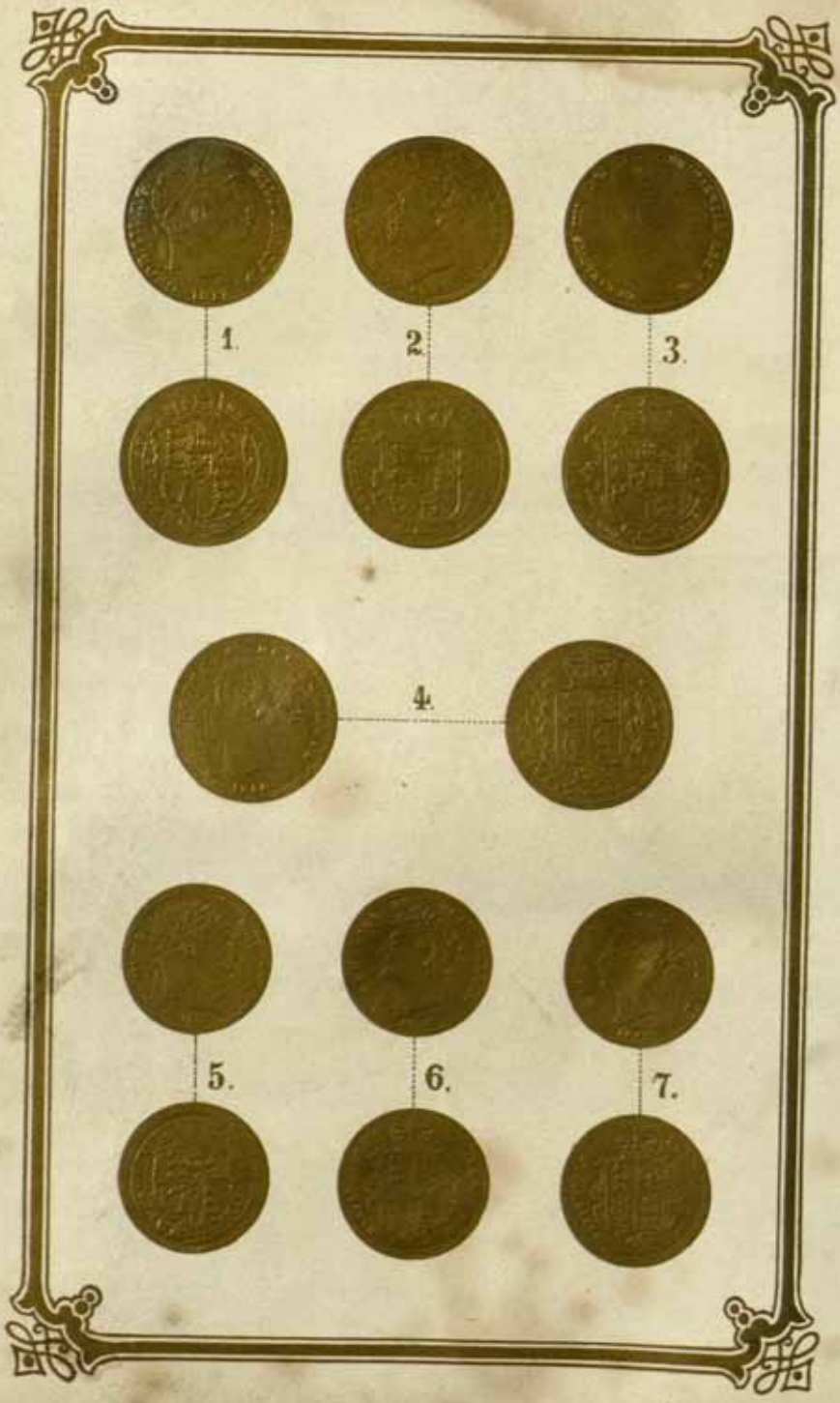
JAMES HAGGER,

67, PATERNOSTER ROW.

Order of the Plates.

Westphalia (*Jérôme Napoléon;* 1809—1813).
Hohenzollern (*Silver;* 1844—1846).
Hamburg (*Gold and Silver;* 1786—1851).
Bremen (*Silver;* 1723—1845).
Lübeck (*Gold and Silver;* 1728-1797).
Frankfort (*Silver;* 1840—1848).
Italy (*Silver;* 1809—1813).
Sardinia (*Gold;* 1746—1841).
" (*Silver;* 1828—1850).
Tuscany (*Gold and Silver;* 1827-1846).
Roman States (*Gold;* 1740—1846).
" " (*Silver;* 1802—1850).
Genoa (*Gold;* 1760—1798).
" (*Silver;* 1796—1799).
Two Sicilies (*Gold;* 1813—1851).
Sicily (*Silver;* 1791—1847).
Venice (*Gold and Silver;* 1769-1789).
Parma (*Gold and Silver;* 1815, 1830).
Lucca.—Modena (*Silver;* 1782-1838).
Malta (*Gold and Silver;* 1778—1798).
Spain (*Gold;* 1758—1817).
" (*Silver;* 1805—1834).
Portugal (*Gold;* 1779—1851).
" (*Silver;* 1802—1835).
Denmark (*Gold;* 1830—1847).
" (*Silver;* 1854—1856).
Sweden (*Gold;* 1718—1848).
" (*Gold and Silver;* 1852).
Belgium (*Silver;* 1848—1853).
The Netherlands (*Gold;* 1806-1852).
" (*Silver;* 1831—1850).
Switzerland (*Gold;* 1741—1800).
" (*Silver;* 1799—1813).
" (*Silver;* 1791—1814).
" (*Silver;* 1848, 1850).
Bern (*Silver;* 1797—1826).
Greece (*Gold and Silver;* 1832-1845).
Turkey (*Gold;* 1787—1839).
" (*Gold and Silver;* 1839, 1840).
United States (*Gold;* 1849—1854).
" " (*Silver;* 1830—1854).
Brazil (*Silver;* 1821—1846).
Mexico (*Gold;* 1822—1847).
" (*Silver;* 1823—1742).
Peru (*Gold and Silver;* 1826, 1827).
Chili.—La Plata (*Gold and Silver;* 1813—1834).
Columbia.—New Granada (*Gold and Silver;* 1819—1833).
Costa-Rica.—Bolivia (*Gold and Silver;* 1825—1849).
Haity (*Silver;* 1808—1830).
Persia (*Gold;* 1732—1828).
Hindostan (*Gold and Silver;* 1768—1808).
Nepal.—Mysore (*Gold and Silver;* 1702—1790).
Japan.
Cochin China.

Great-Britain.



GREAT BRITAIN AND IRELAND.

GOLD COINS.

No. 1. *Sovereign*, of 20*s*. of 1817. 1869 are coined out of 40 pounds troy, $\frac{11}{12}$ fine. The weight of a sovereign is $123\frac{11}{623}$ grains, of which $113\frac{1}{532}$ grains fine: sovereigns weighing less than $122\frac{3}{4}$ grains are not legal tender.

No. 2. *Sovereign* of 1825. Weight, &c. as above.

No. 3. *Do.* of 1837. do. do.

No. 4. *Do.* of 1856. do. do.

No. 5. *Half-sovereign.* 1817. Weight, &c., in proportion to the sovereign.

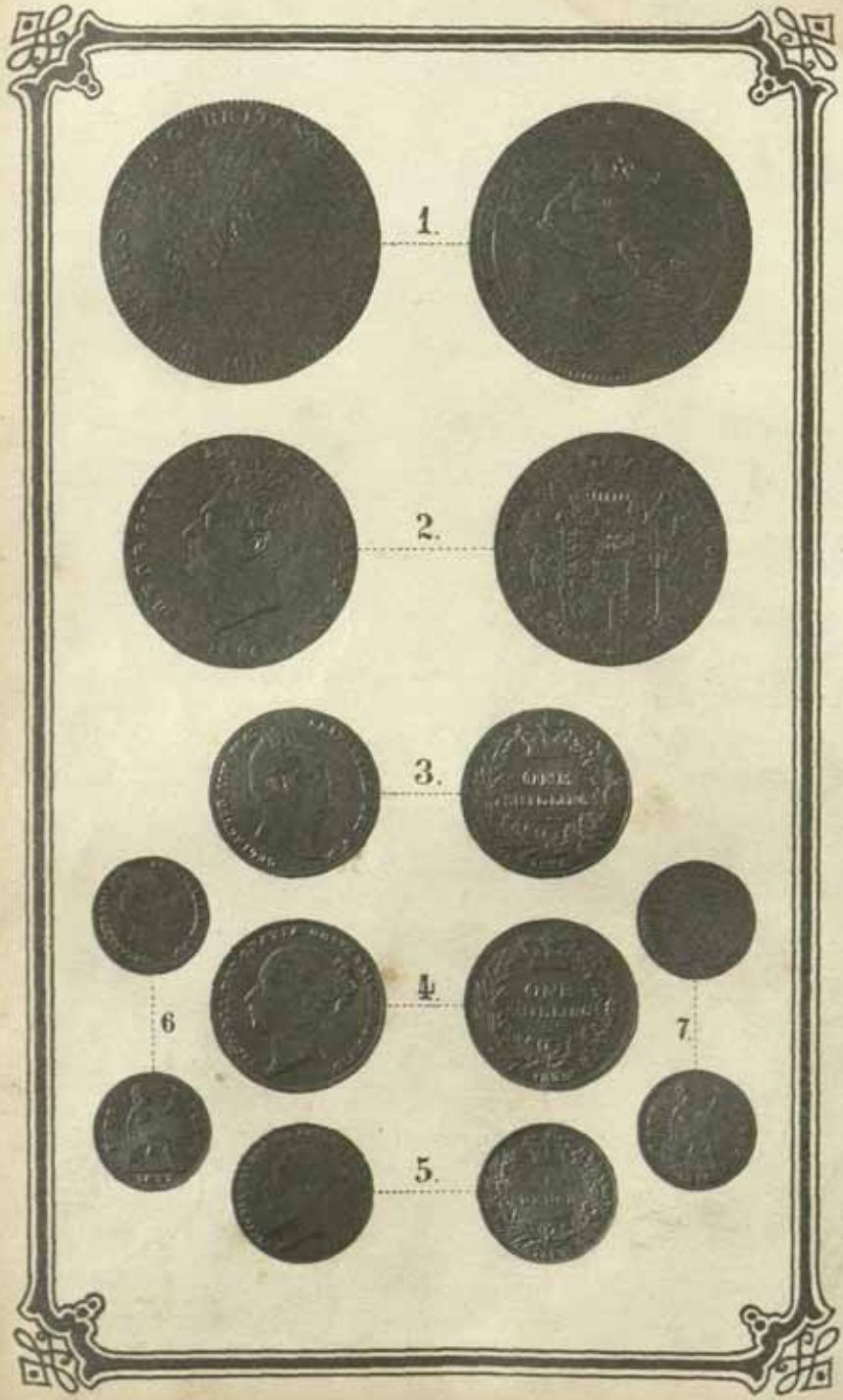
No. 6. *Do.* 1826. do. do. do.

No. 7. *Do.* 1858. do. do. do.

For the average value of a sovereign in continental and other money see text "Great Britain and Ireland." page 132.

2

Great Britain and Ireland.



GREAT BRITAIN AND IRELAND.

SILVER COINS.

No. 1. *Crown* of 1819. Legal weight 18 *dwts.* $4\frac{4}{11}$ *gr.*, or $\frac{10}{11}$ *oz.* troy. Legal tender for 5 shillings.

No. 2. *Halfcrown* of 1826. Weight, &c., in proportion to No. 1.

No. 3. *Shilling* of 1836. Legal weight 3 *dwts.* $15\frac{3}{11}$ *grs.*, or $\frac{2}{11}$ *oz.* troy. Legal tender for 12 pence.

No. 4. *Shilling* of 1839. Weight, &c., as No. 3.

No. 5. *Sixpence* of 1840. Legal weight 1 *dwt.* $19\frac{7}{11}$ *grs.*, or $\frac{1}{11}$ *oz.* troy. Legal tender for six pence.

No. 6. *Fourpenny piece* of 1836. Weight, &c., in proportion to the shilling and sixpence.

No. 7. *Fourpenny piece* of 1849. Same as No. 6.

3

France.


1.


2.


3.


4.


5.

FRANCE.

GOLD COINS.

No. 1. *Hundred-franc piece* of 1855. 31 to the kilogramme, by $\frac{9}{10}$ fine; $11._{57}$ to the troy pound. Mean value £3 19*s* 5*d*.

No. 2. *Fifty-franc piece* of 1856. Weight and value in proportio to No. 1.

No. 3. *Twenty-franc piece.* 1856. 155 to the kilogramme, by $\frac{9}{10}$ fine; $57._{85}$ to the troy pound. Mean value 15*s*. $10\frac{3}{5}$*d*.

No. 4. *Ten-franc piece.* 1856. Weight and value one-half of No. 3.

No. 5. *Five-franc piece.* 1856. Weight and value one-fourth of No. 3.

France.


1.


2.


3.


4.


5.

FRANCE.

SILVER COINS.

No. 1. *Five-franc piece* of 1856. 40 to the kilogramme, by $\frac{9}{10}$ fine; $14_{.9296}$ to the troy pound. Average value 4*s.* 0¼*d.*

No. 2. *Two-franc piece* of 1856. 100 to the kilogramme, $\frac{9}{10}$ fine; $37_{.324}$ to the troy pound. Mean value 1*s.* 7½*d.*

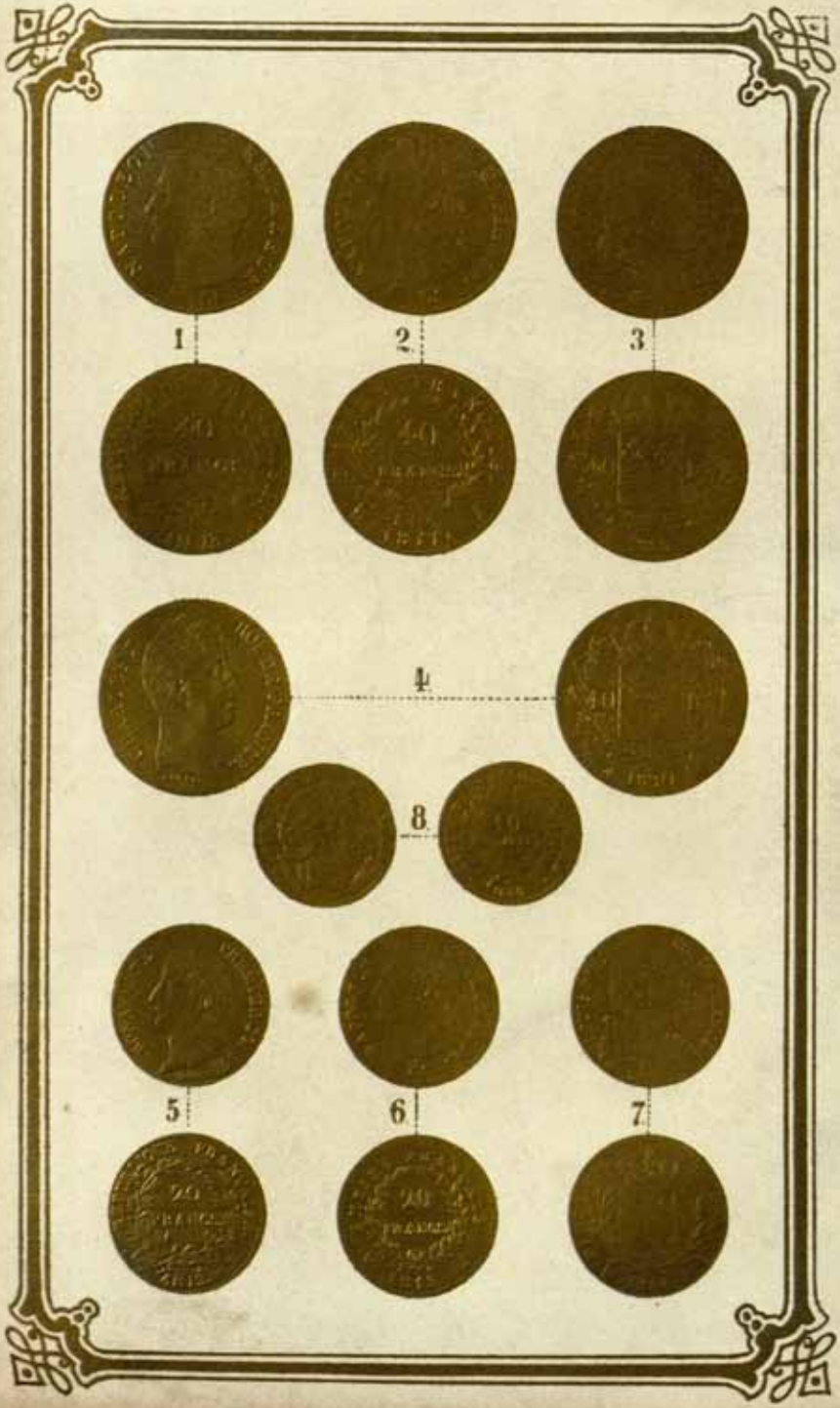
No. 3. *Franc* of 1856. 200 to the kilogramme, $\frac{9}{10}$ fine; $74_{.648}$ to the troy pound. Mean value 9¾*d.*

No. 4. ½-*Franc*, of 50 centimes, of 1856. Weight, &c., in proportion to No. 3.

No. 5. ¼-*Franc*, of 20 centimes, of 1856. Weight, &c., in proportion to No. 3.

5

France.



FRANCE.

GOLD COINS.

No. 1. *Forty-Franc piece* of 1805. Legally 77½ to the kilogramme, $\frac{9}{10}$ fine; $28._{226}$ to the Eng. troy pound. Mean value £1 11*s.* 8½*d.*

No. 2. *Forty-Franc piece* of 1811. Weight, value, &c., same as No. 1.

No. 3. *Do.* of 1816. do. do.

Nr. 4. *Do.* of 1830. do. do.

No. 5. *Twenty-Franc piece* of 1804. Weight, value, &c., in proportion to No. 1.

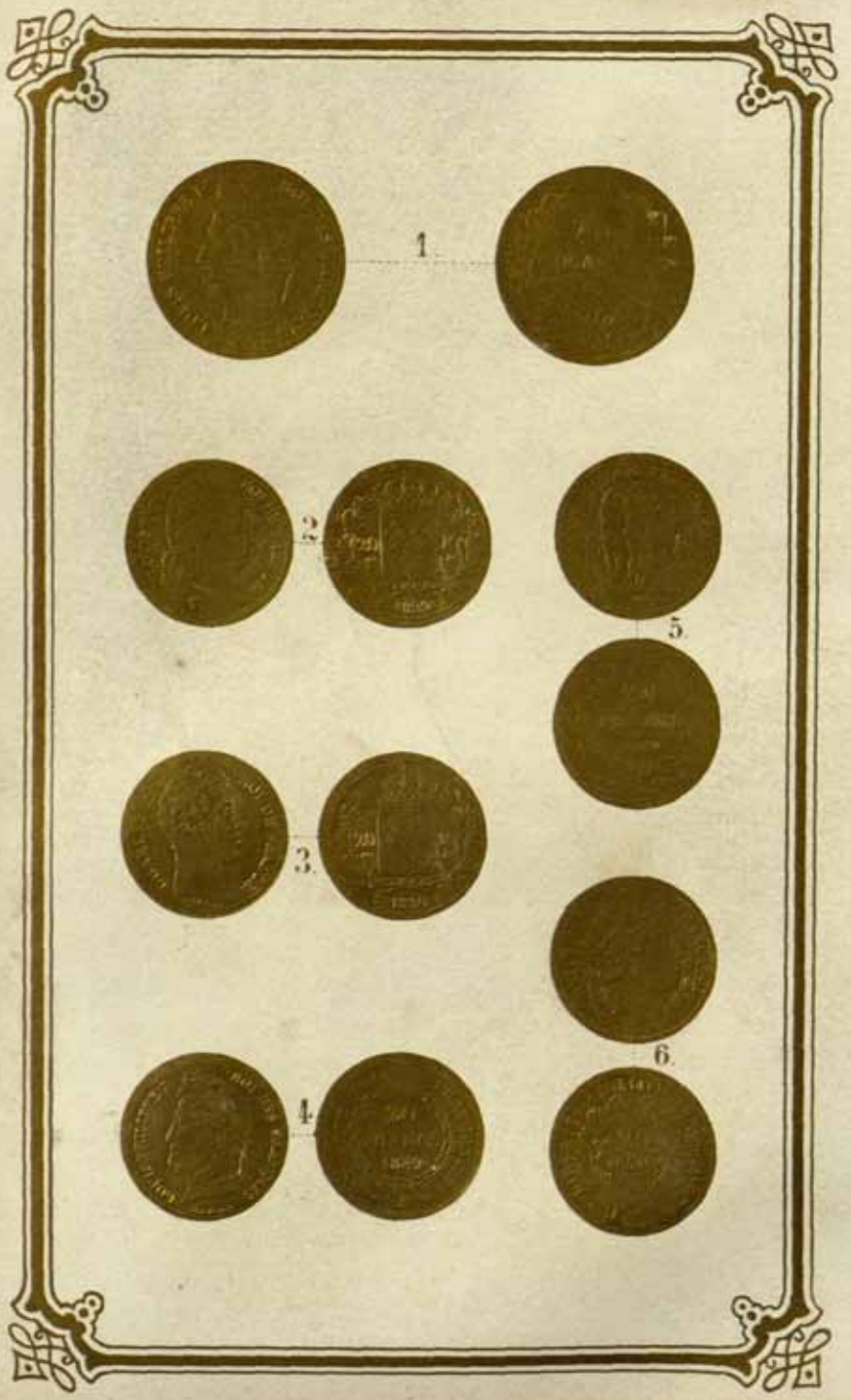
No. 6. *Twenty-Franc piece* of 1813. Weight, value, &c., in proportion to No. 1

No. 7. *Twenty-Franc piece* of 1814. Weight, value, &c., in proportion to No. 1.

Nr. 8. *Ten-Franc piece* of 1850. Weight, value, &c., in proportion to Nr. 1.

6

France.



FRANCE.

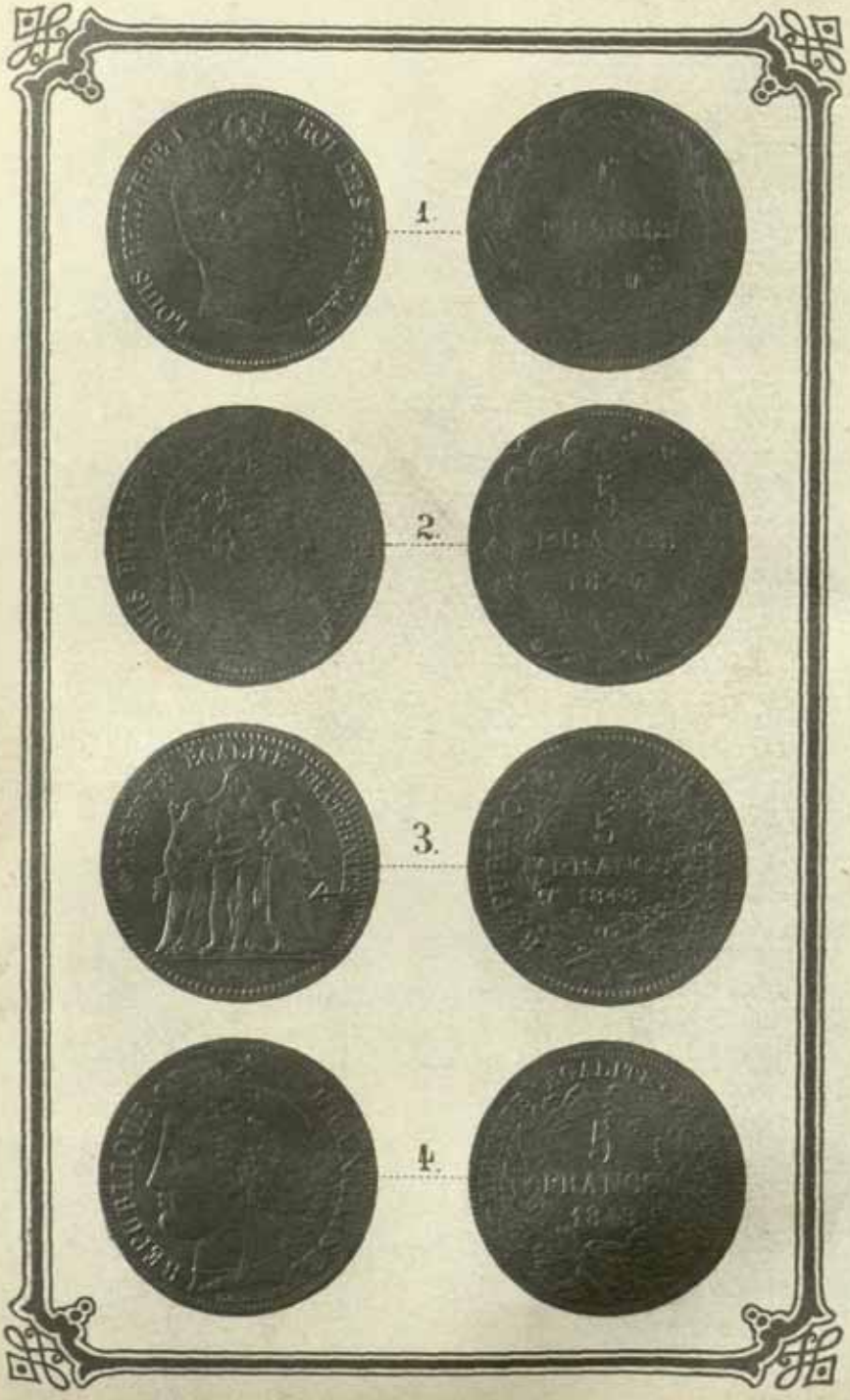
GOLD COINS

No. 1, *Forty-Franc piece* of 1834. $77._3$ to the Fr. kilogramme, $\frac{9}{10}$ fine; $28._{925}$ to the Eng. troy pound. Mean value £1. 11*s*. 9¼*d*.

No. 2. *Twenty-Franc piece* of 1822. 155 to the kilogramme, $\frac{9}{10}$ fine; $57._{85}$ to the troy pound. Mean value 15*s*. 10⅗*d*.

No. 3.	*Twenty-Franc piece*	of 1830.	Weight, value, &c.,	same as No. 2.
No. 4.	Do.	of 1840.	do.	do.
No. 5.	Do.	of 1849.	do.	do.
No. 6.	Do.	of 1850.	do.	do.

France.



FRANCE.

SILVER COINS.

No. 1. *Five-Franc piece* of 1830. Legally 40 to the kilogramme, $\frac{9}{10}$ fine; $14._{93}$ to the Eng. troy pound. Mean value 4*s*. $0._{285}$*d*.

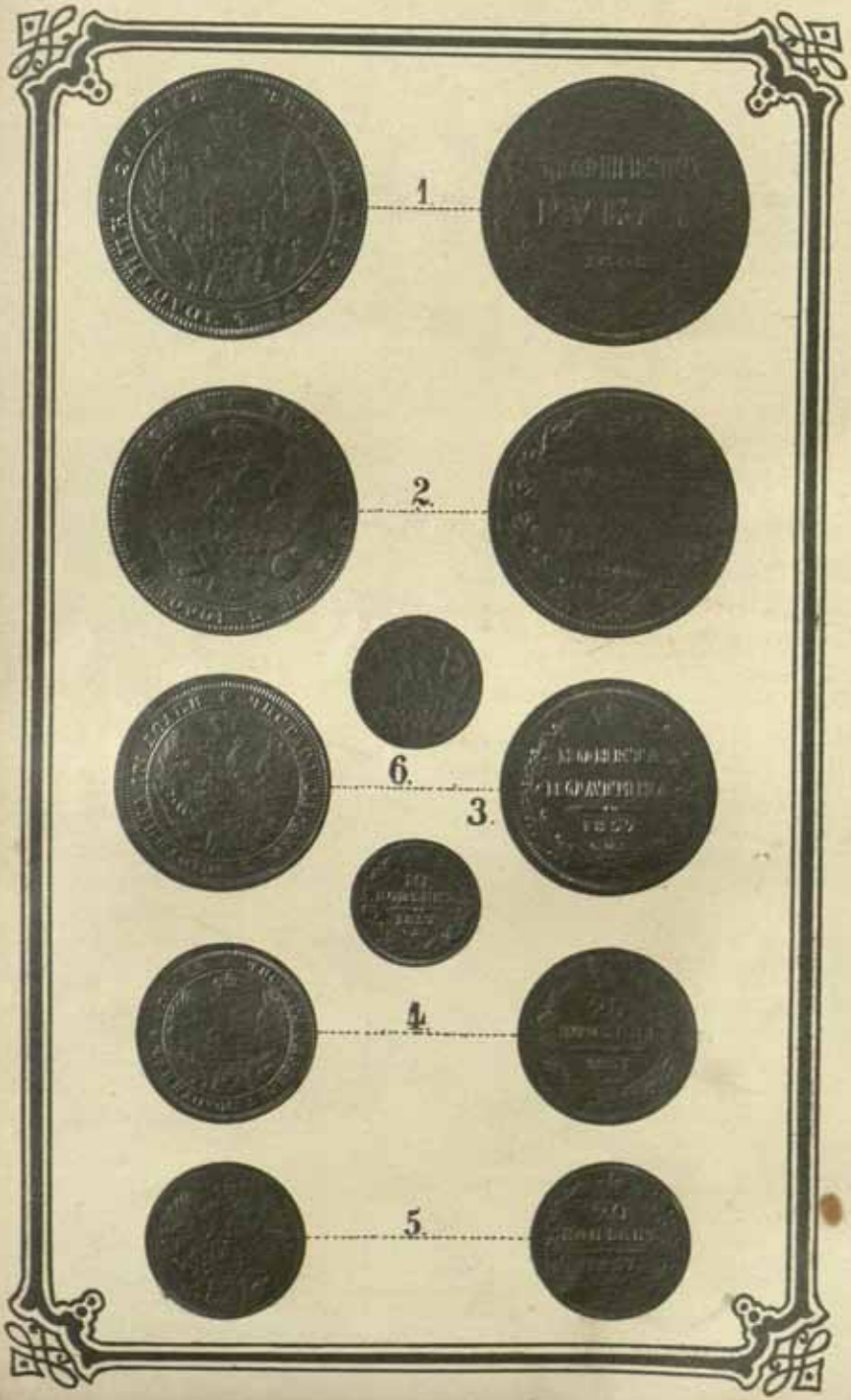
No. 2. *Five-Franc piece* of 1847. Weight, value, &c., as No. 1.

No. 3. *Do.* of 1848. do. do.

No. 4. *Do.* of 1849. do. do.

8

Russia.



RUSSIA.

SILVER COINS.

No. 1. *Rubel*, of 100 Kopeken, of 1848. Weight $466_{.36}$ doli, or about 320 Eng. troy grains, $\frac{125}{144}$ fine. Mean value 3*s*. $2\frac{3}{4}$*d*.

No. 2. $\frac{3}{4}$-*Rubel*, or 5 zlote, of 1840. Weight about 239 Eng. troy grains, varying from $\frac{868}{1000}$ to $\frac{873}{1000}$ fine. Mean value 2*s*. $5\frac{1}{16}$*d*.

No. 3. $\frac{1}{2}$-*Rubel* of 1857. Weight, &c., in proportion to No. 1.

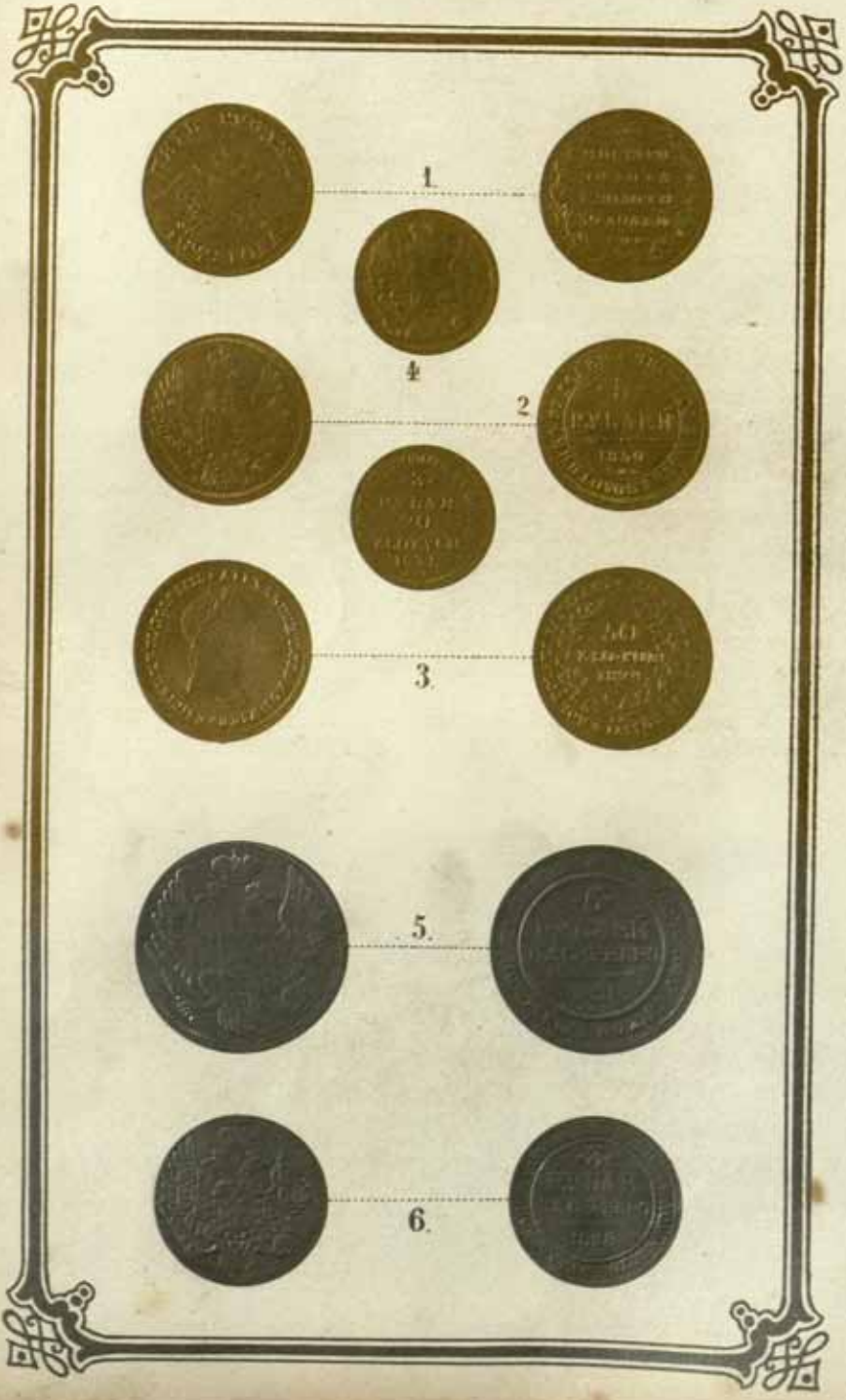
No. 4. $\frac{1}{4}$-*Rubel* of 1857. do. do.

No. 5. $\frac{1}{5}$-*Rubel* of 1857. do. do.

No. 6. $\frac{1}{10}$-*Rubel* of 1857. do. do.

9

Russia.



RUSSIA.

GOLD COINS.

Nos. 1 and 2. *Half-Imperial* of 5 gold rubel, of 1828 and 1850. Legally 62 $\frac{46}{45}$ to the Russian funda, or pound, $\frac{11}{12}$ fine; 57 to the Eng. troy pound. Legal value 16*s*. 4½*d*.

No. 3. *Piece of* 50 *Zlote polski* (Polish gulden, or florin), of 1829. 38 to the Eng. troy pound, $\frac{11}{12}$ fine. Mean value £1 4*s*. 6½*d*.

No. 4. *Ducat* of 1834. Legal weight 88$\frac{4}{11}$ doli, $\frac{11}{12}$ fine; 95 to the Eng. troy pound. Mean value 9*s*. 9¾*d*.

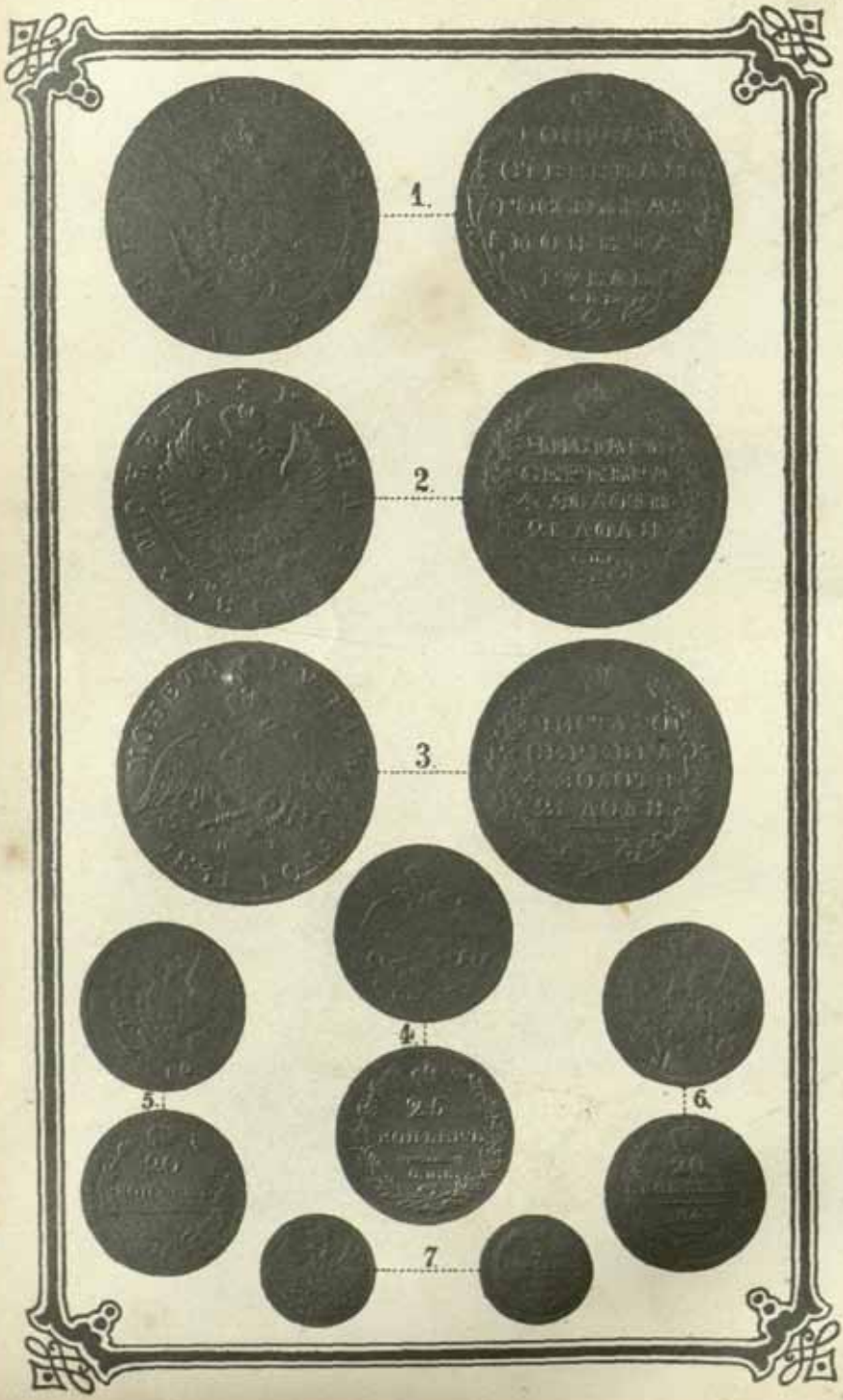
PLATINA COINS.

No. 5. *Double-Ducat* of 6 silver rubel, of 1831. Legal weight 466 doli, or 319.$_{54}$ English troy grains. The intrinsic worth of this coin depends upon the price of platina: its nominal worth is, or was, 6 silver rubel, or about 19*s*. 4¾*d*. Since 1845 no platina money has been coined.

No. 6. *Ducat* of 1829. See No. 5.

10

Russia



RUSSIA.

SILVER COINS.

No. 1. *Rubel* of 1804. Weight $471_{.24}$ doli, about $\frac{116}{125}$ fine; $17_{.778}$ to the troy pound. Mean value 3*s*. 3*d*.

No. 2. *Do.* of 1818. 100 to $5\frac{1}{16}$ Russian pounds, one thus weighing $466._{56}$ doli, $\frac{125}{144}$ fine; 18 to the troy pound. Mean value 3*s*. $2\frac{1}{2}$*d*.

No. 3. *Do.* of 1831. Weight, value, &c., as No. 2.

No. 4. $\frac{1}{4}$-*Rubel* (of 25 kopeks), of 1827. Weight and value in proportion to No. 2.

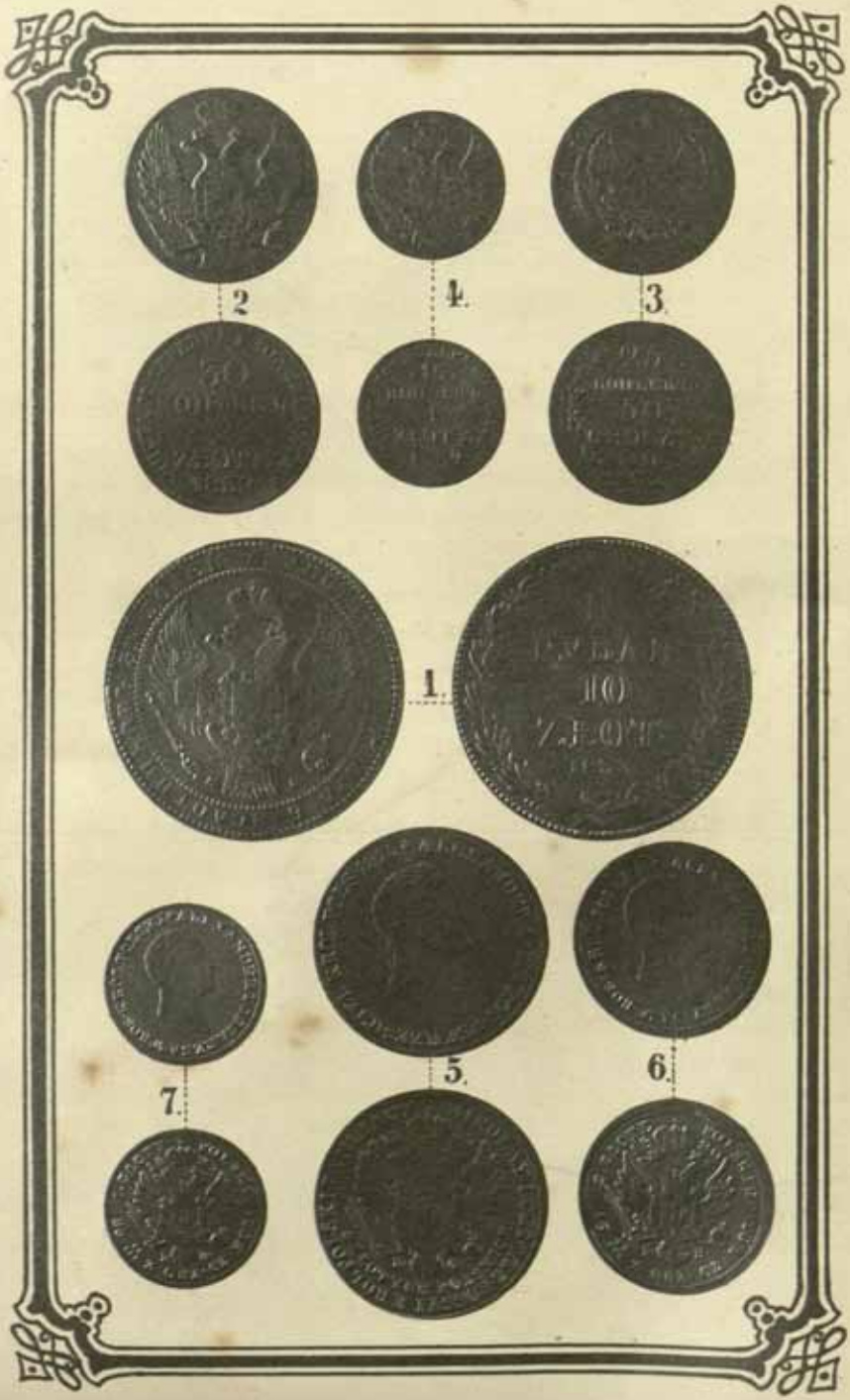
No 5. $\frac{1}{5}$-*Rubel* (of 20 kopeks), of 1810. Weight and value in proportion to No. 2.

No. 6. $\frac{1}{5}$-*Rubel* of 1847. Weight, value, &c., as No. 2.

No. 7. $\frac{1}{10}$-*Rubel* of 1847. Weight, value, &c., as No. 2.

11

Russia.



RUSSIA.

RUSSIAN-POLISH SILVER COINS.

No. 1. $1\frac{1}{2}$-*Rubel piece*, of 10 zlote polski, of 1833. Weight $699_{\cdot 84}$ Russian doli, or about 480 Eng. troy grains, $\frac{875}{1000}$ fine. Mean value 4*s*. $10\frac{1}{2}$*d*.

No. 2. 30-*Kopeken piece*, 2 zlote polski, or 2 Polish gulden (1839). Weight about 140 doli, or 96 troy grains, $\frac{875}{1000}$ fine. Mean value $11_{\cdot 7}$*d*.

No. 3. 25-*Kopeken piece*, or 50 groszy, of 1846. Weight $116_{\cdot 64}$ doli, or about 80 troy grains, $\frac{875}{1000}$ fine. Mean value $9\frac{3}{4}$*d*.

No. 4. 15-*Kopeken piece*, or 1 zloty, of 1839. Weight value, &c., in proportion to No. 2.

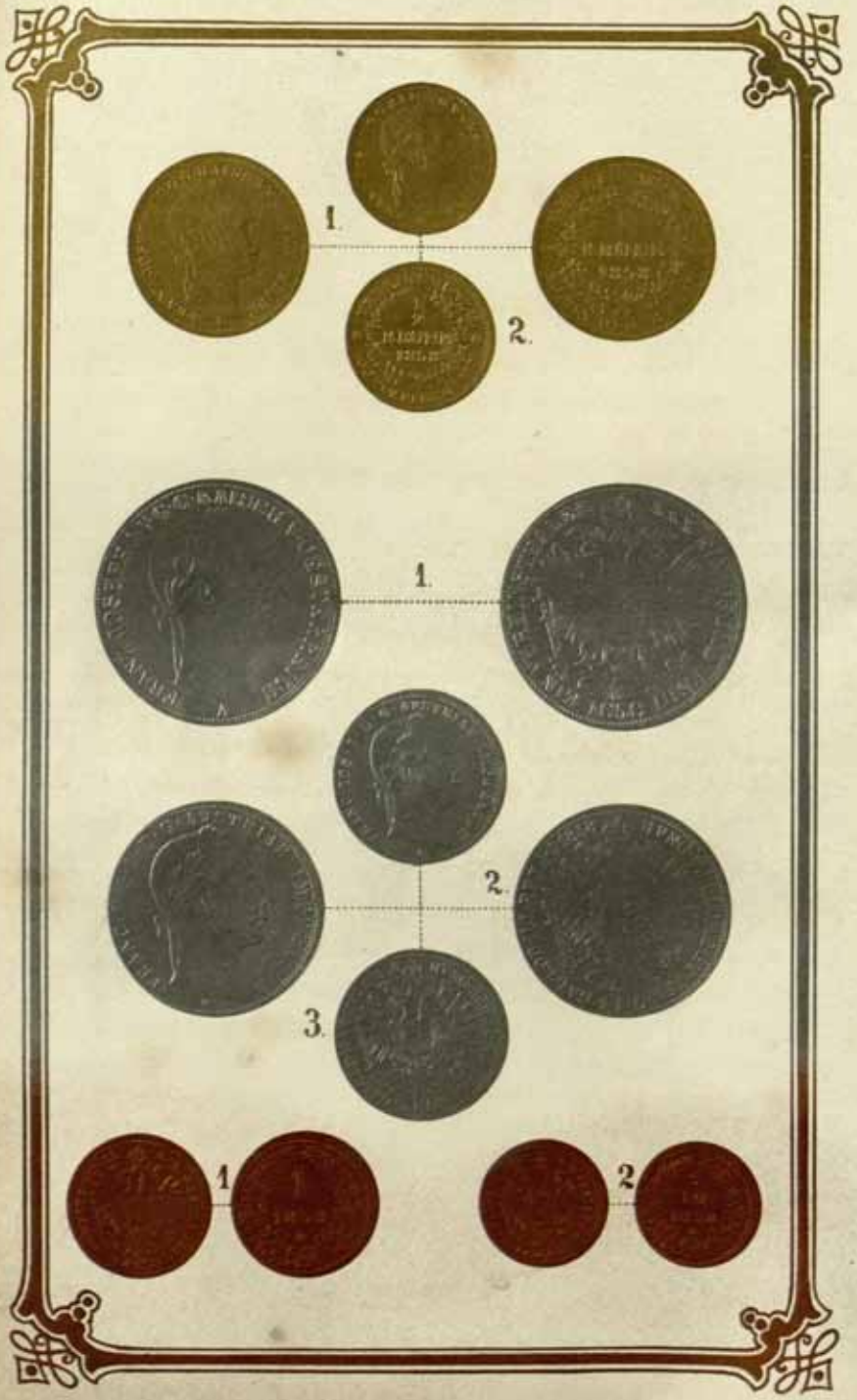
No. 5. 5-*Zlote piece*, or $\frac{3}{4}$ rubel, of 1815. As near as possible in proportion to No. 1.

No. 6. 2-*Zlote piece*, of 30 kopeken, of 1820. Weight about 140 Eng. troy grains. $\frac{111}{200}$ fine. Mean value about 1*s*.

No. 7. *Zloty*, or gulden, of 1823. Weight value, &., in proportion to No. 6.

h

Austria.



AUSTRIA.

GOLD COINS.

No. 1. *Krone* of 1858. 45 to the Zollverein pound of minting gold, $\frac{9}{10}$ fine; $33._{59}$ to the Eng. troy pound. Mean value £1 7*s*. 4*d*.

No. 2. $\frac{1}{2}$-*Krone* of 1858. Weight and value in proportion to No. 1.

SILVER COINS.

No. 1. *Thaler* of 1858. 27 to the Zollverein pound, $\frac{9}{10}$ fine; $20._{155}$ to the troy pound. Mean value 3*s*.

No. 2. *Gulden*, or $\frac{2}{3}$-*thaler* of 1858. Weight, value &c., in proportion No. 1.

No. 3. $\frac{1}{4}$-*Gulden*, or $\frac{1}{6}$-*thaler* of 1858. $93._{6}$ to the Zollverein pound, $\frac{29}{50}$ fine; $69._{87}$ to the troy pound. Mean value 6*d*.

COPPER COINS.

No. 1. *Kreuzer* of 1858. Value $\frac{24}{25}$ of a farthing.

No. 2. $\frac{1}{2}$-*Kreuzer* of 1858. Value $\frac{12}{25}$ of a farthing.

AUSTRIA.

GOLD COINS.

No. 1. Ducat of 1868. 15 to the Austrian pound of standard gold. $\frac{1}{2}$ fine, $\frac{23}{24}$ in the fine troy pound. Mean value 11 fr. 6d.

No. 2. $\frac{1}{2}$ Ducat of 1868. Weight and value in proportion to No. 1.

SILVER COINS.

No. 1. Thaler of 1868. 27 to the Austrian pound. $\frac{13}{14}$ fine, $\frac{13}{14}$ in the troy pound. Mean value 3d.

No. 2. Gulden or $\frac{1}{2}$ thaler of 1868. Weight, value, etc., in proportion to No. 1.

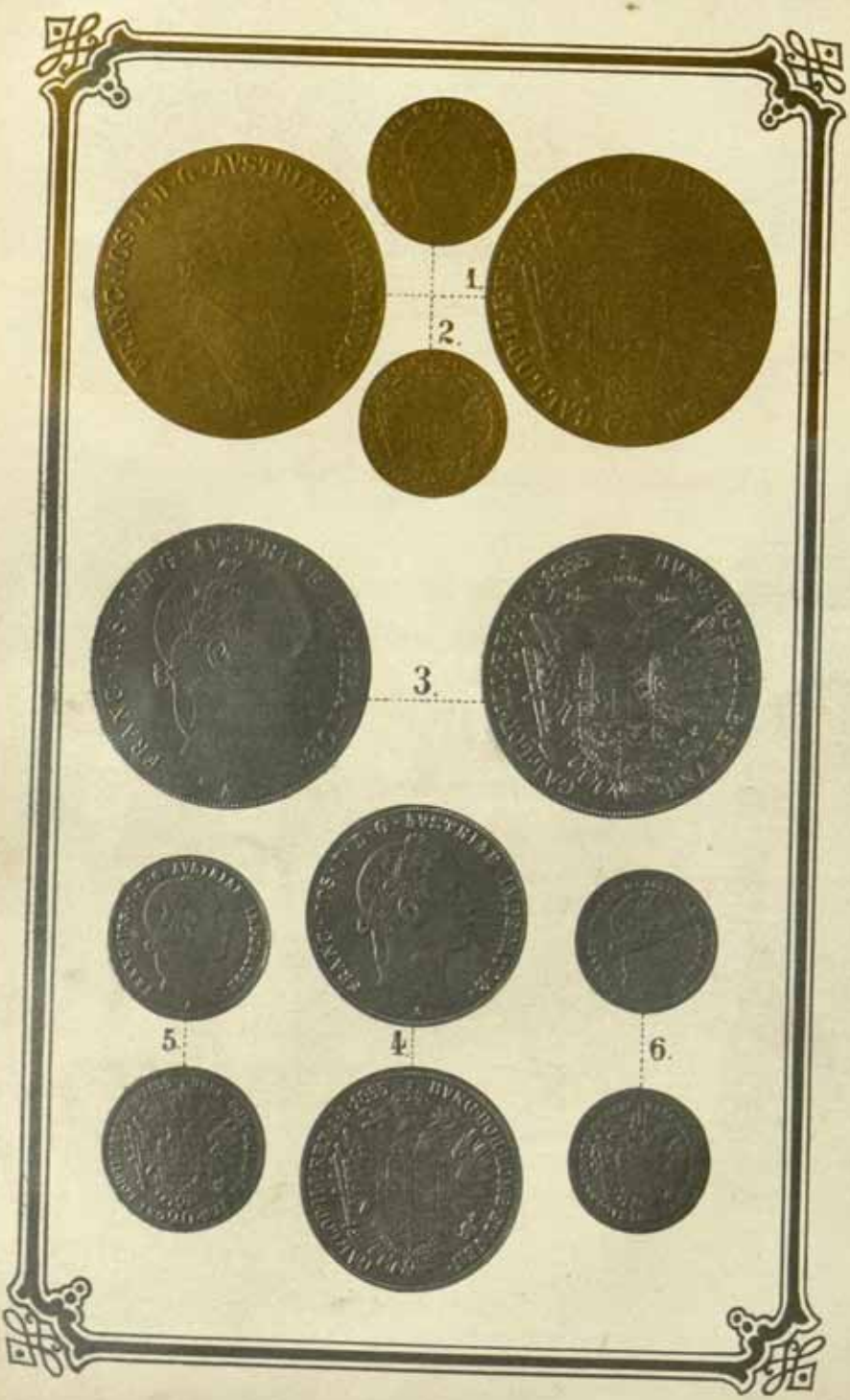
No. 3. $\frac{1}{4}$ Gulden = $\frac{1}{2}$ thaler of 1868. $\frac{13}{14}$ fine, $\frac{13}{14}$ in the Austrian pound. $\frac{11}{12}$ fine, $\frac{23}{24}$ in the troy pound. Mean value 1d.

COPPER COINS.

No. 1. Kreuzer of 1868. 1,200 to a florin.

No. 2. $\frac{1}{2}$ Kreuzer of 1868. Value in proportion.

Austria.



AUSTRIA.

GOLD COINS. 1856.

No. 1. *Four-ducat piece.* $16._{75}$ to the German conventional mark, $\frac{23}{24}$ fine; $26._{72}$ to the Engl. troy pound. Mean value £1 17*s.* 7¼*d.*

No. 2. *Ducat.* 67 to the mark, $\frac{23}{24}$ fine; $106._{92}$ to the troy pound. Mean value 9*s.* 4¾*d.*

SILVER COINS. 1855.

No. 3. *Two-gulden piece,* or *spezies-thaler.* 9 to the mark, $\frac{9}{10}$ fine; $14._{264}$ to the troy pound. Mean value 4*s.* 2*d.*

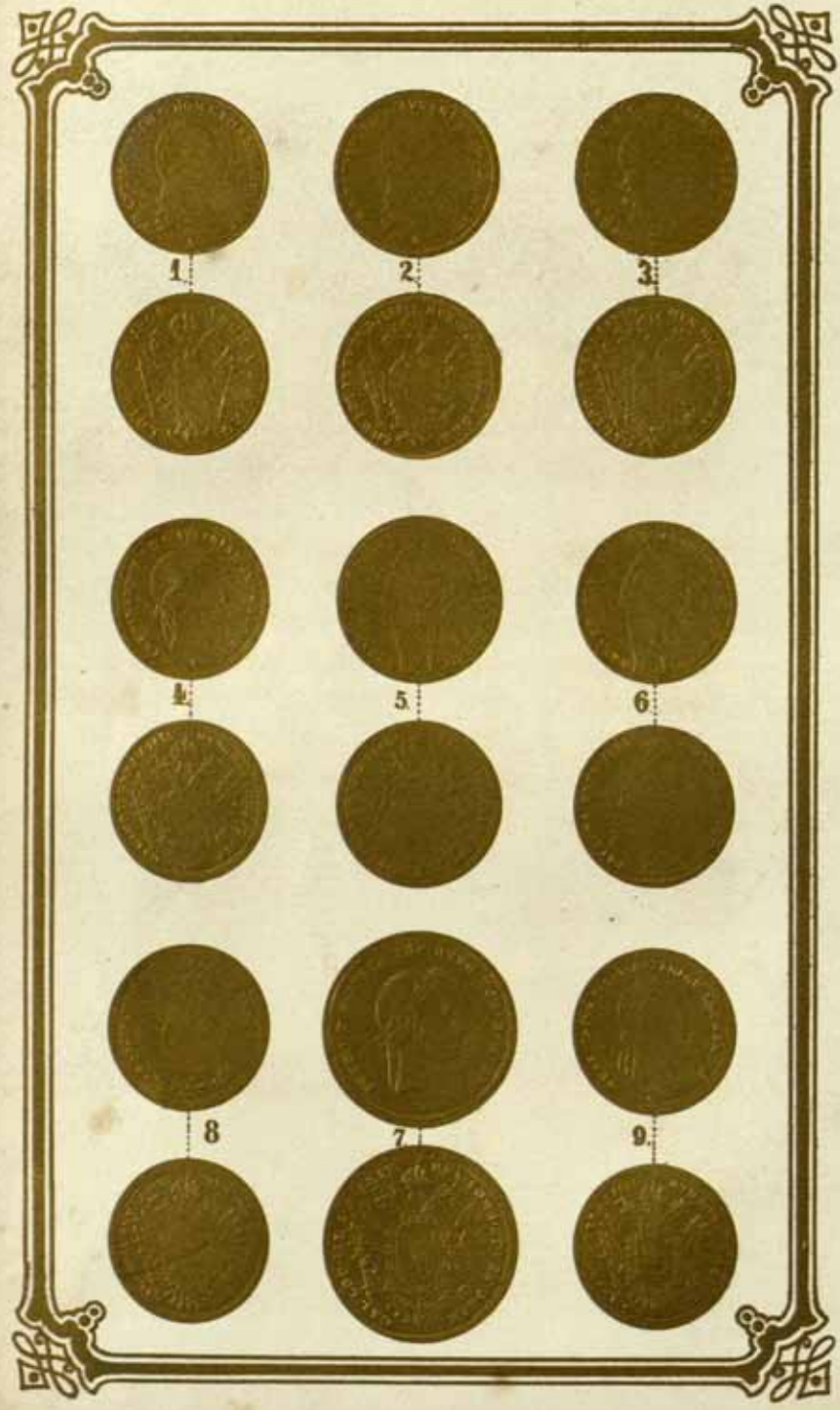
No. 4. *Gulden,* or *fiorino.* 18 to the mark, $\frac{9}{10}$ fine; $28._{72}$ to the troy pound. Mean value 2*s.* 1*d.*

No. 5. *Zwanziger,* or *lira,* of 20 kreuzer. 54 to the mark, $\frac{9}{10}$ fine; $86._{184}$ to the troy pound. Mean value 8*d.*

No. 6. *Ten-kreuzer piece.* Weight, value, &c., in proportion to No. 5.

14

Austria.



AUSTRIA.

GOLD COINS.

No. 1. *Halb-Souveraind'or* of 1804. About 84 to the Cologne mark about $\frac{14}{15}$ fine; weight about 42_{87} Eng. troy grains. Value about 7*s.*, often something less.

No. 2. *Halb-Souveraind'or* of 1811. Weight, value, &c., same as No. 1.

No. 3. *Do.* of 1830. do. do.

No. 4. *Ducat* of 1835. 67 to the Cologne mark, $\frac{71}{72}$ fine; weight 53_{86} Eng. troy grains. Mean value 9*s.* 4*d.*

No. 5. *Ducat* of 1837. Weight, value, &c., as No. 4.

No. 6. *Do.* of 1848. Value about 9*s.* $4\frac{3}{4}$*d.*

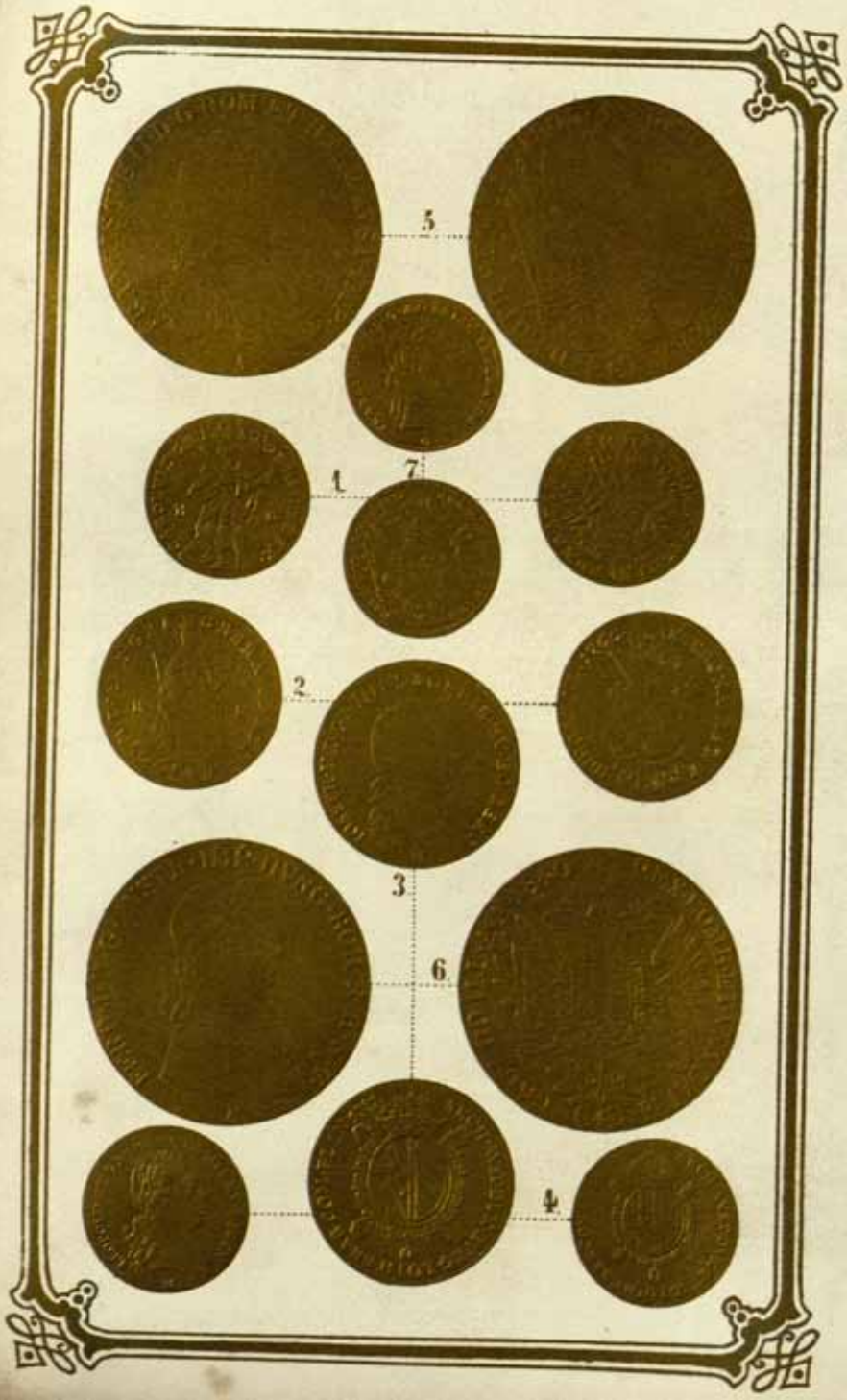
No. 7. *Souveraind'or* of 1837. About 42 to the Cologne mark, about $\frac{14}{15}$ fine; weight about $85\frac{3}{4}$ troy grains. Mean value about 14*s.*

No. 8. *Ducat* of 1822. Weight, value, &c., same as No. 4.

No. 9. *Do.* of 1835. do. do.

15

Austria.



AUSTRIA.

GOLD COINS.

No. 1. *Hungarian Ducat* of 1738. 67 to the Cologne mark, $\frac{888}{888}$ fine; about 107 to the Eng. troy pound. Mean value 9*s.* 5*d.*

No. 2. *Doppel-Ducat* of 1765 (Marie Theresia). $33._3$ to the Cologne mark, $\frac{884}{888}$ fine; about $53._5$ to the troy pound. Mean value 18*s.* 9¼*d.*

No. 3. *Doppel-Souveraind'or* of 1787. About $21._{15}$ to the Cologne mark, $\frac{14}{15}$ fine; about $33._{39}$ to the troy pound. Mean value £1 7*s.* 10*d.*

No. 4. *Souveraind'or* of 1791. Weight, value, &c., in proportion to No. 3.

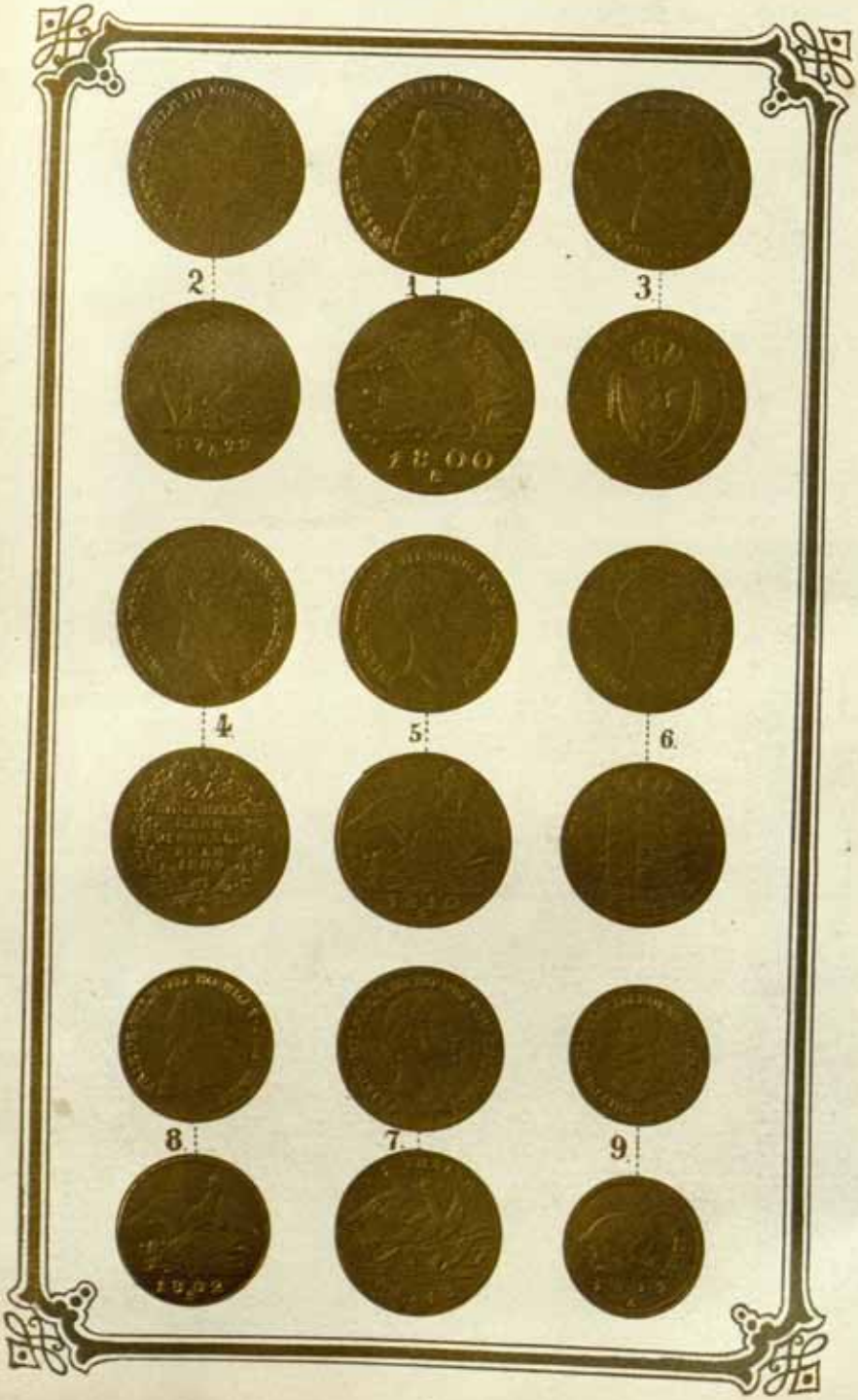
No. 5. *Four-Ducat piece* of 1806. Weight, value, &c., in proportion to No. 2.

No. 6. *Do.* of 1840. do. do.

Nr. 7. *Souveraind'or* of 1738. Weight value, in proportion to No. 3.

16

Prussia.



PRUSSIA.

GOLD COINS.

No. 1. *Doppel-Friedrichsd'or* of 1800. 17½ to the Cologne mark, $\frac{65}{72}$ fine; $27._{93}$ to the Eng. troy pound. Legal value £1 12*s.* 9*d.*, but generally only £1 12*s.* 5*d.*

No. 2. *Friedrichsd'or* of 1798. 35 to the Cologne mark, $\frac{65}{72}$ fine; $55._{86}$ to the Eng. troy pound. Legal value 16*s.* 4½*d.*, but generally only 16*s.* 2½*d.*

No. 3. *Friedrichsd'or* of 1799. Weight and value as No. 2.

No. 4. *Do.* of 1809. do. do.

No. 5. *Do.* of 1810. do. do.

No. 6. *Do.* of 1814. do. do.

No. 7. *Do.* of 1815. do. do.

No. 8. *Halb-Friedrichsd'or* of 1802. Weight and value in proportion to No. 2.

No. 9. *Halb-Friedrichsd'or* of 1817. Weight, value, &c., in proportion to No. 2.

PRUSSIA.

GOLD COINS.

No. 1. Dugat Friedrichsdor of 1800. 174 to the Cologne mark, 23 fine. This is the Eng. ver. (gold) Jacobus, 21 10s. 0d. but generally only 21 12s. 6d.

No. 2. Friedrichsdor of 1766. 86 to the Cologne mark, 23 fine. This is the Fre. ver. pouce. Legal value 16s. 6d. but generally only 16s. 3¼d.

No. 3. Friedrichsdor of 1790. Weight and value as No. 2.

No. 4. Do. of 1800. do. do.

No. 5. Do. of 1810. do. do.

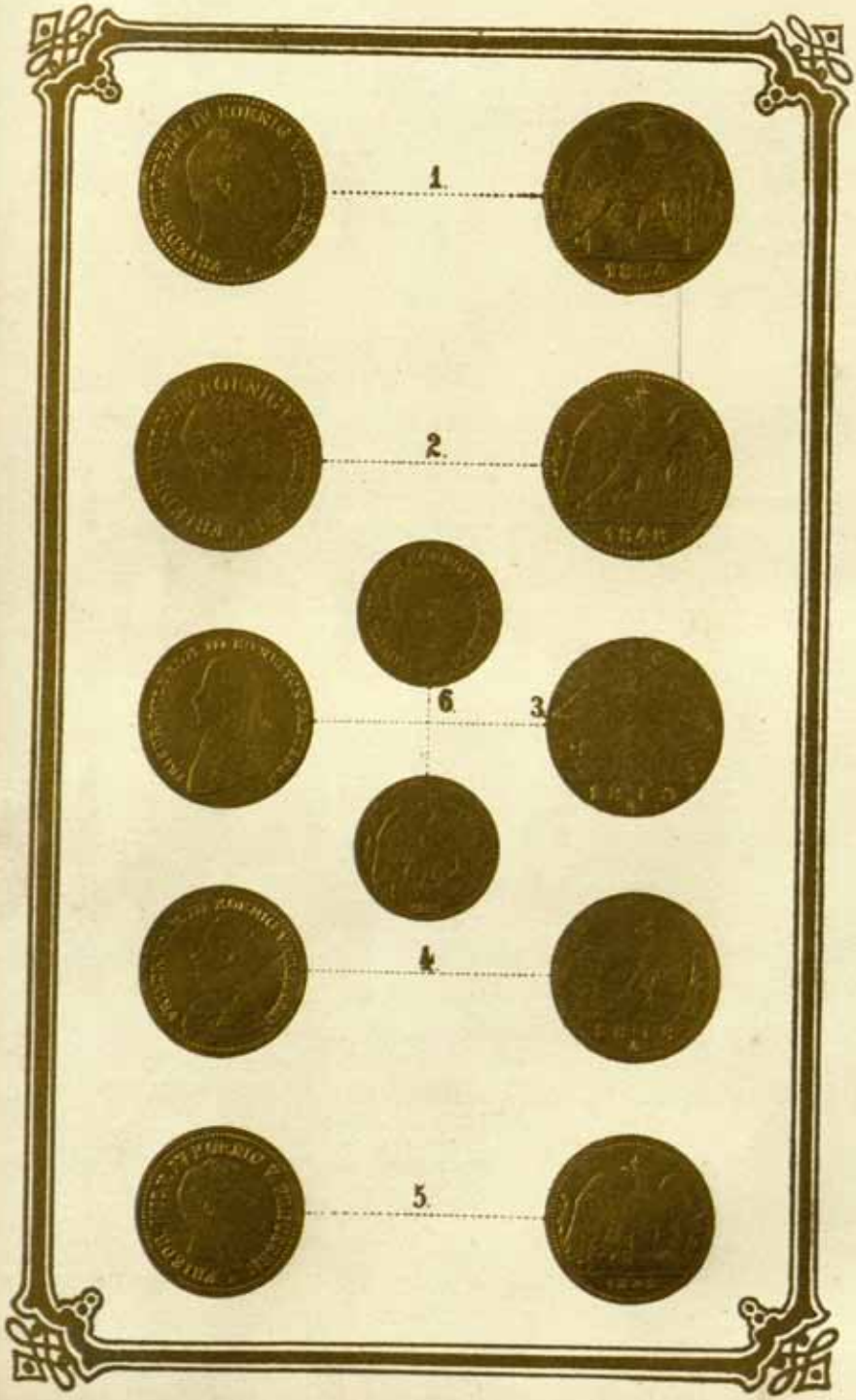
No. 6. Do. of 1818. do. do.

No. 7. Do. of 1818. do. do.

No. 8. Half Friedrichsdor of 1802. Weight and value in proportion to No. 2.

No. 9. Half Friedrichsdor of 1811. Weight and value as in proportion to No. 2.

Prussia.



PRUSSIA.

GOLD COINS.

No. 1. *Doppel-Friedrichsd'or* of 1854. 17½ to the Cologne mark, $\frac{22}{24}$ fine; about 28 to the Eng. troy pound. Mean value £1 12*s*. 11½*d*.

No. 2. *Doppel-Friedrichsd'or* of 1848. Weight, value, &c., same as No. 1.

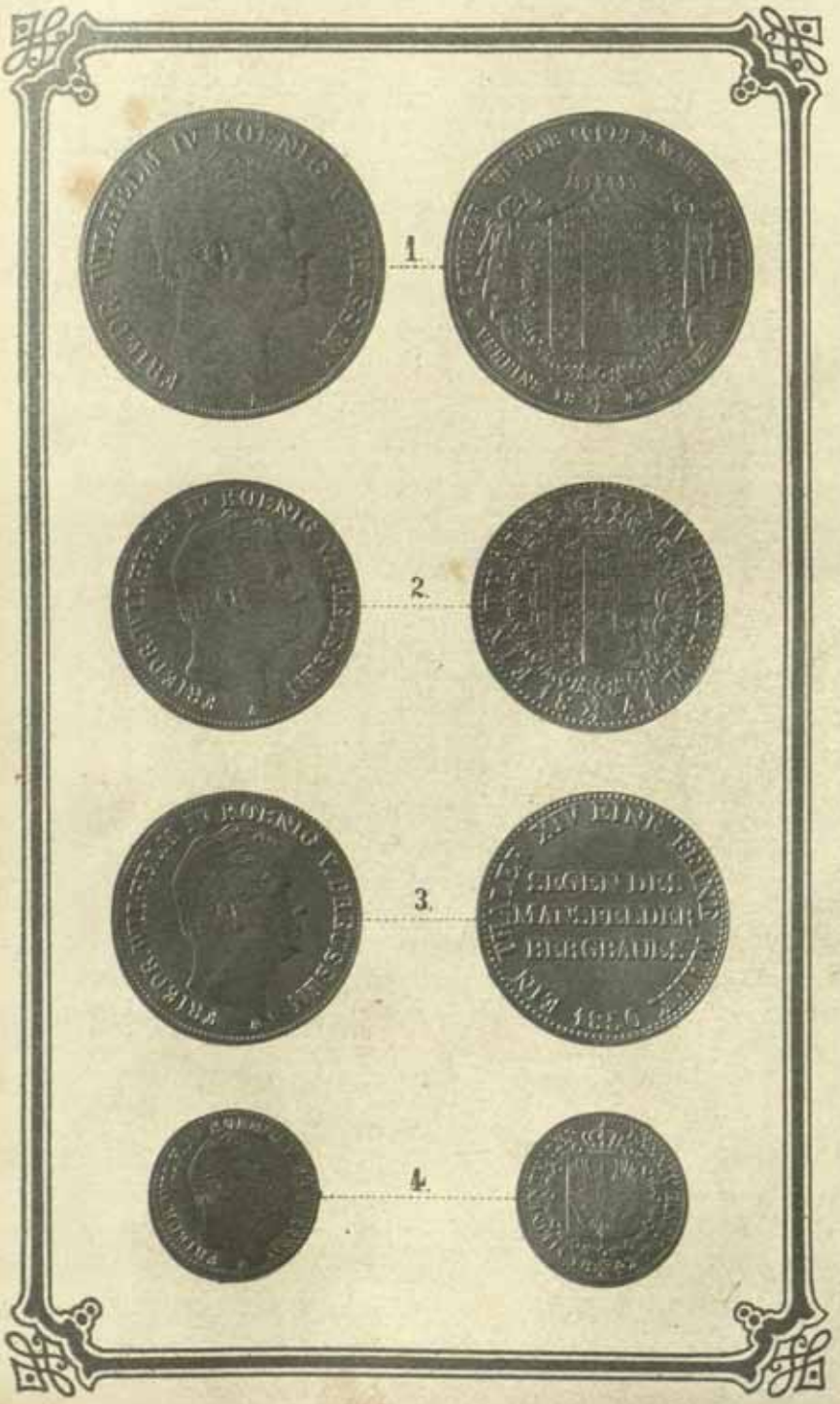
Nos. 3 and 4. *Friedrichsd'or* of 1813 and 1818. Weight, value, &c., in proportion to No. 1.

No. 5. *Friedrichsd'or* of 1842. Weight, value, &c., in proportion to No. 1.

No. 6. *Halb-Friedrichsd'or* of 1833. Weight, value, &c., in proportion to Nr. 1.

18

Prussia.



PRUSSIA.

SILVER COINS.

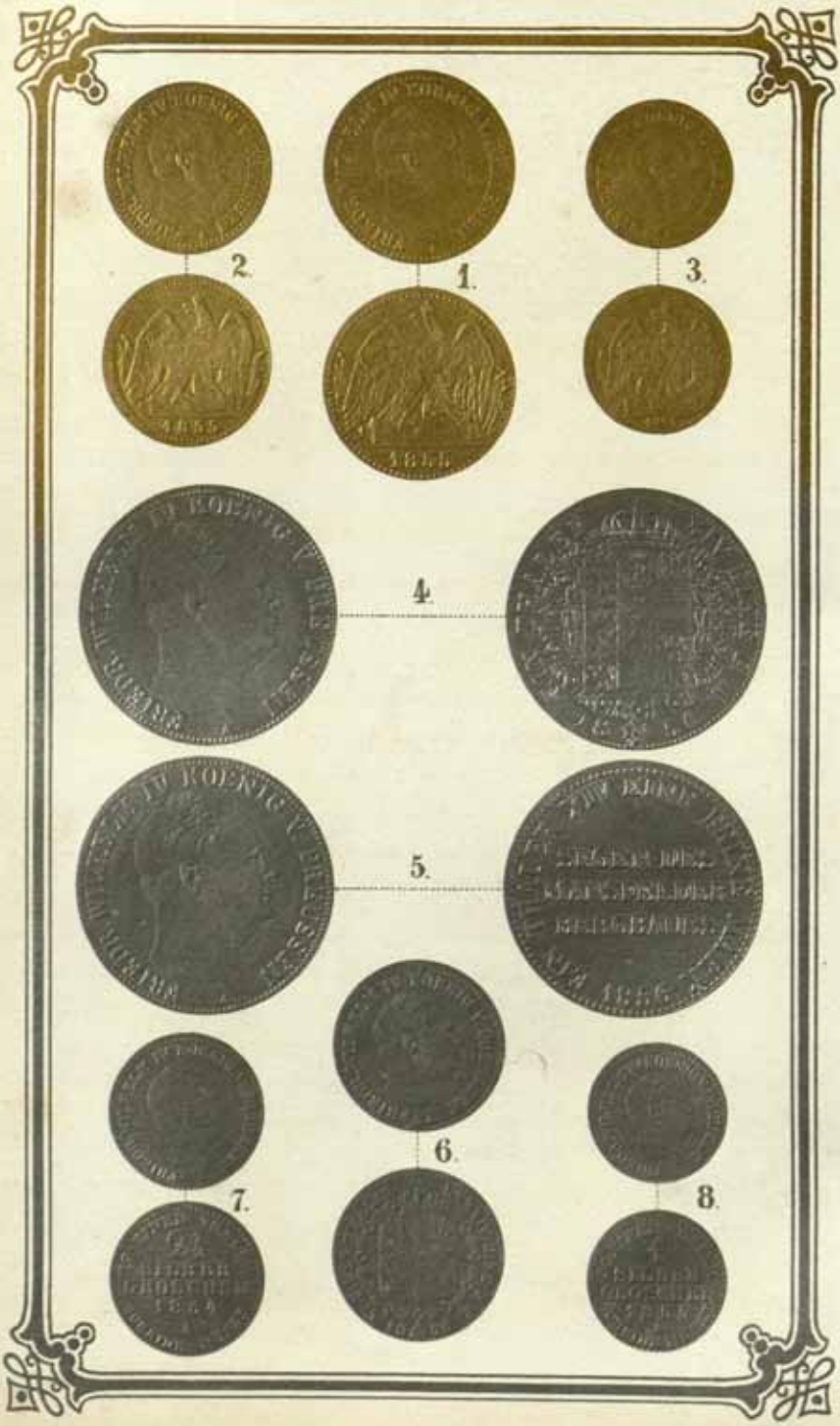
No. 1. *Two-Thaler,* or $3\frac{1}{2}$-*Gulden piece,* of 1842. $6\frac{1}{4}$ to the Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

No. 2. *Thaler* of 1841. $10\frac{1}{2}$ to the Cologne mark, $\frac{5}{6}$ fine; $16\frac{3}{4}$ to the troy pound. Mean value 3*s*.

No. 3. *Thaler* of 1850, made of silver from the Mansfeld mines. Weight, value, &c., same as No. 2.

No. 4. $\frac{1}{2}$-*Thaler* of 1842. $43\frac{3}{4}$ to the Cologne mark, $\frac{75}{144}$ fine; about 70 to the troy pound. Mean value 6*d*.

Prussia.



PRUSSIA.

GOLD COINS.

No. 1. *Double-Friedrich-d'or* of 1855. $17\frac{1}{2}$ to the conventional mark, $\frac{67}{72}$ fine. $27._{93}$ to the pound troy. Mean value £1 4*s.* $4\frac{1}{2}$*d.*

No. 2. *Friedrich-d'or* of 1855. Weight and value in proportion to No. 1.

No. 3. $\frac{1}{2}$-*Friedrich-d'or* of 1853. do. do.

SILVER COINS.

No. 4. *Thaler* of 1856. $10\frac{1}{2}$ to the mark, $\frac{3}{4}$ fine; $16._{7582}$ to the troy pound. Mean value 3*s.*

No. 5. *Thaler* of 1856. Weight and value as No. 4. These pieces are coined from the produce of the Mansfeld silver mines.

No. 6. $\frac{1}{6}$-*Thaler,* or *five-groschen piece.* 1856. $43\frac{3}{4}$ to the mark, about $\frac{13}{25}$ fine; $69._{806}$ to the troy pound. Mean value 6*d.*

No. 7. $\frac{1}{12}$-*Thaler,* or $2\frac{1}{2}$-*groschen piece.* 1854. $114._{914}$ to the troy pound, $\frac{375}{1000}$ fine. Nominal and current value 3*d.*, real value something less.

No. 8. *Silber-groschen.* 1855. $170._{243}$ to the pound troy, $\frac{222}{1000}$ fine. Current value $1\frac{1}{4}$*d.*

Prussia-Saxony.

1.

2.

3.

4

PRUSSIA.—SAXONY.

CONVENTIONAL MONEY.

SILVER COINS.

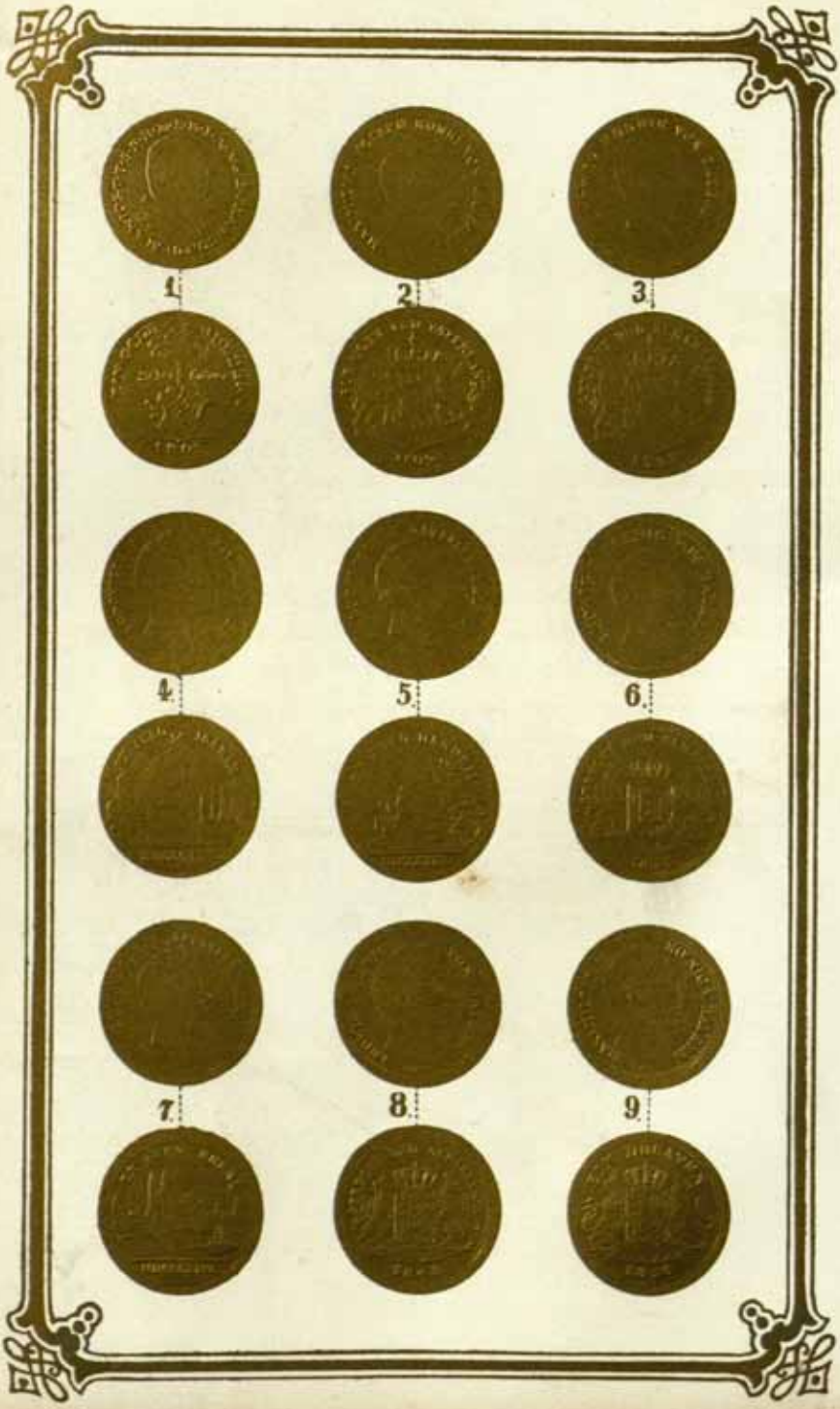
No. 1. *Thaler* of 1858 (Prussia). 27 to the Zollverein pound, $\frac{9}{10}$ fine; $20._{1549}$ to the Eng. troy pound. Mean value 3*s*.

No. 2. *Thaler* of 1856 (Prussia), made of silver from the Mansfeld mines, Weight, value, &c., as No. 1.

No. 3. *Thaler* of 1858 (Saxony). Weight, value, &c., as No. 1.

No. 4. *Two-thaler piece* of 1858 (Saxony). Weight, value, &c., in proportion to Nos. 1, 2, and 3.

Bavaria



BAVARIA.

GOLD COINS.

No. 1. *Goldgulden* of 1803. 72 to the Munich, or Bavarian-Cologne, mark, $\frac{111}{144}$ fine; $114._{86}$ to the troy pound. Mean value 6*s.* 2½*d.*

No. 2. *Ducat* of 1809. 67 to the Munich, or Bavarian-Cologne, mark, $\frac{111}{144}$ fine; $106._{89}$ to the troy pound. Mean value 8*s.* 6*d.*

No. 3. *Ducat* of 1828. Weight and value as No. 2.

No. 4. *Do.* of 1830 (Isar ducat). Weight and value as No. 2.

No. 5. *Do.* of 1830 (Danube ducat). Weight and value as No. 2.

No. 6. *Do.* of 1835. Weight and value as No. 2.

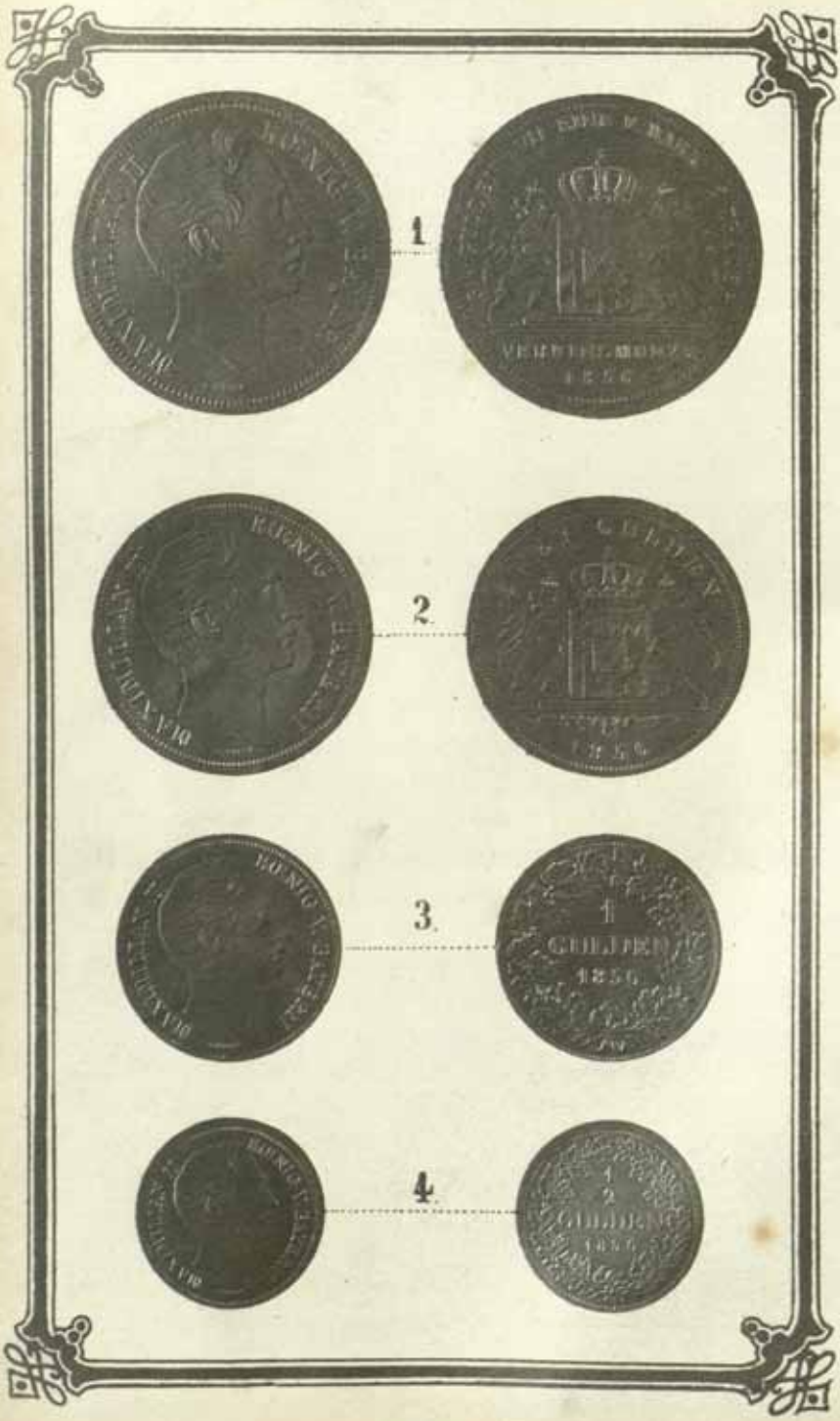
No. 7. *Do.* of 1846 (Rhine ducat). Weight and value as No. 2.

No. 8. *Do.* of 1848. Weight and value as No. 2.

No. 9. *Do.* of 1856. Weight and value as No. 2.

22

Bavaria.



BAVARIA.

SILVER COINS.

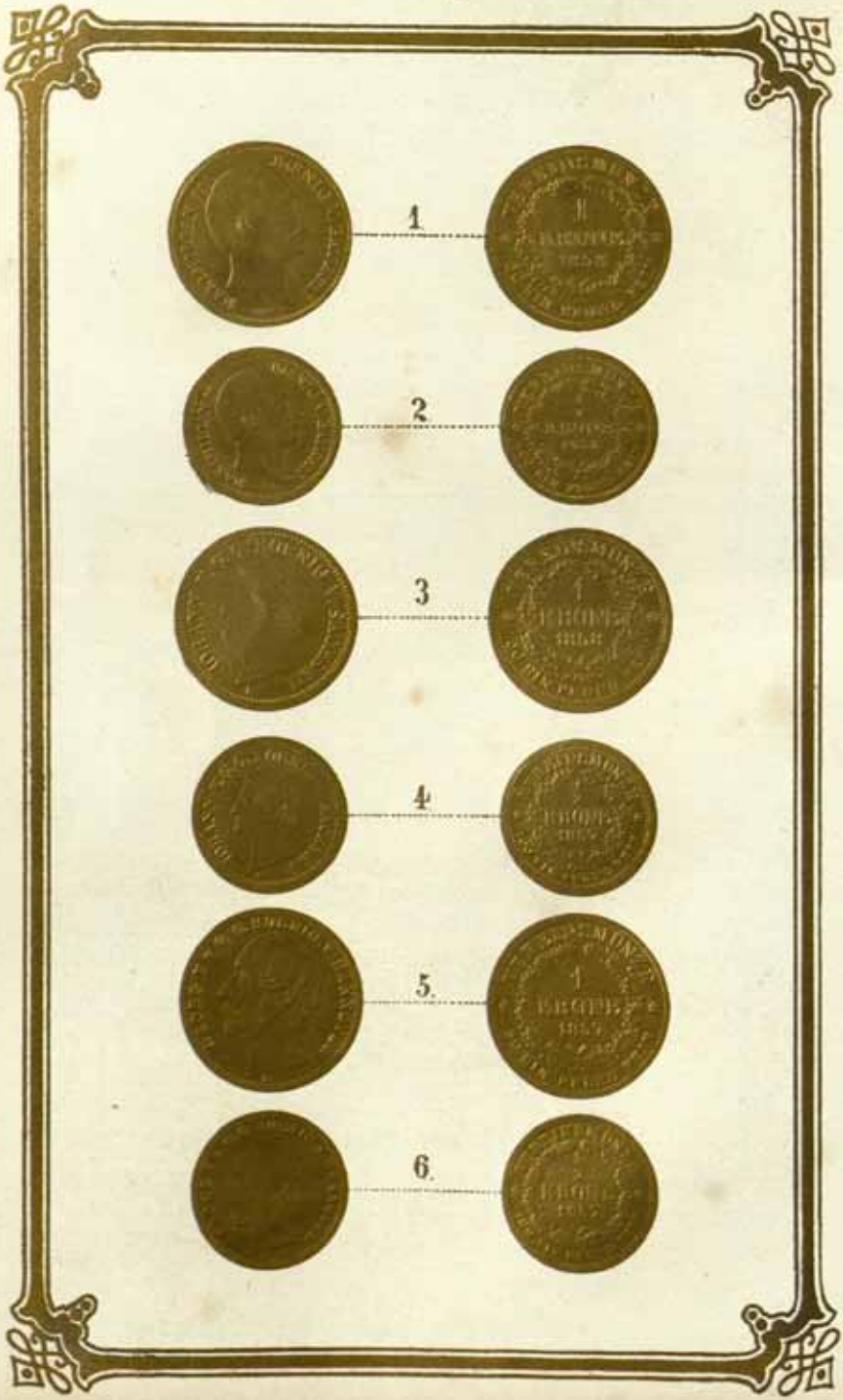
No. 1. $3\frac{1}{2}$-*Gulden* = 2 *thaler*, of 1856. $6._3$ to the Cologne mark, $\frac{9}{10}$ fine; $10._{05}$ to the Engl. troy pound. Mean value 6*s*.

No. 2. *Two-gulden piece* of 1856. $11._{025}$ to the Cologne mark, $\frac{9}{10}$ fine; $17._{59}$ to the troy pound. Mean value 3*s*. $5\frac{1}{2}$*d*.

No. 3. *Gulden* of 1856. Weight, value, &c., in proportion to No. 2.

No. 4. $\frac{1}{2}$-*Gulden* of 1856. Weight, value, &c., in proportion to No. 2.

Bavaria-Saxony-Hanover.



BAVARIA.—SAXONY.—HANOVER.

CONVENTIONAL GOLD COINS.

No. 1. *Krone* of 1858 (Bavaria). 45 to the Zollverein pound, $\frac{9}{10}$ fine; $33._{59}$ to the Eng. troy pound. Mean value £1 7*s.* 4*d.*

No. 2. $\frac{1}{2}$-*Krone* of 1858 (Bavaria). Weight, value, &c., in proportion to No. 1.

No. 3. *Krone* of 1858 (Saxony). Weight, value, &c., as No. 1.

No. 4. $\frac{1}{2}$-*Krone* of 1857 (Saxony). Weight, value, &c., in proportion to No. 1.

No. 5. *Krone* of 1857 (Hanover). Weight, value, &c., as No. 1.

No. 6. $\frac{1}{2}$-*Krone* of 1757 (Hanover). Weight, value, &c., in proportion to No. 1.

Bavaria-Hanover-Oldenburg.

1.

2.

3.

4.

BAVARIA.—HANOVER.—OLDENBURG.

CONVENTIONAL MONEY.

SILVER COINS.

No. 1. *Thaler* of 1858 (Bavaria). 27 to the Zollverein pound, $\frac{9}{10}$ fine; $20_{\cdot 1549}$ to the Eng. troy pound. Mean value 3*s*.

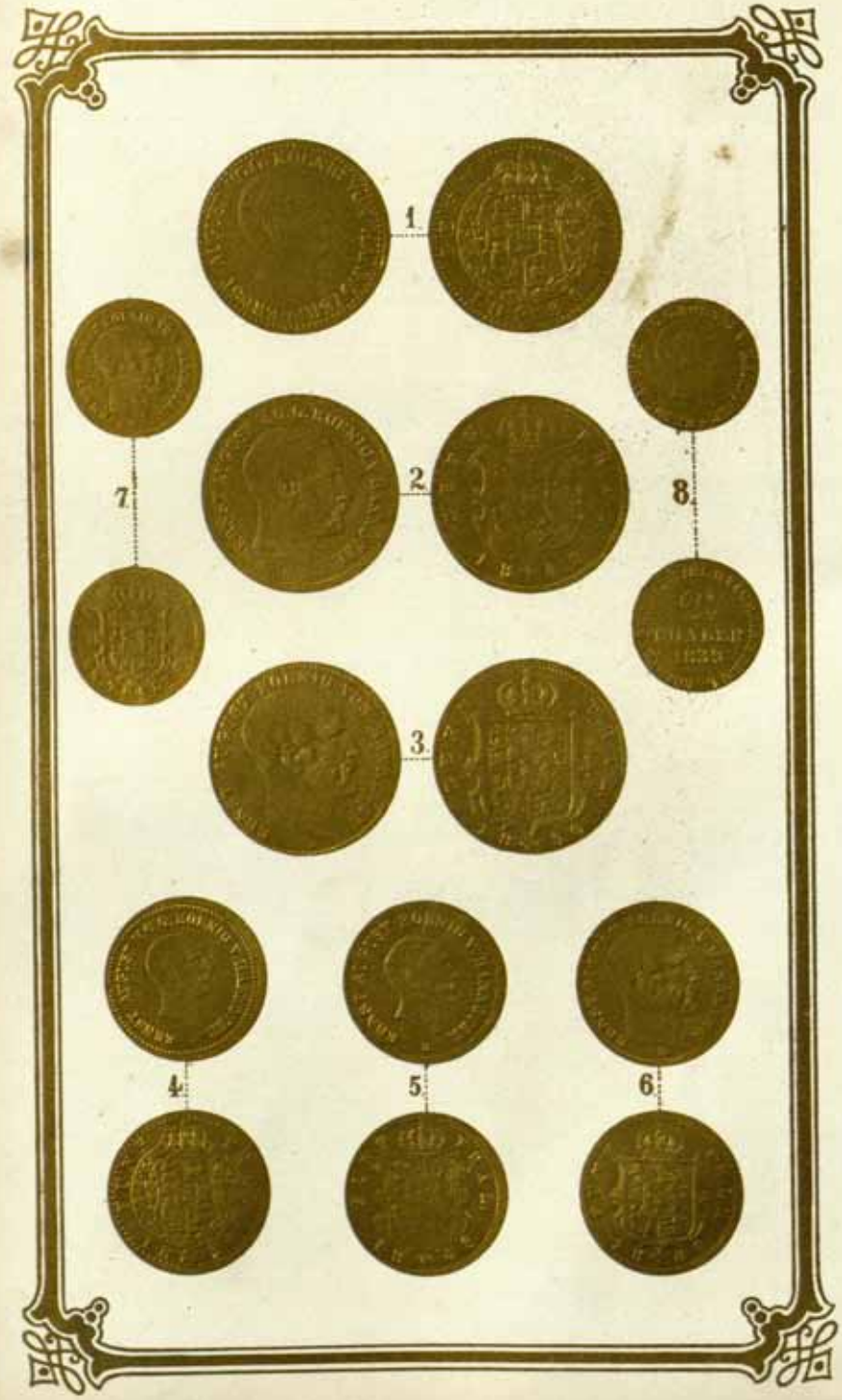
No. 2. *Thaler* of 1857 (Hanover). Weight, value, &c., as No. 1.

No. 3. *Thaler* of 1858 (Oldenburg). Weight, value, &c., as No. 1.

No. 4. *Two-thaler piece* of 1854 (Hanover). Weight, value, &c., in proportion to Nos. 1, 2, and 3.

25

Hanover.



HANOVER.

GOLD COINS.

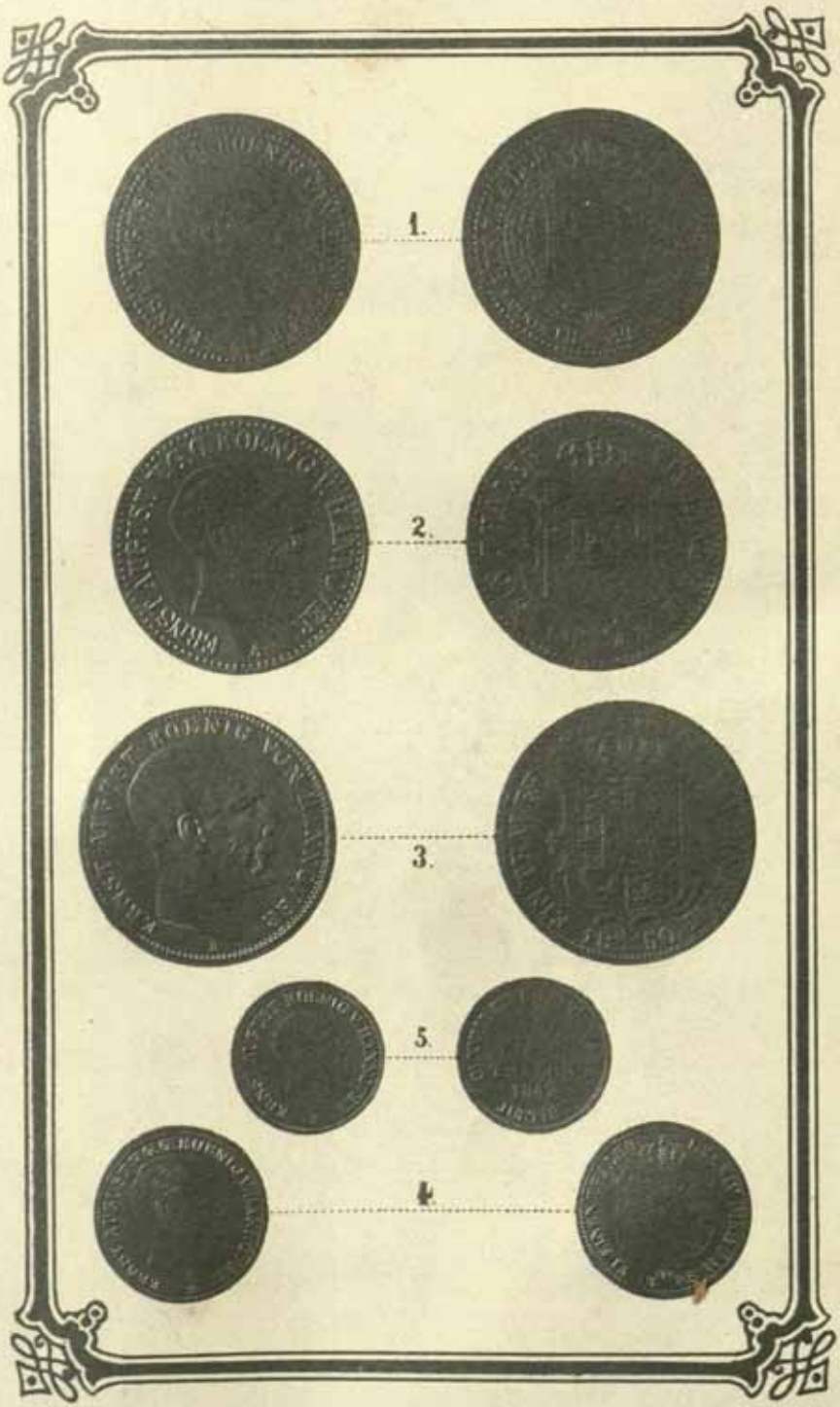
Nos. 1, 2, and 3. *Doppel-pistole* of 1839, 1848, 1850. 17_{58} to the conventional mark $\frac{258}{288}$ fine; 28 to the troy pound. Mean value £1 12*s*.

Nos. 4, 5, and 6. *Pistole,* of 1839, 1848, 1849. Weight, value, &c., in proportion to Nos. 1, 2, and 3.

Nos. 7 and 8. ½-*Pistole* of 1839, 1850. Weight, value, &c., in proportion to Nos. 1, 2, and 3.

26

Hsnover.



HANOVER.

SILVER COINS.

No. 1. *Thaler*, of 1839. $10_{,5}$ to the Cologne mark, $\frac{3}{4}$ fine; $16_{,75}$ to the Eng. troy pound. Mean value 3*s*.

No. 2. *Thaler* of 1848. Weight, value, &c., same as No. 1.

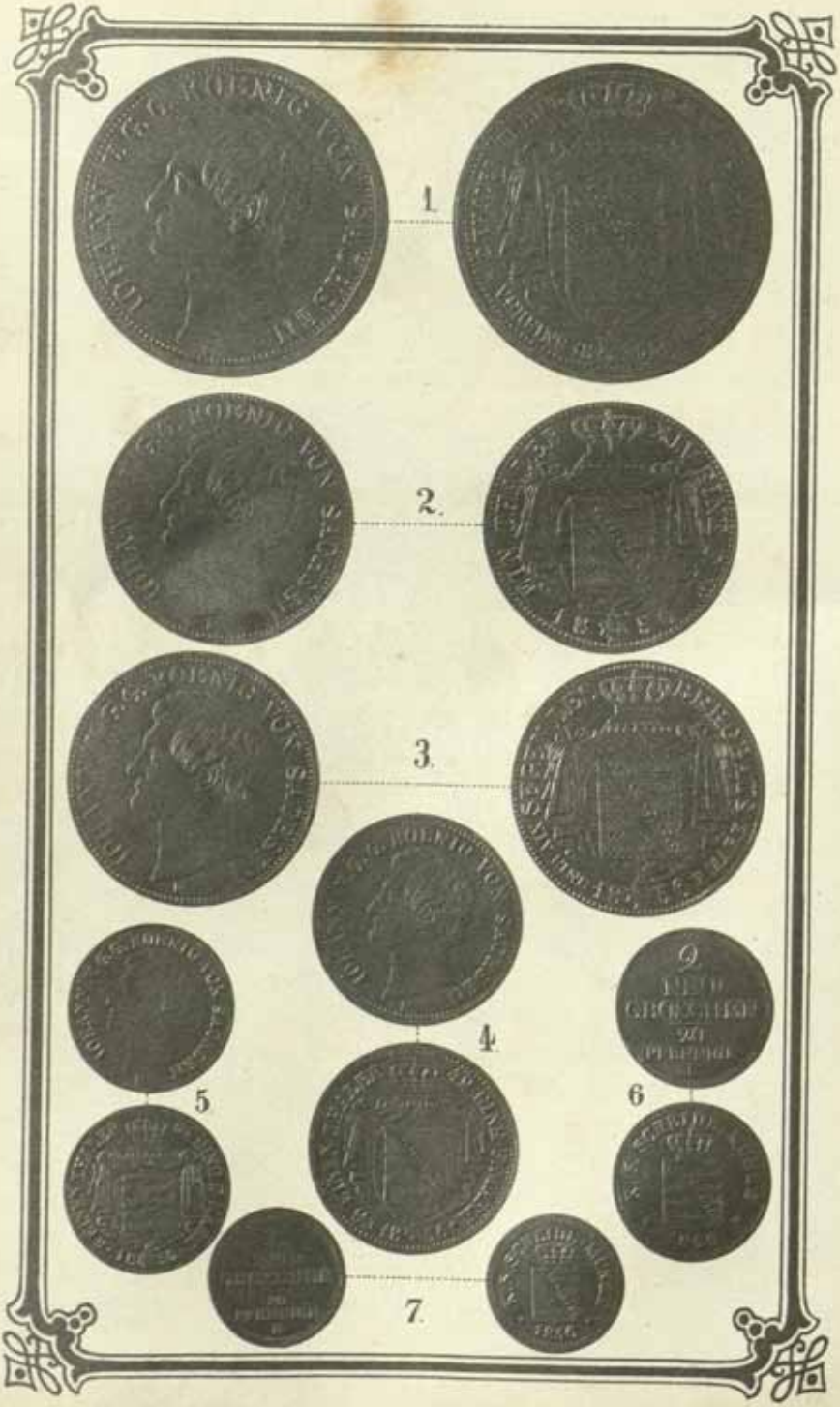
No. 3. *Thaler* of 1850. do. do.

No. 4. $\frac{1}{6}$-*Thaler* of 1845. $43_{,75}$ to the Cologne mark, $\frac{15}{16}$ fine; about 70 to the troy pound. Mean value 6*d*.

No. 5. $\frac{1}{12}$-*Thaler* of 1847. Weight, value, &c., in proportion to No. 4.

27

Saxony.



SAXONY.

SILVER COINS.

No. 1. *Doppelthaler* of 1855. $6._3$ to the conventional mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

No. 2. *Thaler* of 1856. $10._5$ to the mark, $\frac{3}{4}$ fine; $16._{758}$ to the troy pound. Mean value 3*s*.

No. 3. *Thaler* of 1856, made of silver obtained in the royal mines. Weight, value, &c., as No. 2.

No. 4. $\frac{1}{3}$-*Thaler* of 1856. 28 to the mark, $\frac{2}{3}$ fine; $44._{69}$ to the troy pound. Mean value 1*s*.

No. 5. $\frac{1}{6}$-*Thaler* of 1856. $43._{75}$ to the mark, $\frac{75}{144}$ fine; $69._{78}$ to the troy pound. Mean value 6*d*.

No. 6. 2-*Neugroschen piece* of 1856. 75 to the mark, $\frac{5}{18}$ fine; $119._{7}$ to the troy pound. Mean value $2\frac{1}{2}$*d*.

No. 7. *Neugroschen* of 1856. 110 to the mark, $\frac{11}{48}$ fine; $175._{56}$ to the troy pound. Value $1\frac{1}{4}$*d*.

SAXONY.

SILVER COINS.

No. 1. Dreigroschen of 1856. 6g. to the conventional mark, ½ fine; 10½ to the troy pound. Silver value 1s.

No. 2. Thaler of 1856. 18g. to the mark, ½ fine; 18½ to the troy pound. Silver value 2s.

No. 3. Thaler of 1856, minted of silver obtained by the royal mines. Weight, value, &c., as No. 2.

No. 4. ½-Thaler of 1856. 9g. to the mark, ½ fine; 18½ to the troy pound. Silver value 1s.

No. 5. ¼-Thaler of 1856. 6g. to the mark, ½ fine; 18½ to the troy pound. Silver value 6d.

No. 6. ⅙-Dreigroschen piece of 1856. 7g. to the mark, ½ fine; 17½ to the troy pound. Silver value 3½d.

No. 7. Groschen of 1856. 110 to the mark, ½ fine; 17½ to the troy pound. Value 1½d.

28


1


2


3


4


5

SAXONY.—BELGIUM.

SAXONY.—GOLD COINS.

No. 1. *Doppel-Augustd'or* of 1845. 17¼ to the conventional Cologne mark, $\frac{65}{72}$ fine; about 28 to the Eng. troy pound. Mean value £1 12*s.* 11¼*d.*

No. 2. *Augustd'or* of 1839. Weight, value, &c., in proportion to No. 1.

No. 3. *Half-Augustd'or* of 1845. do. do.

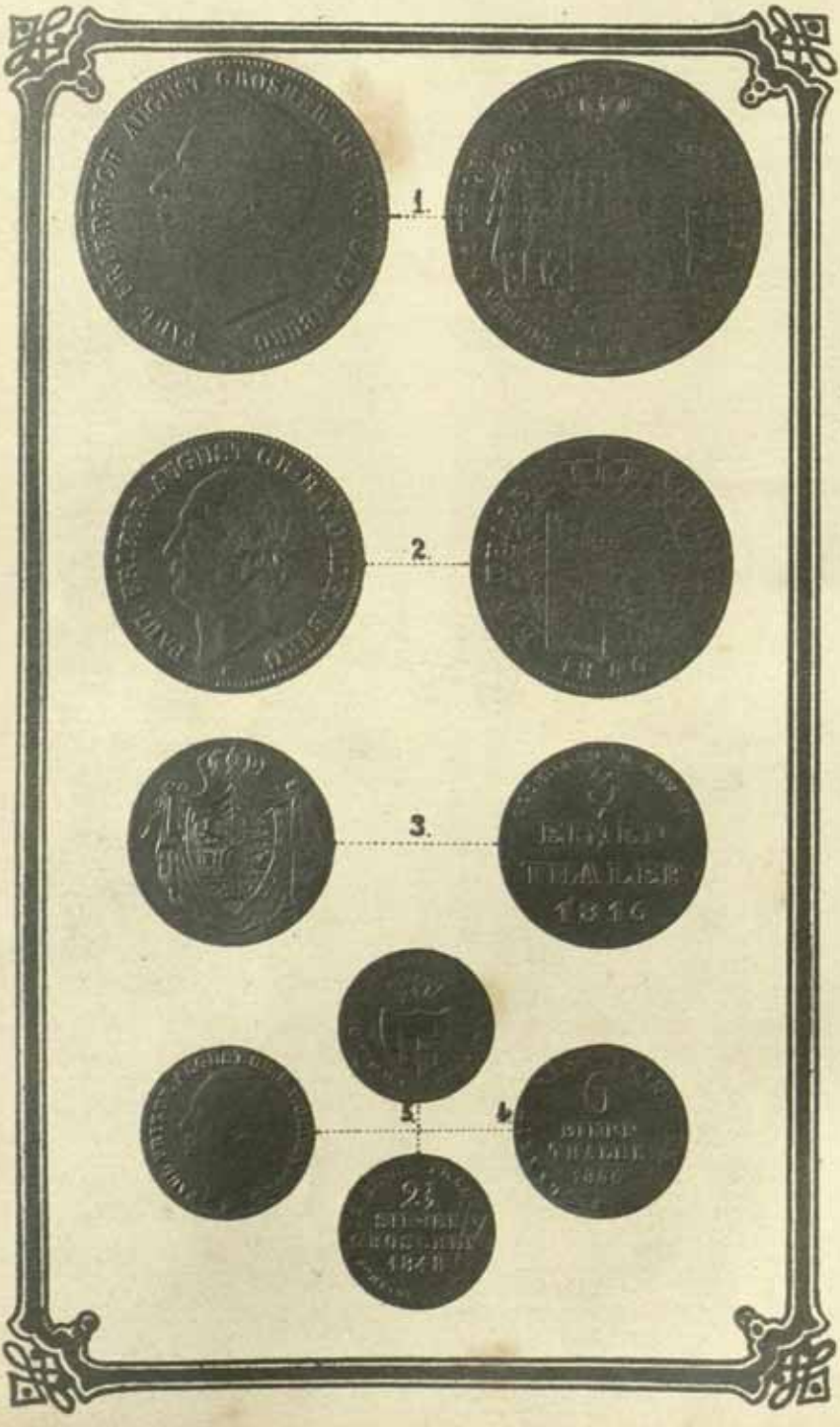
BELGIUM.—GOLD COINS.

No. 4. *Twenty-five-Franc piece* of 1848. 126¼ to the Fr. kilogramme, $\frac{9}{10}$ fine; $47._{15}$ to the Eng. troy pound. Mean value about 19*s.* 6½*d.*

No. 5. *Ten-Franc piece* of 1850. Weight, value, &c., in proportion to No. 4.

29

Oldenburg.



OLDENBURG.

SILVER COINS.

No. 1. *Two-Thaler piece* ($3\frac{1}{2}$ *Gulden*) of 1840. $6._2$ to the Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

No. 2. *Thaler* of 1846. $10._5$ to the Cologne mark, $\frac{3}{4}$ fine; $16._{75}$ to the troy pound. Mean value 3*s*.

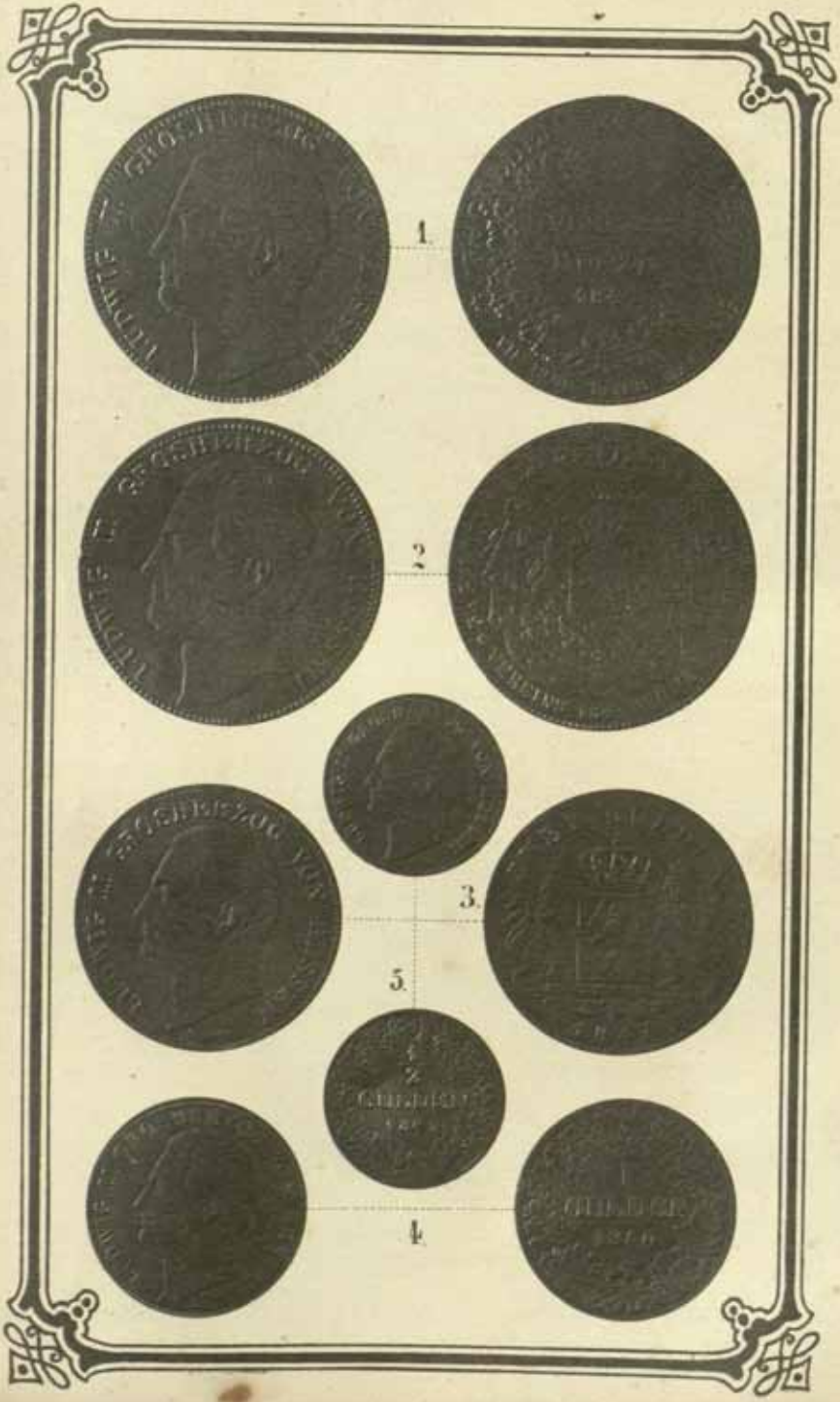
No. 3. $\frac{1}{2}$-*Thaler* of 1846. 30 to the Cologne mark, $\frac{5}{8}$ fine; $47._{83}$ to the troy pound. Mean value $10\frac{1}{2}$*d*. (Out of circulation sine 1847.)

No. 4. $\frac{1}{6}$-*Thaler* of 1846. $43._{75}$ to the Cologne mark, $\frac{25}{48}$ fine; about 70 to the troy pound. Mean value 6*d*.

No. 5. $\frac{1}{12}$-*Thaler* of 1848. 72 to the Cologne mark, $\frac{3}{8}$ fine; about 115 to the troy pound. Mean real value $2\frac{1}{2}$*d*., nominal worth 3*d*.

30

Hesse-Darmstadt.



HESSE-DARMSTADT.

SILVER COINS.

No. 1. *Two-Thaler piece* ($3\frac{1}{2}$ gulden) of 1841. $6\frac{1}{3}$ to the conventional Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

No 2. *Two-Thaler piece* of 1844. Weight, value, &c., same as No. 1.

No. 3. *Two-Gulden piece* of 1847. $11\frac{1}{40}$ go to the conventional mark, $\frac{9}{10}$ fine; $17\frac{1}{58}$ to the troy pound. Mean value 3*s*. $5\frac{1}{4}$*d*.

No. 4. *Gulden* of 1840. Weight, value, &c., in proportion to No. 3.

No. 5. *Half-Gulden* of 1845. Weight, value, &c., in proportion to No. 3.

31

German Conventional Coins.


1.


2.


3.


4.

GERMAN CONVENTIONAL COINS.

SILVER. 1858.

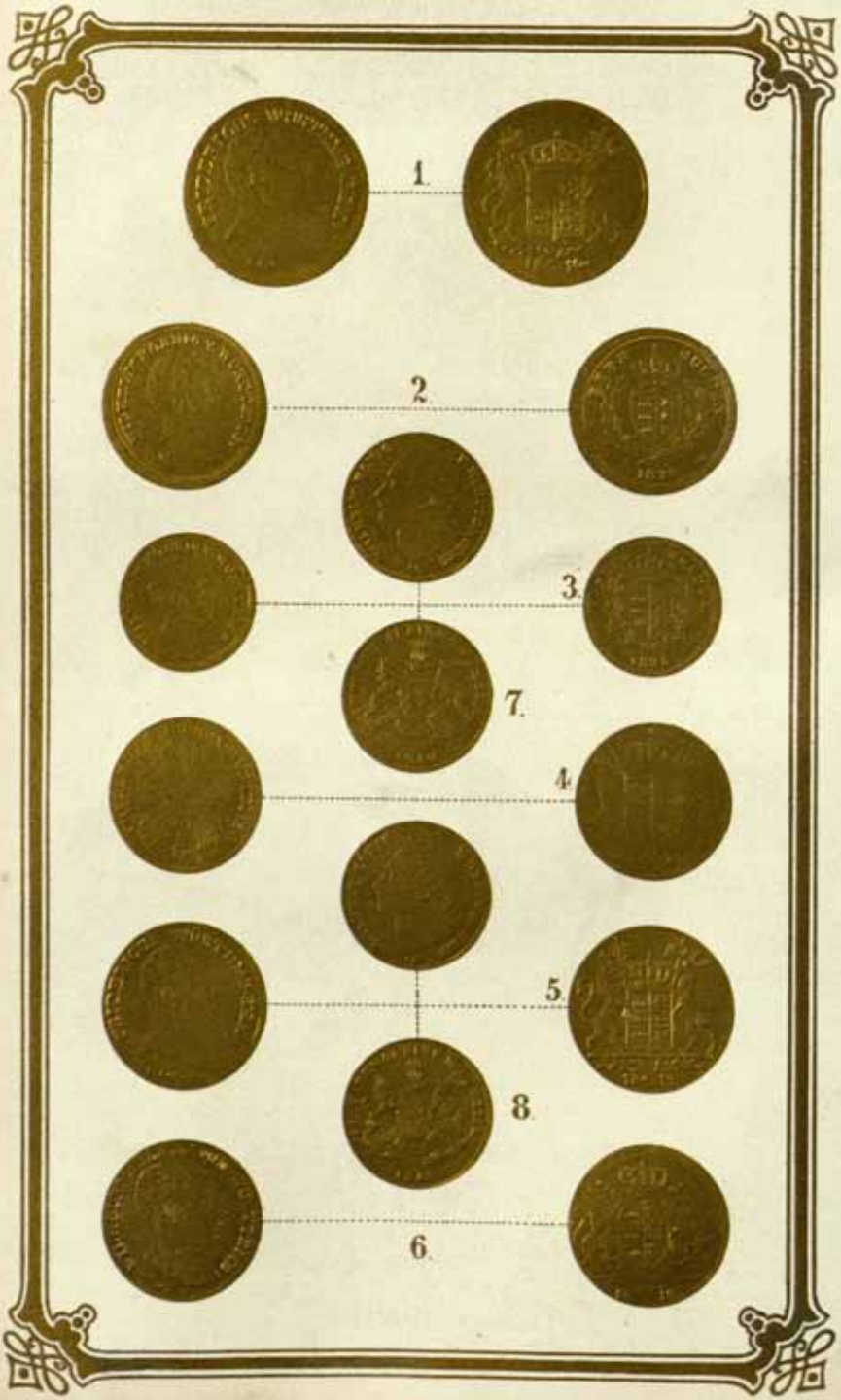
No. 1. *Thaler* of Hesse-Darmstadt. 27 to the Zollverein pound, $\frac{9}{10}$ fine; 20_{15} to the Eng. troy pound. Mean value 3*s*.

No. 2. *Thaler* of Hesse-Homburg. Weight, value, &c., same as No. 1.

No. 3. *Thaler* of Baden. do. do.

No. 4. *Thaler* of Frankfort a. M. do. do.

Wirtemberg.



WIRTEMBERG.

GOLD COINS.

No. 1. *Friedrichd'or* of 1810. $30\frac{3}{8}$ to the conventional mark, $\frac{888}{888}$ fine; 49 to the troy pound. Mean value 18*s*. 8*d*.

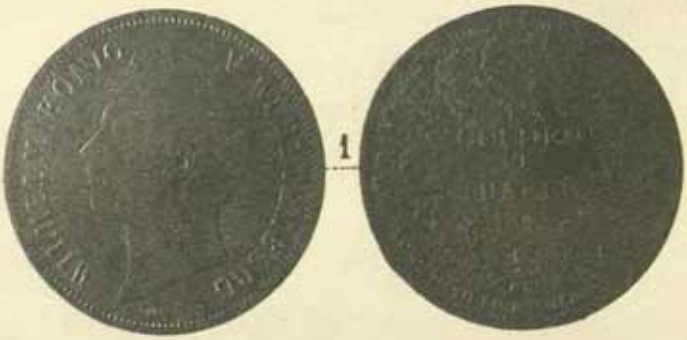
No. 2. *Ten-gulden piece* of 1824. 35 to the mark, $\frac{888}{888}$ fine; $55._{8}$ to troy pound. Mean value 16*s*. 4*d*.

No. 3. *Five-gulden piece* of 1825. Weight, value, &c., in proportion to No. 2.

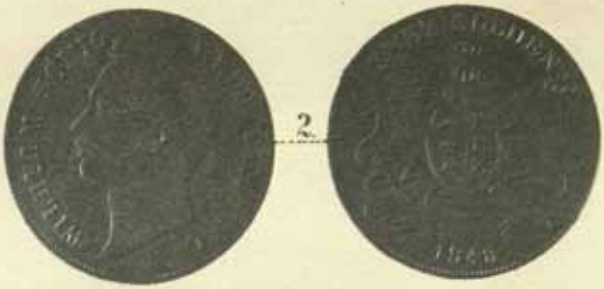
No. 4. *Ducat* of 1818. Coined of the same proportions as the Dutch ducats of the time, viz. weighing $72._{69}$ Dutch *as*, of which $71._{42}$ fine; $106._{8}$ to the troy pound. Mean value 9*s*. 4*d*.

No. 5, 6, 7, and 8 are ducats of the years 1813, 1818, 1840, and 1848, and are of the same weight standard, and value as No. 4.

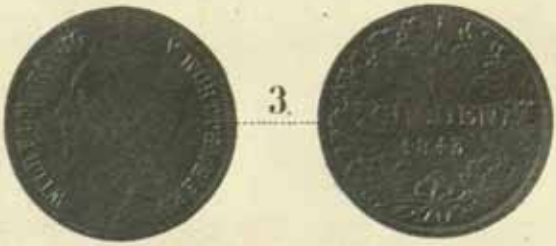
Wirtemberg.



1



2



3

4

WIRTEMBERG.

SILVER COINS.

No. 1. *Two-Thaler piece* ($3\frac{1}{2}$ gulden), of 1843. $6_{\cdot 2}$ to the conventional Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

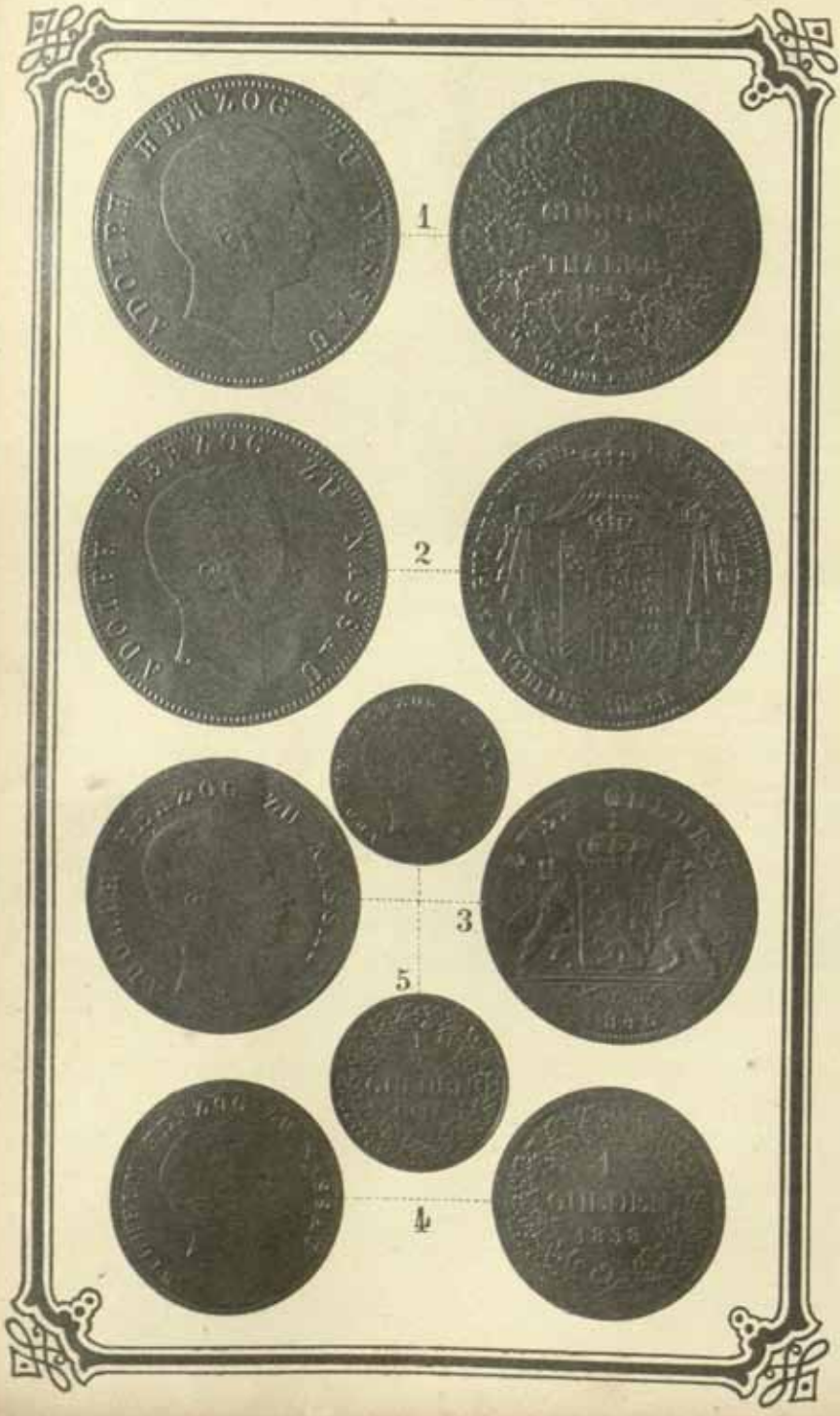
No. 2. *Two-Gulden piece* of 1848. $11\frac{1}{4}\frac{1}{0}$ to the conventional Cologne mark, $\frac{9}{10}$ fine; $17_{\cdot 58}$ to the troy pound. Mean value 3*s*. $5\frac{1}{2}$*d*.

No. 3. *Gulden* of 1843. Weight, value, &c., in proportion to No. 2.

Nr. 4. *Halb-Gulden* of 1841. Weight, value, &c., in proportion to No. 2.

34

Nassau.



NASSAU.

SILVER COINS

No. 1. $3\frac{1}{2}$-*Gulden piece* (two thaler) of 1843. $6._3$ to the conventional Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

No. 2. $3\frac{1}{2}$-*Gulden piece* of 1847. Weight, value, &c., same as No. 1.

No. 3. *Two-Gulden piece* of 1846. $11\frac{1}{4}\frac{1}{0}$ to the conventional mark, $\frac{9}{10}$ fine; $17._{58}$ to the troy pound. Mean value 3*s*. $5\frac{1}{2}$*d*.

No. 4. *Gulden* of 1838. Weight, value, &c. in proportion to No. 3.

No. 5. *Half-Gulden* of 1841. do. do.

35

German Conventional Coins.

1.

2.

3.

4.

GERMAN CONVENTIONAL COINS.

SILVER. 1858.

No. 1. *Thaler* of Anhalt-Bernburg. 27 to the Zollverein pound, $\frac{9}{10}$ fine; 20_{15} to the Eng. troy pound. Mean value 3*s*.

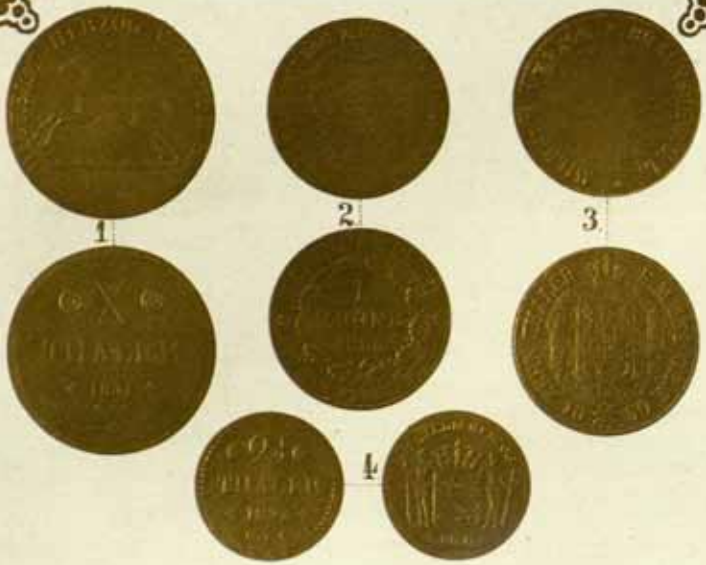
No. 2. *Thaler* of Saxony. Weight, value, &c., same as No. 1.

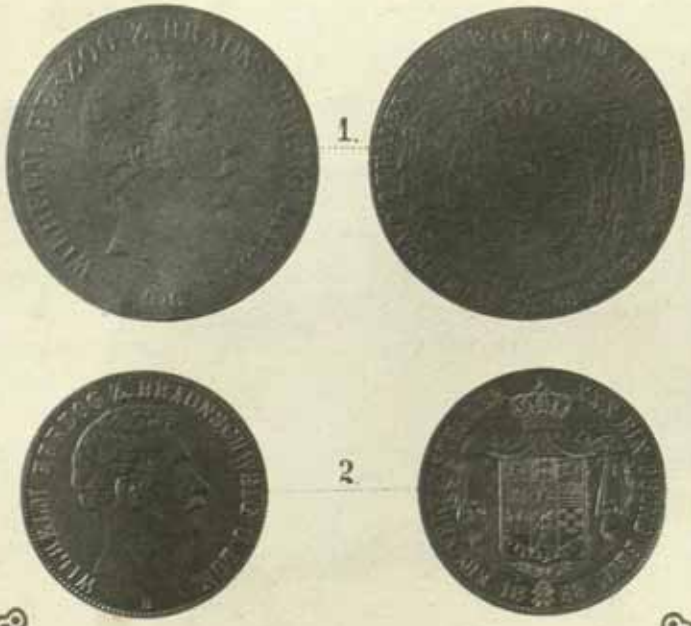
No. 3. *Thaler* of Saxe-Weimar. do. do.

No. 4. *Thaler* of Wirtemberg. do. do.

36

Brunswick.





BRUNSWICK.

GOLD COINS.

No. 1. *Doppel-Pistole* of 1831. $17._5$ to the Cologne mark, $\frac{258}{288}$ fine; about 28 to the Eng. troy pound. Mean value £1 12*s.* 9¾*d.*

No. 2. *Doppel-Pistole* of 1850. Of nearly the same weight and fineness as No. 1., and worth about £1 12*s.* 6½*d.*

No. 3. *Krone* of 1858. 45 to the Zollverein pound of minting gold, $\frac{9}{10}$ fine; $33._{59}$ to the Eng. troy pound. Mean value £1 7*s.* 4*d.*

No. 4. *Half-Pistole* of 1832. Weight, value, &c., in proportion to No. 1.

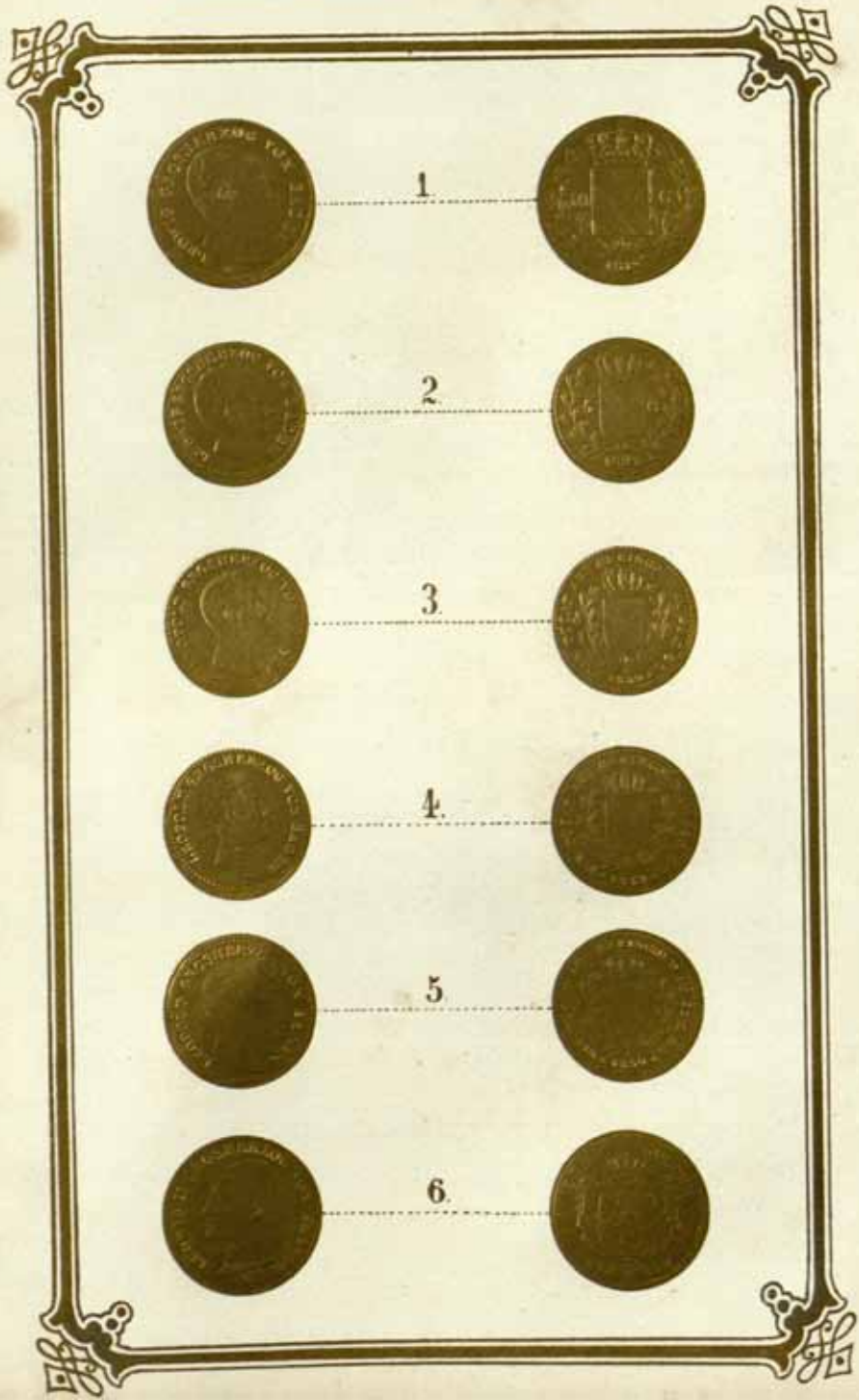
SILVER COINS.

No. 1. *Two-Thaler piece* of 1848. $6._3$ to the conventional Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s.*

No. 2. *Thaler* of 1858. 27 to the Zollverein pound, $\frac{9}{10}$ fine; $20._{15}$ to the Eng. troy pound. Mean value 3*s.*

37

Baden-Hesse-Darmstadt.



BADEN.—HESSE-DARMSTADT.

No. 1. *Ten-gulden piece* of 1819 (Baden). 34 to the Cologne mark, $\frac{65}{72}$ fine; $54._{24}$ to the Eng. troy pound. Mean value 16*s*. 11½*d*.

No. 2. *Five-gulden piece* of 1827 (Baden). Weight, value, &c., in proportion to No. 1.

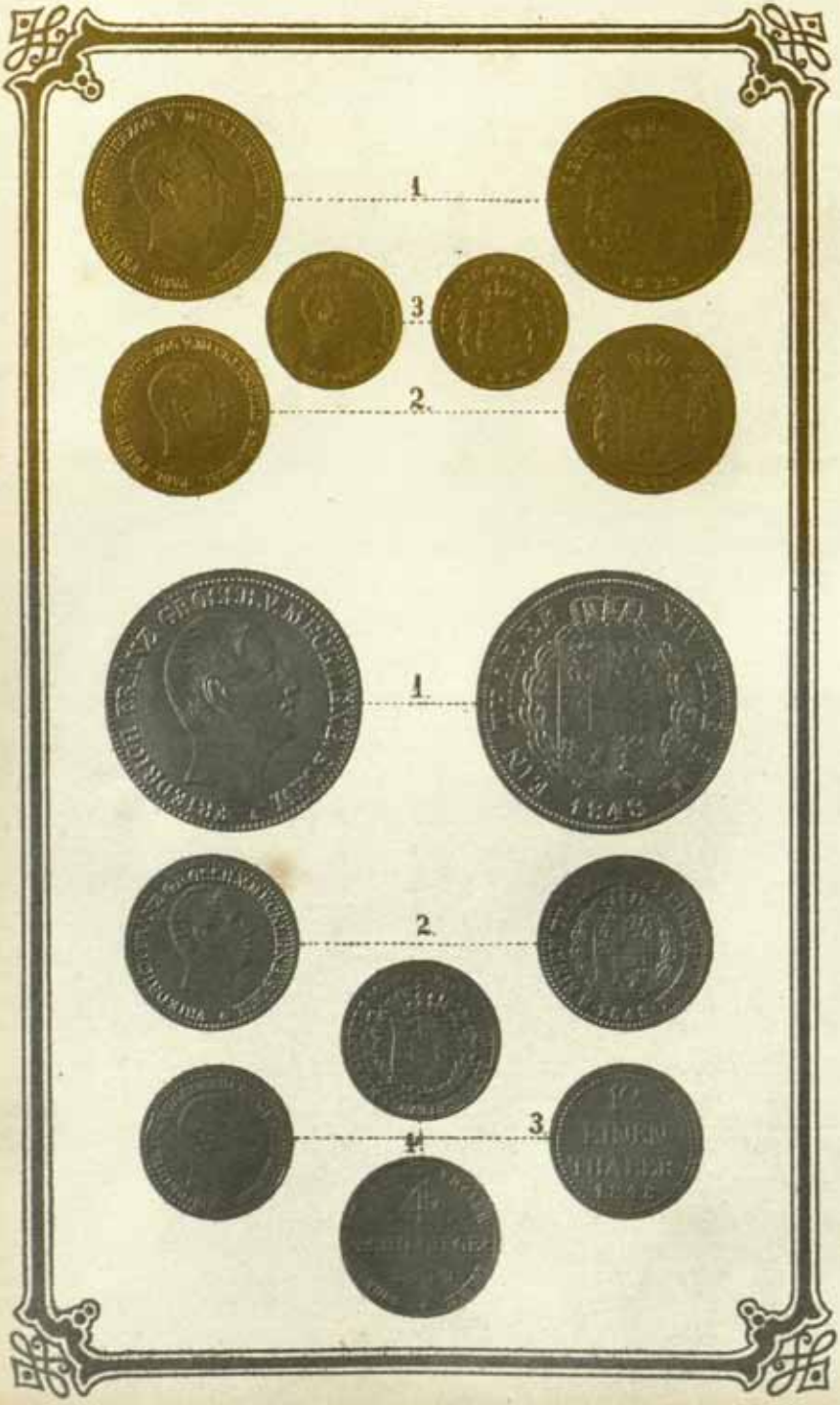
No. 3. *Ducat* of 1832, made of Rhine gold. $63\frac{22}{142}$ to the Cologne mark, $\frac{135}{144}$ fine; $101._{1}$ to the troy pound. Mean value 9*s*. 4¾*d*.

No. 4. *Ducat* of 1839. Weight, value, &c., as No. 3.

No. 5. *Ducat* of 1850. " " "

No. 6. *Ten-gulden piece* of 1841 (Hesse-Darmstadt). $34._{65}$ to the Cologne mark, $\frac{9}{10}$ fine; $55._{2}$ to the troy pound. Mean value 16*s*. 9*d*.

Mecklenburg-Schwerin.



MECKLENBURG-SCHWERIN.

GOLD COINS.

No. 1. *Doppel-Pistole* of 1839. Legally $17._{5583}$ to the Cologne mark, $\frac{558}{288}$ fine; about $28._{1}$ to the Eng. troy pound. Mean value £1 12*s.* 4¼*d.*

No. 2. *Pistole* of 1840. Weight, value, &c., in proportion to No. 1.

No. 3. *Halb-Pistole* of 1840. Weight, value, &c., in proportion to Nos. 1 and 2.

SILVER COINS.

No. 1. *Thaler* of 1848. 10½ to the Cologne mark, ¾ fine; $16._{7}$ to the Eng. troy pound. Mean value 3*s.*

No. 2. ⅓-*Thaler* (8 schillinge) of 1848. About 43¾ to the Cologne mark, $\frac{520\frac{5}{6}}{1000}$ fine; about 70 to the troy pound. Mean value 6*d.*

No. 3. $\frac{1}{12}$-*Thaler* (4 schillinge) of 1848. 96 to the Cologne mark, ½ fine; $153._{2}$ to the troy pound. Legal tender for 2½ *groschen*, or 3*d.*; real value 2⅝*d.*

No. 4. *Four-Schilling piece* of 1839. 76½ to the Cologne mark, ½ fine; 122 to the troy pound. Mean value 3¼*d.*

39

Reuss-Waldeck.

REUSS. — WALDECK.

SILVER COINS.

No. 1. *Two-Thaler piece* ($3\frac{1}{2}$ gulden), of Reuss elder line, of 1844. $6._3$ to the conventional Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

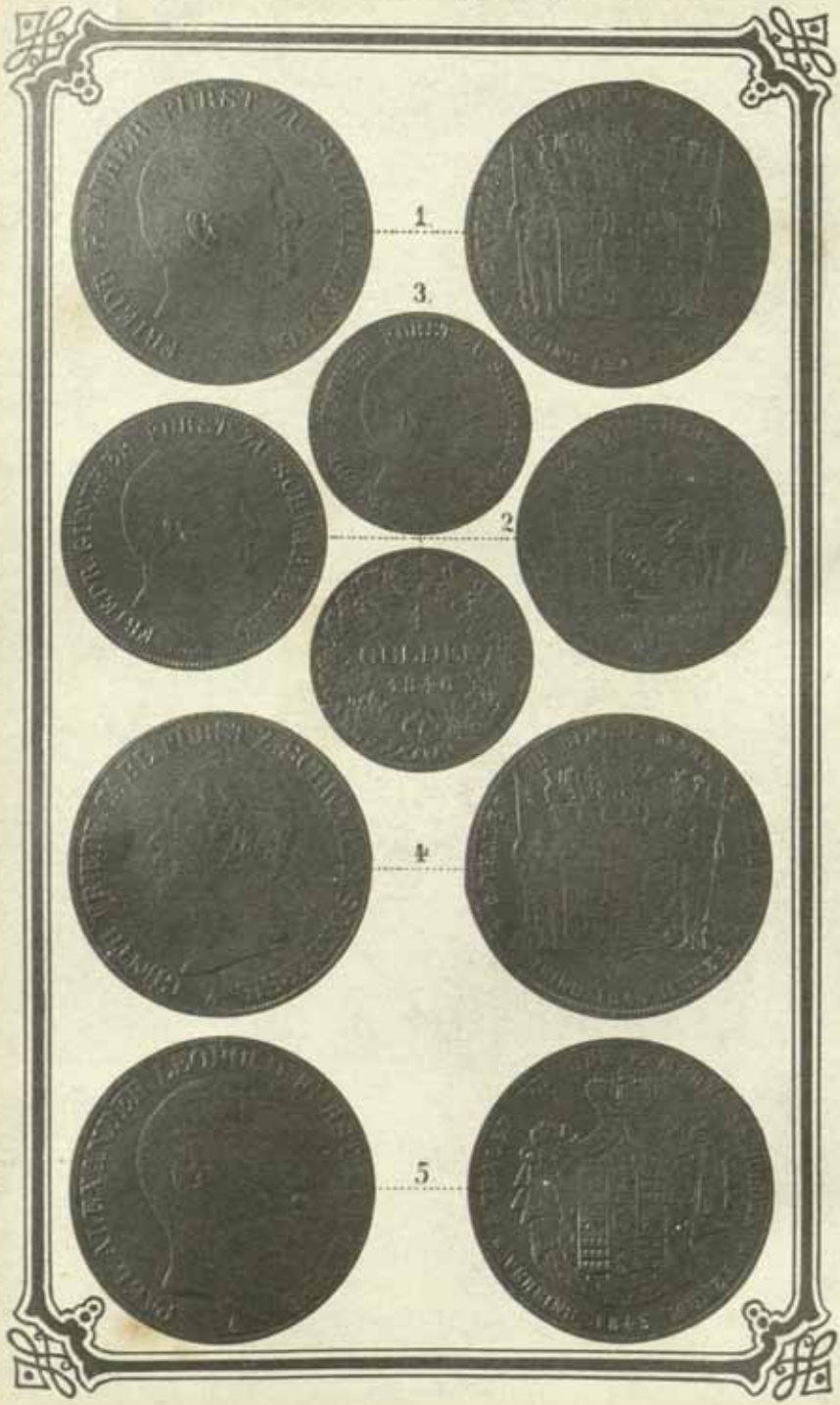
No. 2. *Two-Thaler piece* of Reuss younger line, of 1844. Weight, value, &c., same as No. 1.

No. 3. *Two-Thaler piece* of Reuss younger line, of 1847. Weight, value, &c., same as No. 1.

No. 4. *Two-Thaler piece* of Waldeck, of 1847. Weight, value, &c., same No. 1.

40

Schwarzburg-Lippe



SCHWARZBURG. — LIPPE.

SILVER COINS.

No. 1. *Two-Thaler piece* ($3\frac{1}{2}$ *Gulden*) of Schwarzburg-Rudolstadt, of 1841. $6_{\cdot 3}$ to the conventional Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

No. 2. *Two-Gulden piece* of Schwarzburg-Rudolstadt, of 1846. $11\frac{1}{10}$ to the conventional mark, $\frac{9}{10}$ fine; $17_{\cdot 58}$ to the troy pound Mean value 3*s*. $5\frac{1}{2}$*d*.

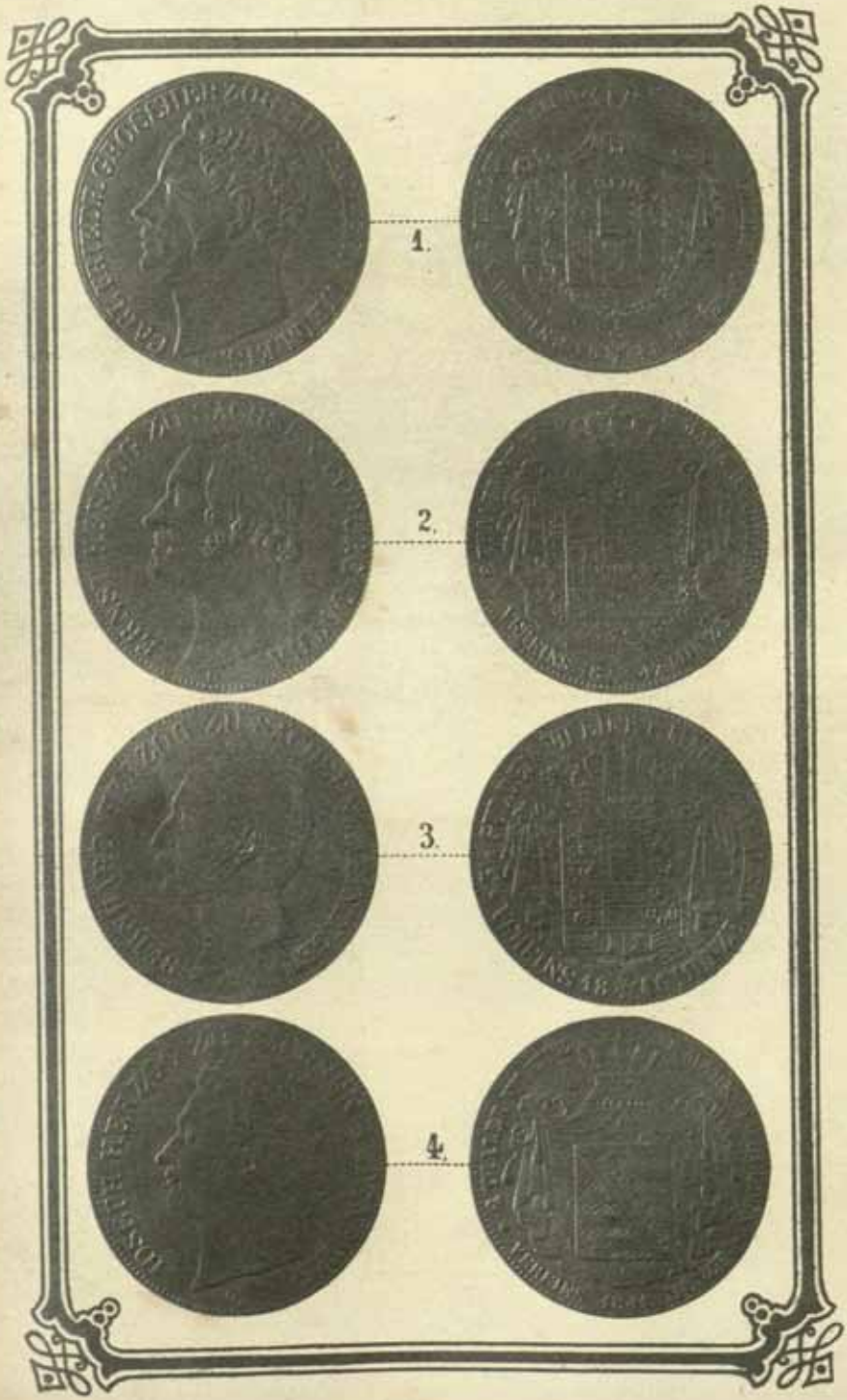
No. 3. *Gulden* of Schwarzburg-Rudolstadt, of 1846. Weight, value, &c., in proportion to No. 2.

No. 4. *Two-Thaler piece* of Schwarzburg-Sondershausen, of 1845. Weight, value, &c., same as No. 1.

No. 5. *Two-Thaler piece* of Lippe, 1843. Weight, value, &c., same as No. 1.

41

Saxon Duchies.



SAXON DUCHIES.

SILVER COINS.

No. 1. *Doppel-Thaler*, or 3½-*Gulden piece*, of Saxe-Weimar. (1848). $6_{\frac{1}{2}}$ to the Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6s.

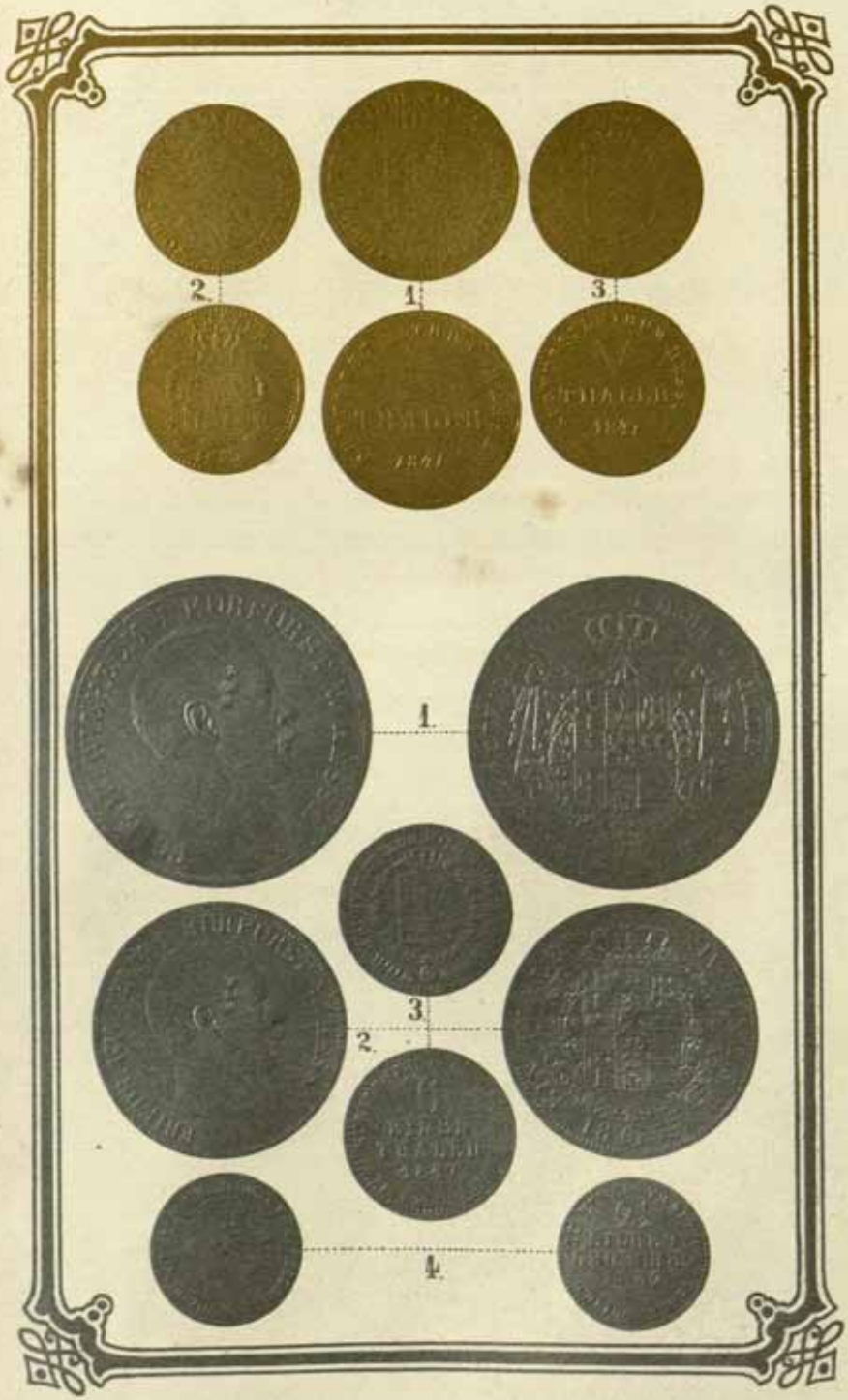
No. 2. *Doppel-Thaler*, or 3½-*Gulden piece*, of Saxe-Coburg. (1847). Weight, value, &c., same as No. 1.

No. 3. *Doppel-Thaler*, or 3½-*Gulden piece*, of Saxe-Meiningen. Weight, value, &c., same as No. 1.

No. 4. *Doppel-Thaler*, or 3½-*Gulden piece*, of Saxe-Altenburg. Weight, value, &c., same as No. 1.

42

Hesse-Cassel.



HESSE-CASSEL.

GOLD COINS.

No. 1. *Doppel-Wilhelmsdor* of 1841. $17._3$ to the German conventional mark, by $\frac{860}{888}$ fine; $27._9$ to the English troy pound. Average value £1 12*s*. 11½*d*.

No. 2. *Wilhelmsdor* of 1823. $35._1$ to the mark, $\frac{850}{888}$ fine; 56 to the troy pound. Average value 16*s*. 4½*d*.

No. 3. *Wilhelmsdor* of 1847. 35 to the mark, $\frac{860}{888}$ fine; $55._{86}$ to the troy pound. Average value 16*s*. 5¾*d*.

SILVER COINS.

No. 1. *Two-Thaler piece* = 3½ gulden South-German currency, of 1855. $6._3$ to the mark, $\frac{9}{10}$ fine; $10._{05}$ to the troy pound. Average value 6*s*.

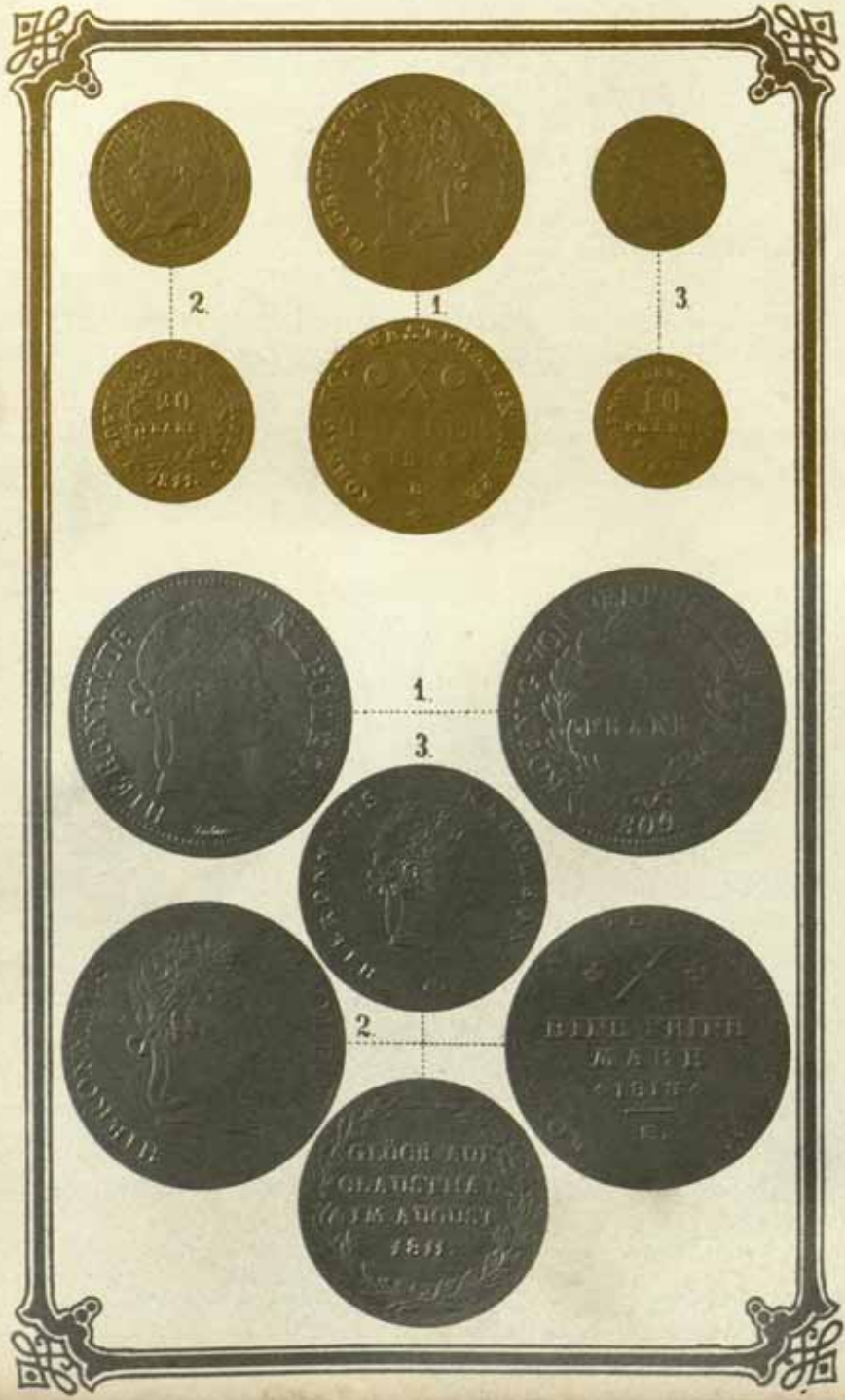
No. 2. *Thaler* of 1855. $10._5$ to the mark, ¾ fine; $16._{75}$ to the troy pound. Average value 3*s*.

No. 3. ⅙-*Thaler*, or *Fünf-Groschen* piece, of 1847. $43._{75}$ to the mark, $\frac{150}{888}$ fine; $69._4$ to the troy pound. Mean value 6*d*.

No. 4. $\frac{1}{12}$-*Thaler* of 1852. 72 to the mark, ⅔ fine; $114._9$ to the troy pound. Nominal value 3*d*., real value 2¾*d*.

43

Westphalia.



WESTPHALIA.

GOLD COINS.

No. 1. *Doppel-Hieronymus-d'or* of 1813. $17_{.5}$ to the Cologne mark, $\frac{852}{888}$ fine; $27_{.9}$ to the Eng. troy pound. Mean value £1 12*s*. 8¼*d*.

No. 2. *Twenty-franc piece* of 1811. 155 to the French kilogramme, $\frac{9}{10}$ fine; $57_{.852}$ to the Eng. troy pound. Mean value 15*s*. 10⅝*d*.

No. 3. *Ten-franc piece* of 1813. Weight, value, &c., in proportion to No. 2.

SILVER COINS.

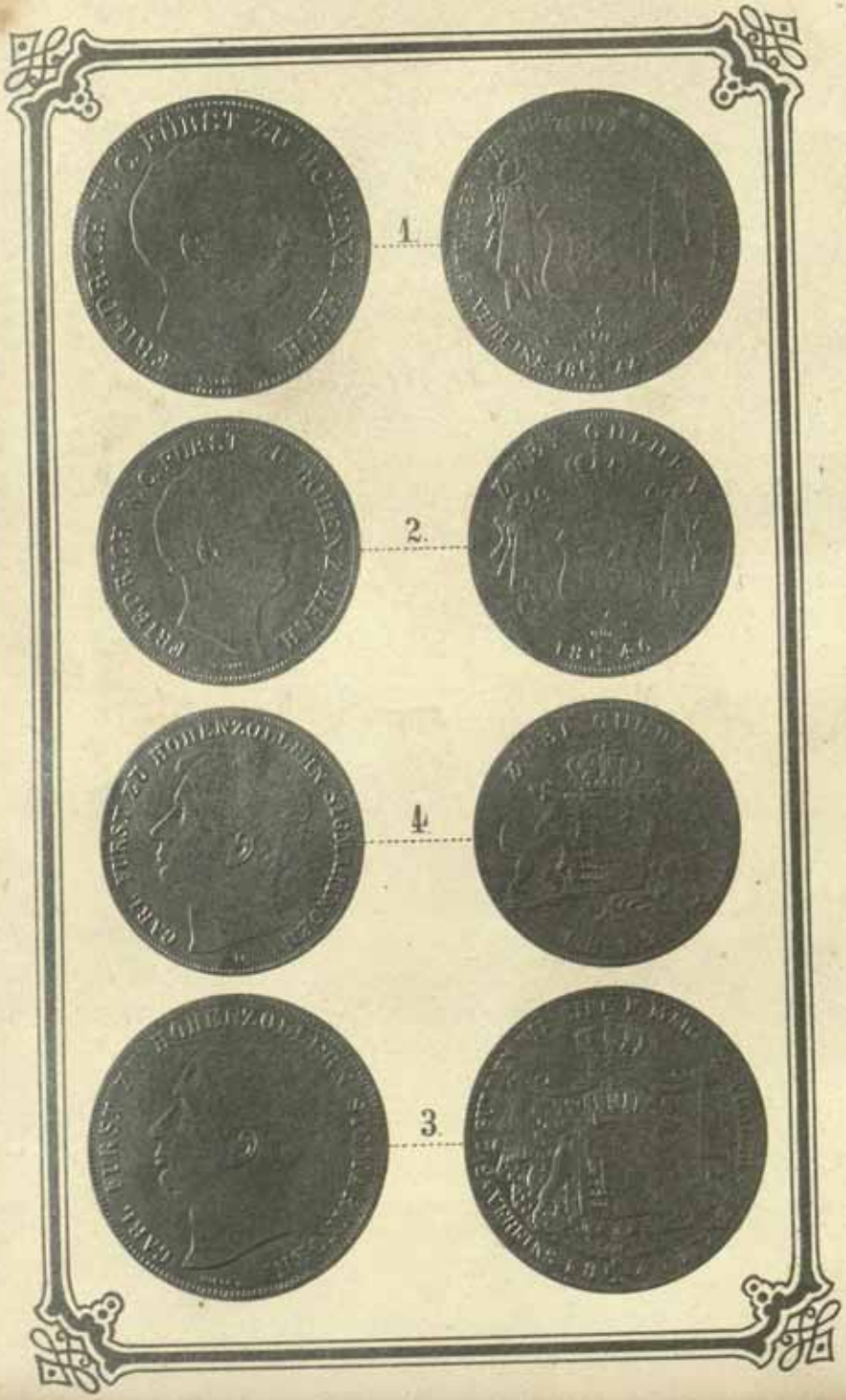
No. 1. *Five-franc piece* of 1809. 40 to the French kilogramme, $\frac{9}{10}$ fine; $14_{.9296}$ to the Eng. troy pound. Mean value 4*s*. 0¼*d*.

No. 2. *Conventions-species thaler* of 1813. 8⅓ to the Cologne mark, $\frac{5}{6}$ fine; $13_{.3}$ to the troy pound. Mean value 4*s*. 2½*d*.

No. 3. *Gulden* of 1811, made of silver from the Clausthal mines. 13½ to the Cologne mark, $\frac{3}{4}$ fine; $21_{.54}$ to the troy pound. Mean value 2*s*. 4½*d*.

44

Hohenzollern.



HOHENZOLLERN.

SILVER COINS.

No. 1. $3\frac{1}{2}$-*Gulden piece* (two thaler) of 1844. $6_{,3}$ to the conventional Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

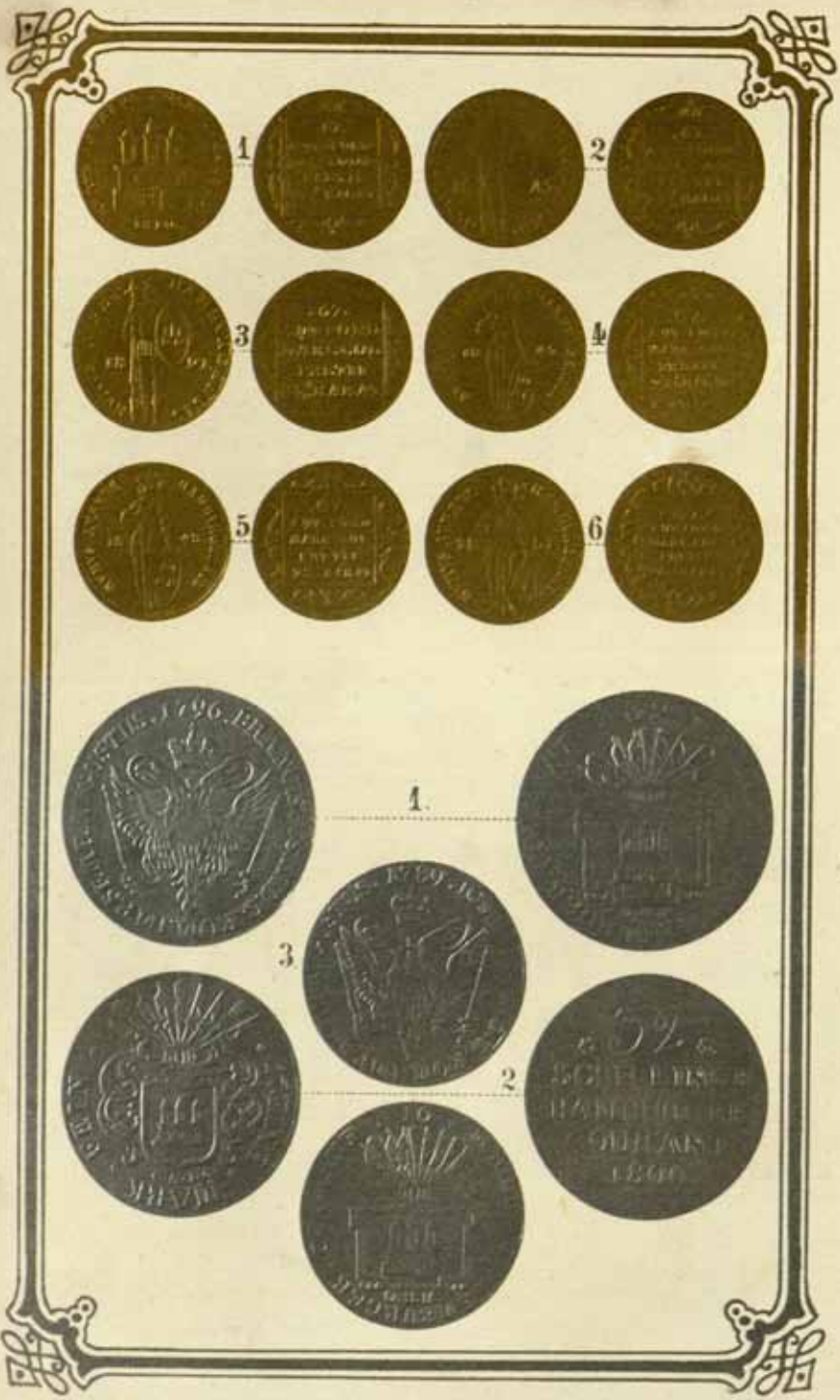
No. 2. *Two-Gulden piece* of 1846. $11\frac{1}{10}$ to the conventional mark, $\frac{9}{10}$ fine; $17_{,38}$ to the troy pound. Mean value 3*s*. $5\frac{1}{2}$*d*.

No. 3. $3\frac{1}{2}$-*Gulden piece* of 1846. Weight, value, &c., same as No. 1.

No. 4. *Two-Gulden piece* of 1845. Weight, value, &c., same as No. 2.

45

Hamburg.



HAMBURG.

GOLD COINS.

No. 1. *Ducat* of 1810. 67 to the Cologne mark, $\frac{23}{24}$ fine; about 107 to the Eng. troy pound. Mean value 9*s.* 4*d.*

No. 2. *Ducat* of 1815. Weight, value, &c., same as No. 1.

No. 3. Do. of 1821. do. do.

No. 4. Do. of 1845. do. do.

No. 5. Do. of 1848. do. do.

No. 6. Do. of 1851. do. do.

SILVER COINS.

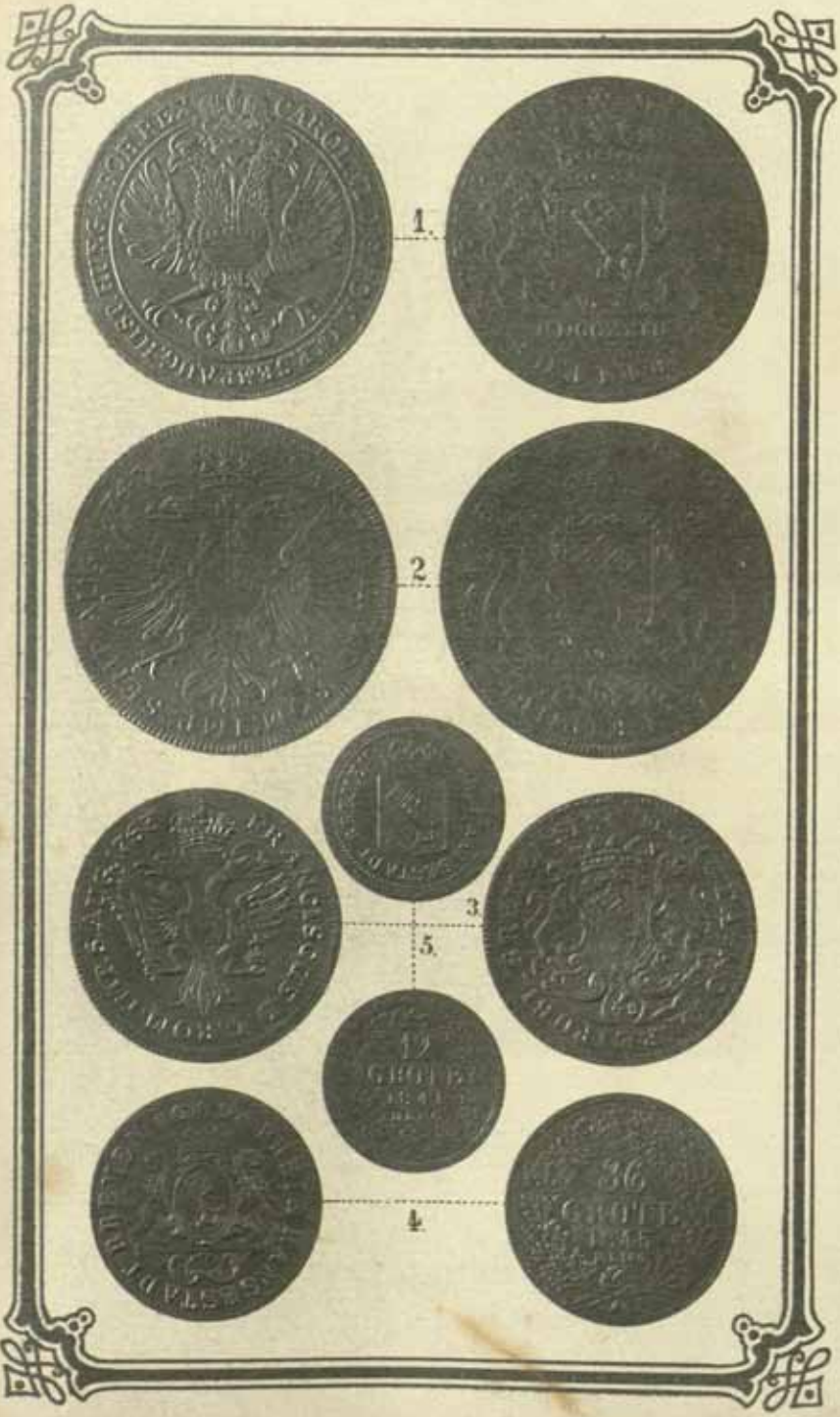
No. 1. *Two-Mark piece* of 1796. $12._{75}$ to the Cologne mark, $\frac{3}{4}$ fine; about $20._{35}$ to the troy pound. Mean value 2*s.* 6*d.*

No. 2. *Two-Mark piece* of 1809. Weight, value, &c., same as No. 1.

No. 3. *Mark* of 1789. Weight, value, &c., in proportion to No. 1.

46

Bremen.



BREMEN.

SILVER COINS.

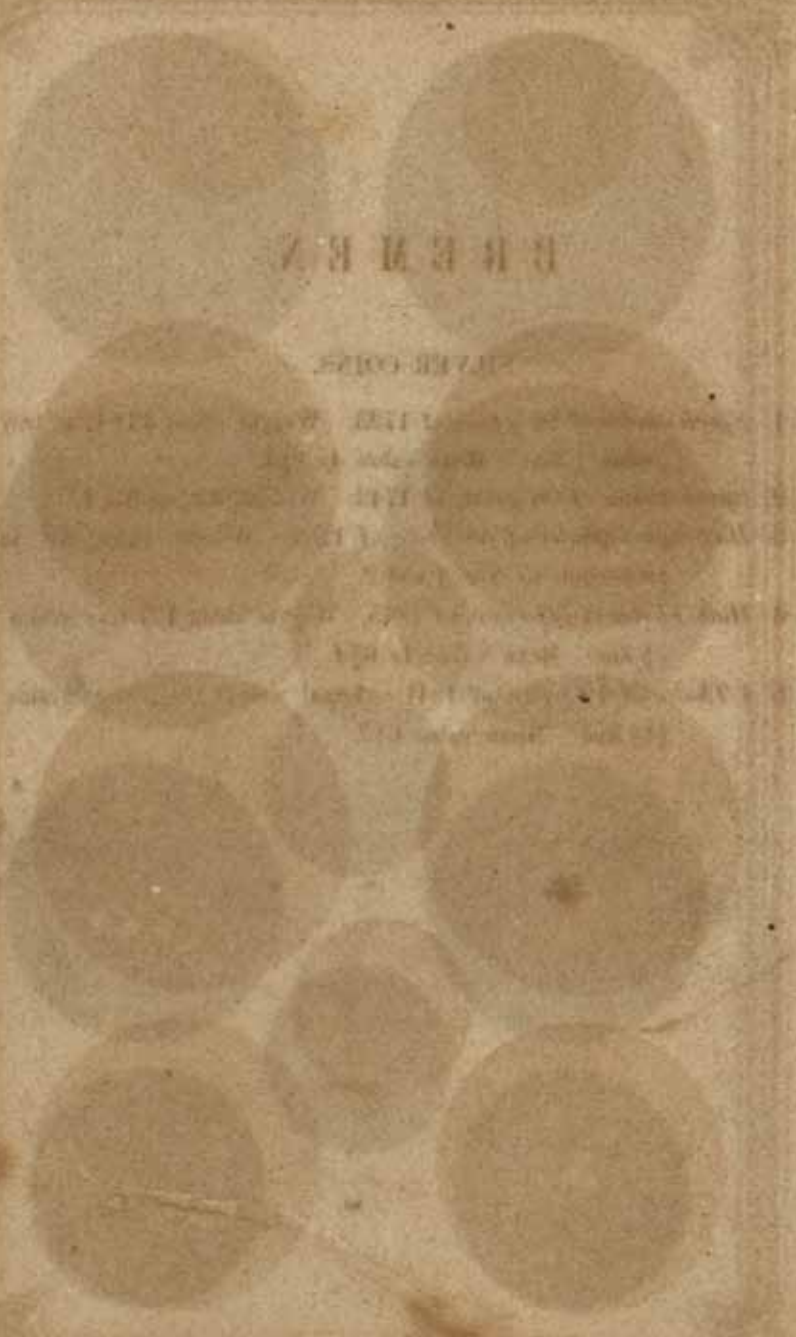
No. 1. *Speciesthaler* of 96 grote, of 1723. Weight about 432 Eng. troy grains, $\frac{5}{6}$ fine. Mean value 4*s*. 2½*d*.

No. 2. *Speciesthaler* of 96 grote, of 1743. Weight, &c., as No. 1.

No. 3. *Halb-Speciesthaler* of 48 grote of 1753. Weight, value, &c., in proportion to Nos. 1 and 2.

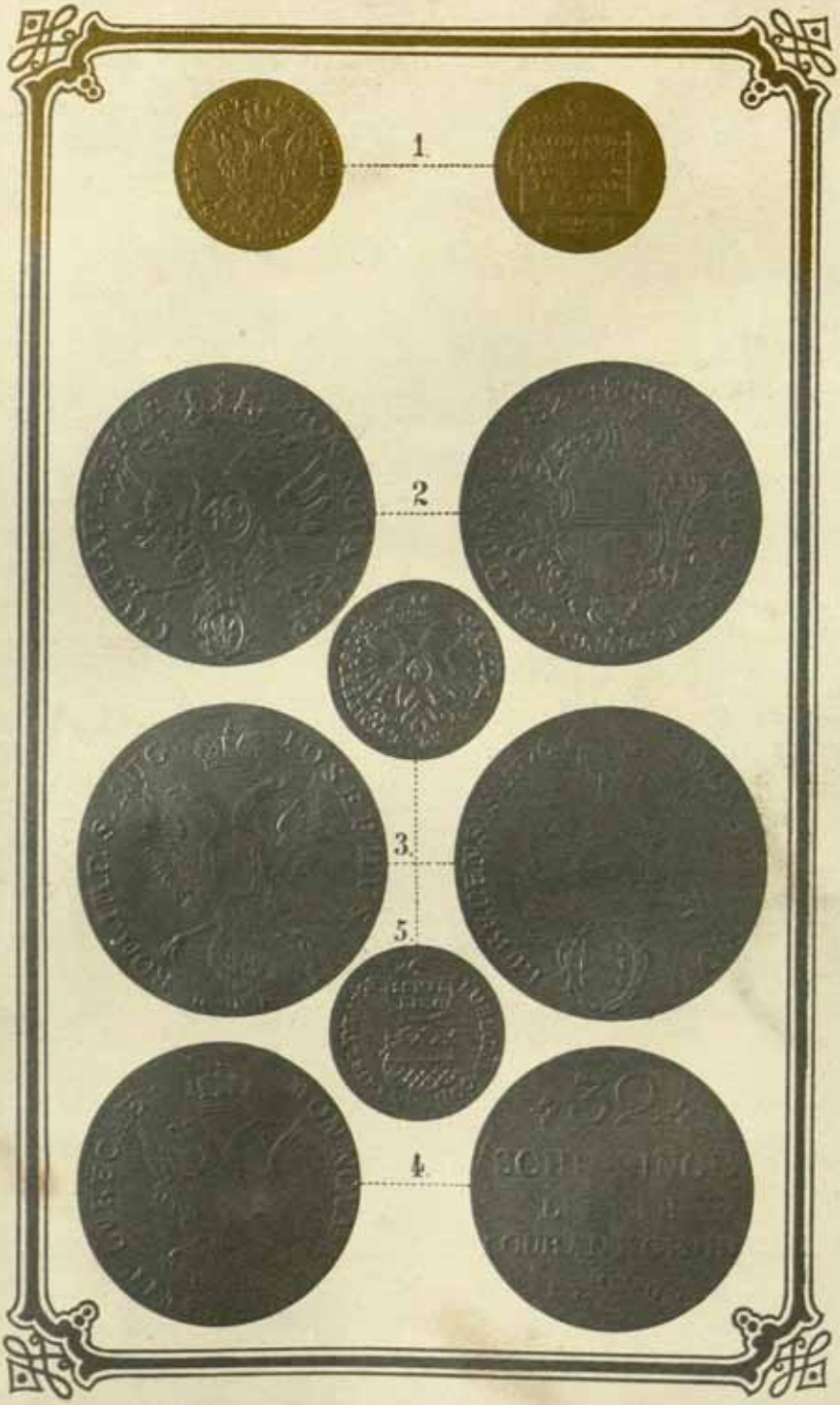
No. 4. *Halb-Thaler* of 36 grote, of 1845. Weight about 137 troy grains, $\frac{7}{12}$ fine. Mean value 1*s*. 6¾*d*.

No. 5. ⅓-*Thaler* of 12 grote, of 1841. Legal weight $60_{,9}$ troy grains, $\frac{313}{500}$ fine. Mean value 6¼*d*.



47

Lübeck.



LÜBECK.

GOLD COINS.

No. 1. *Ducat* of 1792. 67 to the Cologne mark, $\frac{47}{48}$ fine; about 107 to the troy pound. Mean value 9*s.* 4*d.*

SILVER COINS.

No. 2. *Kurant-Thaler* (3 mark, or 48 schillinge) of 1752. $8\frac{1}{2}$ to the Cologne mark, $\frac{3}{4}$ fine; $13_{\cdot 56}$ to the Eng. troy pound. Mean value 3*s.* 9*d.*

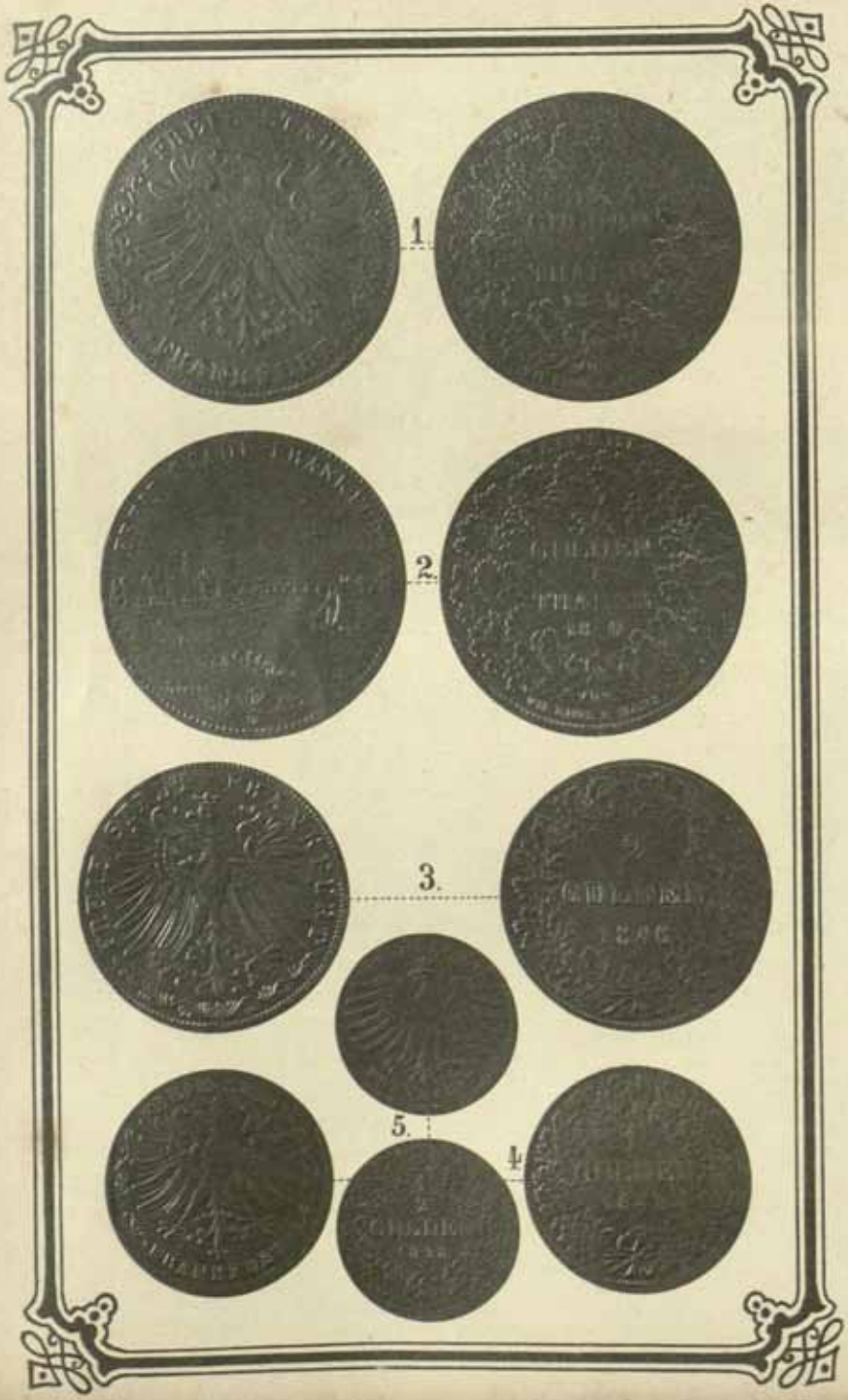
No. 3. *Kurant-Thaler* (3 mark, or 48 schillinge). Weight, value, &c., same as No. 2.

No. 4. *Two-Mark piece* of 1797. Weight, value, &c., in proportion to No. 2.

No. 5. *Four-Schilling piece* of 1728. $78_{\cdot 5}$ to the Cologne mark, $\frac{582\frac{1}{2}}{1000}$ fine; $125_{\cdot 28}$ to the troy pound. Mean value $3\frac{3}{4}$*d.*

48

Frankfort.



FRANKFORT.

SILVER COINS.

No. 1. 3½-*Gulden piece* (two thaler) of 1840. $6._2$ to the conventional Cologne mark, $\frac{9}{10}$ fine; 10 to the Eng. troy pound. Mean value 6*s*.

No. 2. 3½-*Gulden* (two thaler) of 1840. Weight, value, &c., same as No. 1.

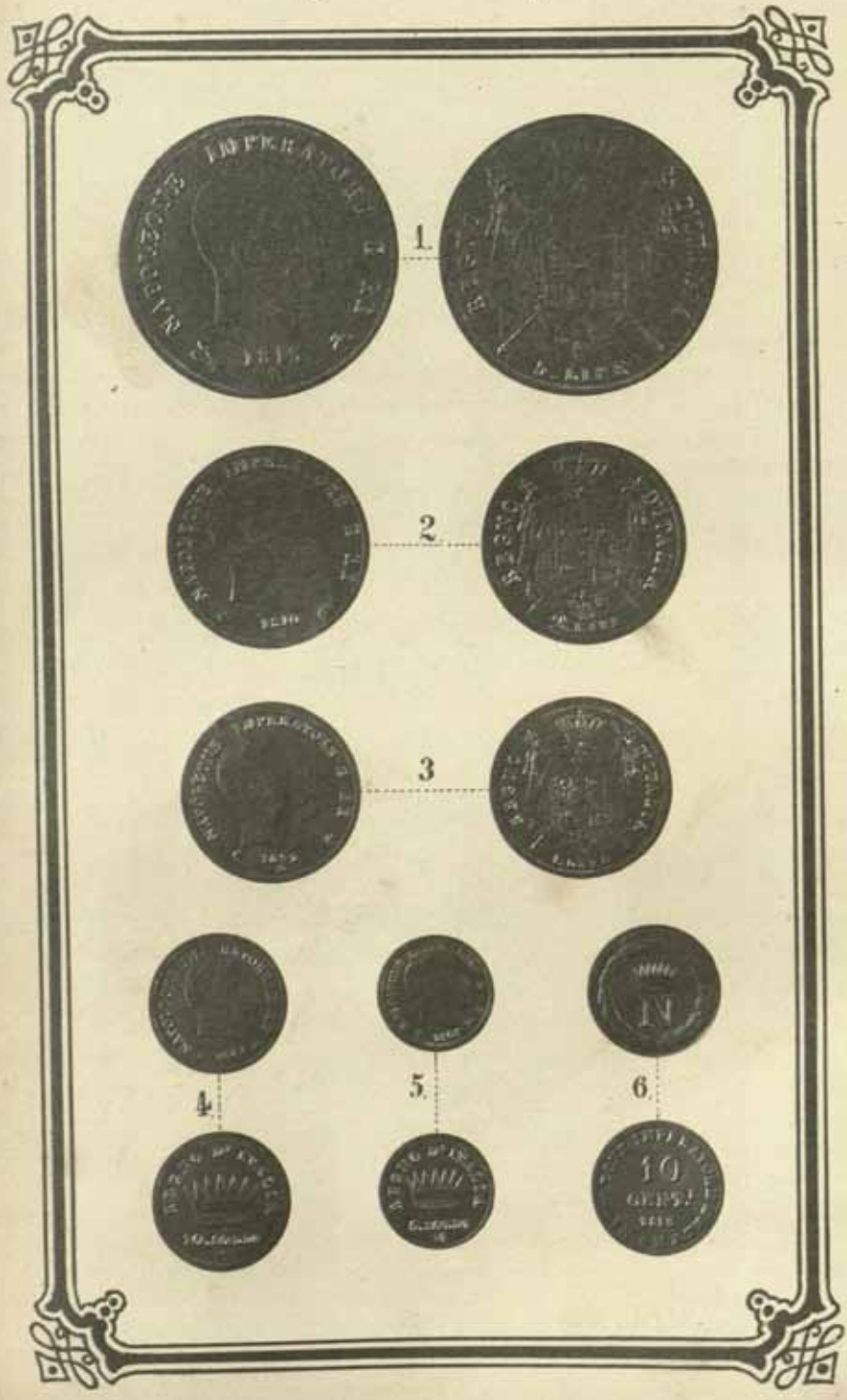
No. 3. *Two-Gulden piece* of 1846. $11\frac{1}{10}$ to the conventional mark, $\frac{9}{10}$ fine; $17._{58}$ to the troy pound. Mean value 3*s*. 5½*d*.

No. 4. *Gulden* of 1848. Weight, value, &c., in proportion to No. 3.

No. 5. *Half-Gulden* of 1838. do. do.

49

Kingdom of Italy.



KINGDOM OF ITALY.

SILVER COINS.

No. 1. *Five-Lire piece* of 1813. 40 to the French kilogramme, $\frac{9}{10}$ fine; $14_{.9296}$ to the troy pound. Average value 4*s.* 0¼*d.*

No. 2. *Two-Lire piece* of 1810. 100 to the kilogramme, $\frac{9}{10}$ fine; $37_{.224}$ to the troy pound. Mean value 1*s.* 7⅓*d.*

No. 3. *Lira* of 1812. 200 to the kilogramme, $\frac{9}{10}$ fine. Value 9⅔*d.*

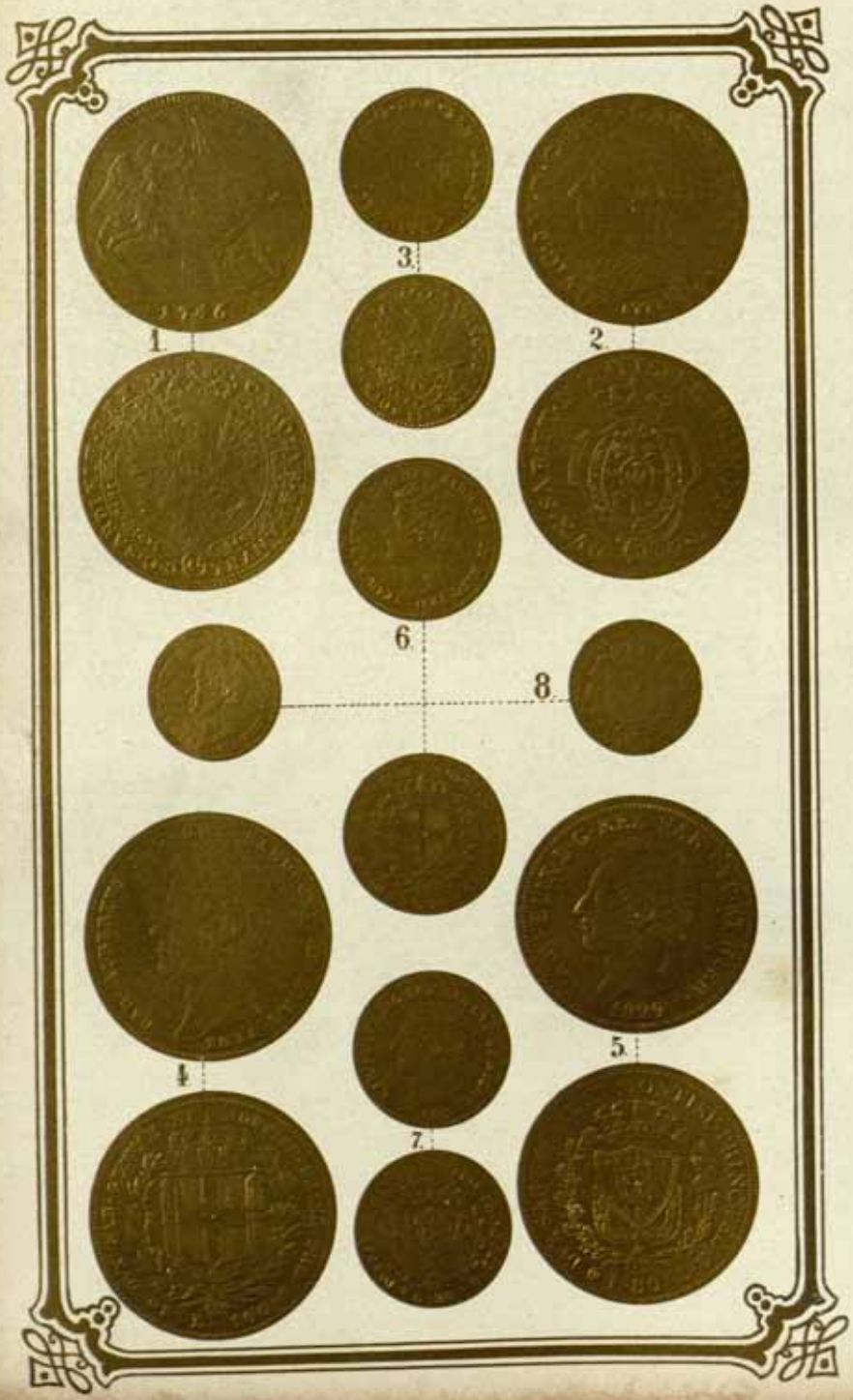
No. 4. *Ten-Soldi piece*, or ½ lira, of 1811. Weight, value, &c., in proportion to No. 3.

No. 5. *Five-Soldi piece*, or ¼ lira. Weight, value, &c., in proportion to No. 3.

No. 6. *Ten-Centesimi piece*, or $\frac{1}{10}$ lira. Value something less than 1*d.*

50

Sardinia.



SARDINIA.

GOLD COINS.

No. 1. *Doppia-Doppia de Savoja*, of 1746. Weight about 280½ Eng. troy grains, $\frac{905}{1000}$ fine. Mean value £2 4*s*. 10*d*.

No. 2. *Doppia-Doppia* of 1773. Weight, value, &c., same as No. 1.

No. 3. *Metà-Doppia* (half-doppia) of 1789. Weight, value, &c., in proportion to No. 1.

No. 4. 100-*Lire piece* of 1834. 31 to the French Kilogramme, $\frac{9}{10}$ fine; $11._{57}$ to the Eng. troy pound. Mean value £3 19*s*. 5*d*.

No. 5. 80-*Lire piece* of 1829. Weight 397½ Eng. troy grains, $\frac{898}{1000}$ fine. Mean value £3 3*s*. 2¼*d*.

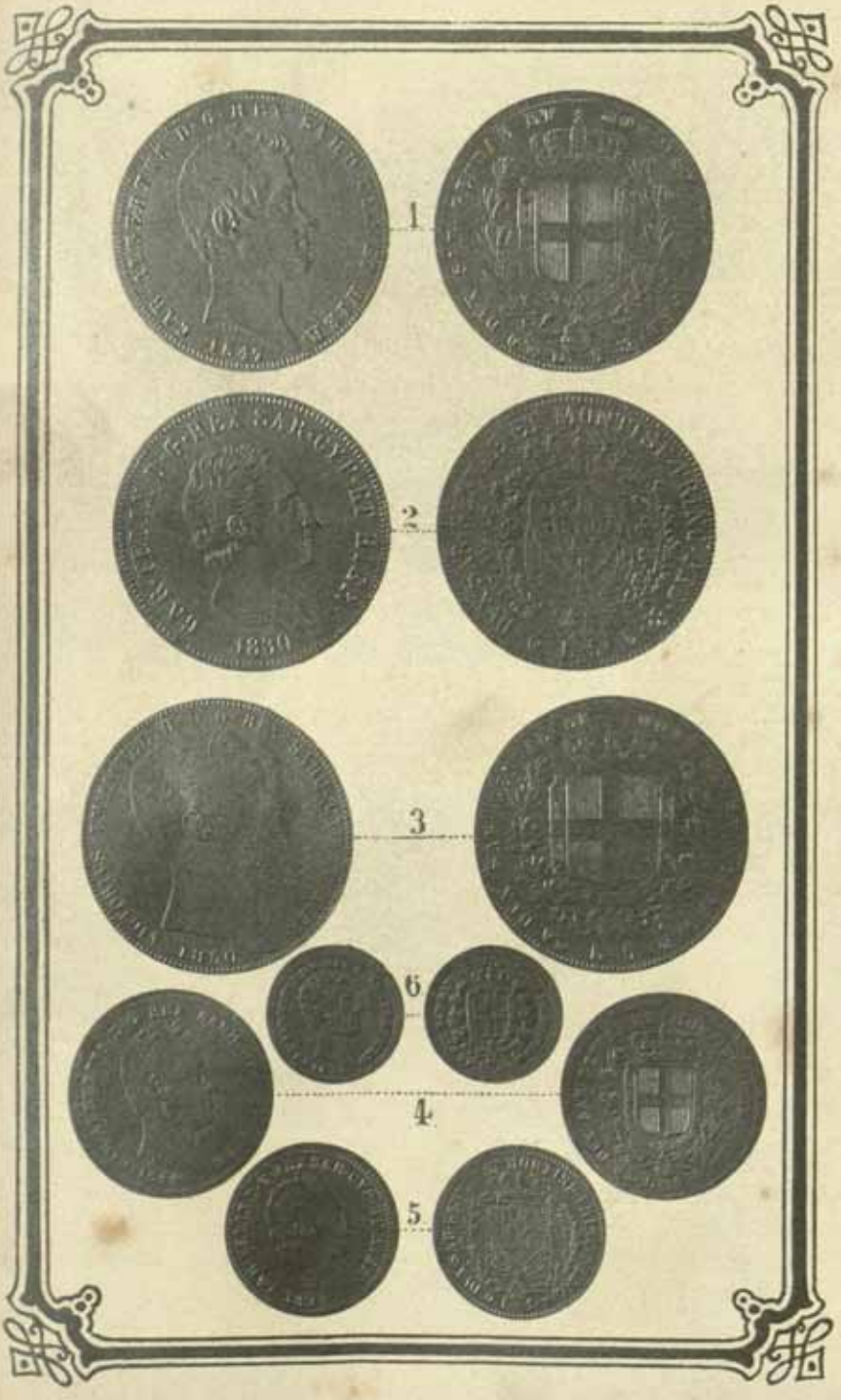
No. 6. 20-*Lire piece* of 1841. 155 to the French Kilogramme, $\frac{9}{10}$ fine $57._{85}$ to the troy pound. Mean value 15*s*. 10⅔*d*.

No. 7. 20-*Lire piece* of 1826. Weight, value, &c., the same as No. 6.

No. 8. 10-*Lire piece* of 1833. Weight, value, &c., in proportion to Nos. 6 and 7.

57

Sardinia.



SARDINIA.

SILVER COINS.

No. 1. *Scudo* of 5 *lire*, of 1847. 40 to the French kilogramme, $\frac{9}{10}$ fine; $14_{\cdot 9296}$ to the troy pound. Mean value 4*s*. 0¼*d*.

No. 2. *Scudo* of 1830. Weight, value, &c., same as No. 1.

No. 3. *Scudo* of 1850. do. do.

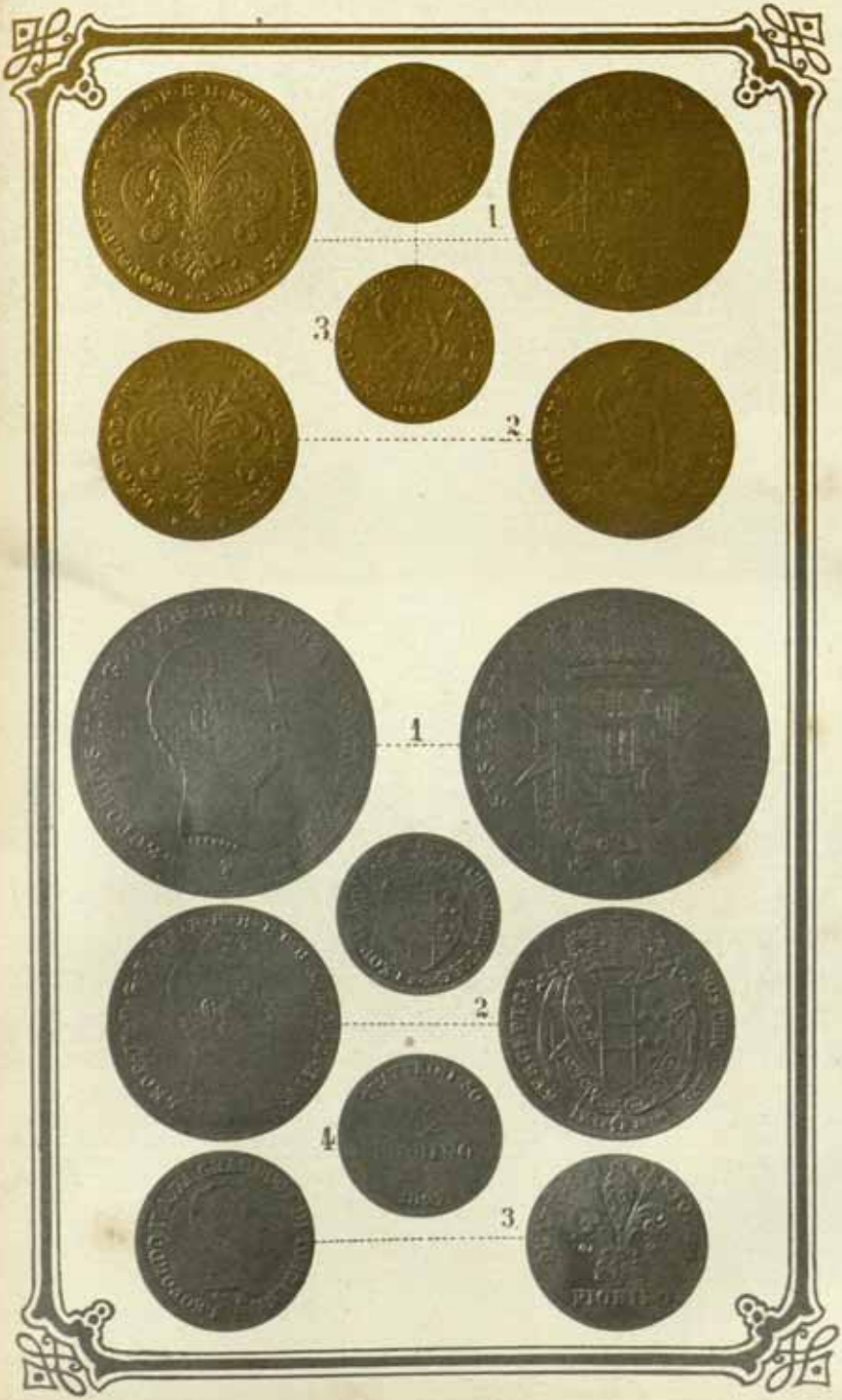
No. 4. *Two-Lire piece* of 1844. 100 to the kilogramme, $\frac{9}{10}$ fine; $37_{\cdot 224}$ to the troy pound. Mean value 1*s*. 7½*d*.

No. 5. *Lira* of 1828. 200 to the kilogramme, $\frac{9}{10}$ fine; $74_{\cdot 448}$ to the troy pound. Mean value $9_{\cdot 657}$*d*.

No. 6. ½-*Lira* of 1833. Weight, value, &c., in proportion to No. 5.

52

Tuscany.



TUSCANY.

GOLD COINS

No. 1. 80-*Fiorini piece* of 1828. Legal weight 664 Tuscan grani all pure gold, or about 504 Eng. troy grains. Mean value £4 9*s*. 1½*d*.

No. 2. *Ruspone* of 1829. Legal weight 213 grani all pure gold, or about 161½ Eng. troy grains. Legal value £1 8*s*. 6¾*d*., but varying between this and £1 8*s*. 4½*d*.

No. 3. *Zecchino* of 1849. This coin is one-third the weight of the ruspone, and its value is in proportion.

SILVER COINS.

No. 1. *Francescone* of 10 paoli, of 1846. Legal weight 560 Tuscan grani, or about 424½ Eng. troy grains, $\frac{11}{12}$ fine. Mean value 4*s*. 6½*d*.

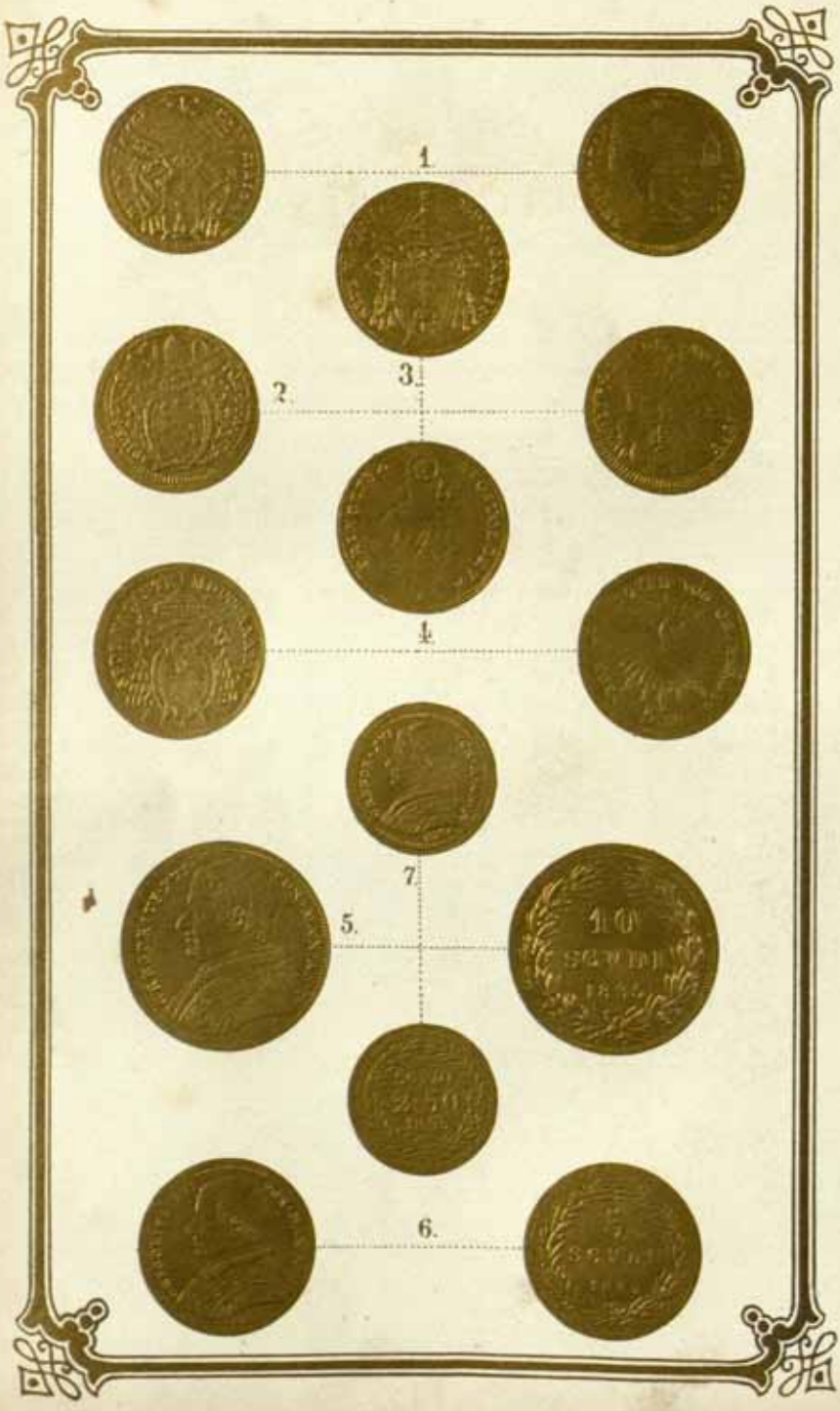
No. 2. *Franceschino* of 5 paoli, of 1829. Weight, value, &c., in proportion to No. 1.

No. 3. *Fiorino* of 2½ paoli of 1828. Weight, value, &c., in proportion to No. 1.

No. 4. ½-*Fiorino* of 1827. Weight ⅛ of No. 1; value in proportion.

53

Rome.



ROMAN STATES.

GOLD COINS.

No. 1. *Zecchino* of 1740. 99 to the Roman pound; weight $52_{.8669}$ Eng. troy grains, legally all pure gold, but sometimes only $\frac{143}{144}$ fine. Value 9*s.* 4*d.*

No. 2. *Zecchino* of 1783 (Pius VI.). Weight, &c., as No. 1.

No. 3. *Doppia* of 1823. 62 to the Roman mark of minting gold, $\frac{11}{12}$ fine; weight $84_{.41}$ Eng. troy grains. Value 13*s.* 8½*d.*

No. 4. 5-*Scudi piece* of 1846. Weight $132_{.66}$ Eng. troy grains, $\frac{143}{144}$ fine. Value £1 1*s.* 5½*d.*

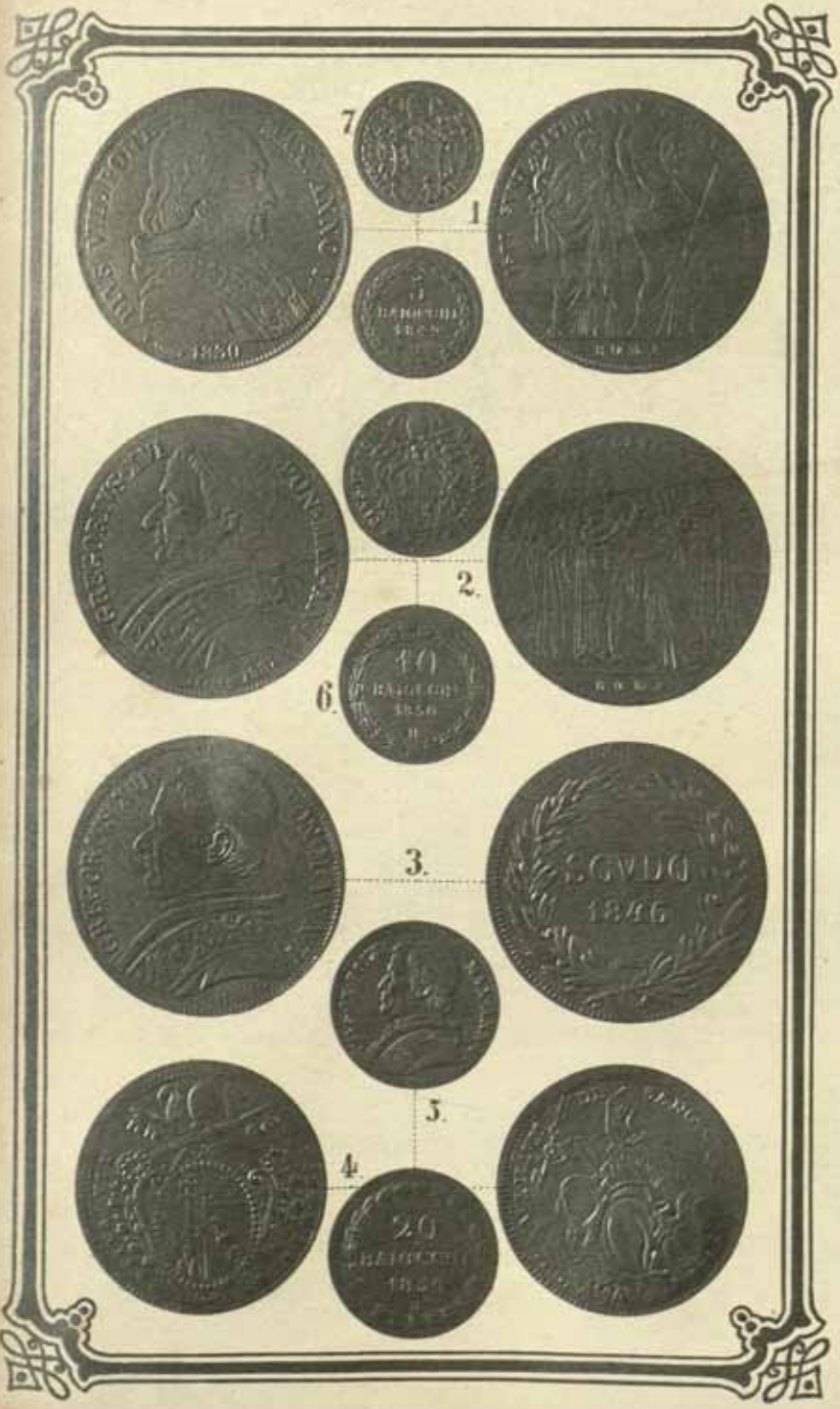
No. 5. 10-*Scudi piece* of 1835. Weight, value, &c., in proportion to No. 4.

No. 6. 5-*Scudi piece* of 1845. Weight, value, &c., as No. 4.

No. 7. 2½-*Scudi piece* of 1835. Weight, value, &c., in proportion to No. 4.

54

Papal States.



PAPAL STATES.

SILVER COINS.

No. 1. *Scudo,* of 100 bajocchi, of 1830. $12\frac{83}{100}$ to the Roman libbra, $\frac{11}{12}$ fine; 408 Eng. troy grains in weight. Mean value 4*s.* $4\frac{1}{2}$*d.*

No. 2. *Scudo* of 1831. Weight, value, &c., same as No. 1.

No. 3. *Scudo* of 1846. Weight about 415 Eng. troy grains, $\frac{9}{10}$ fine. Mean value 4*s.* $4\frac{1}{2}$*d.*

No. 4. $\frac{1}{2}$-*Scudo* of 1802. Weight, value, &c., in proportion to No. 1.

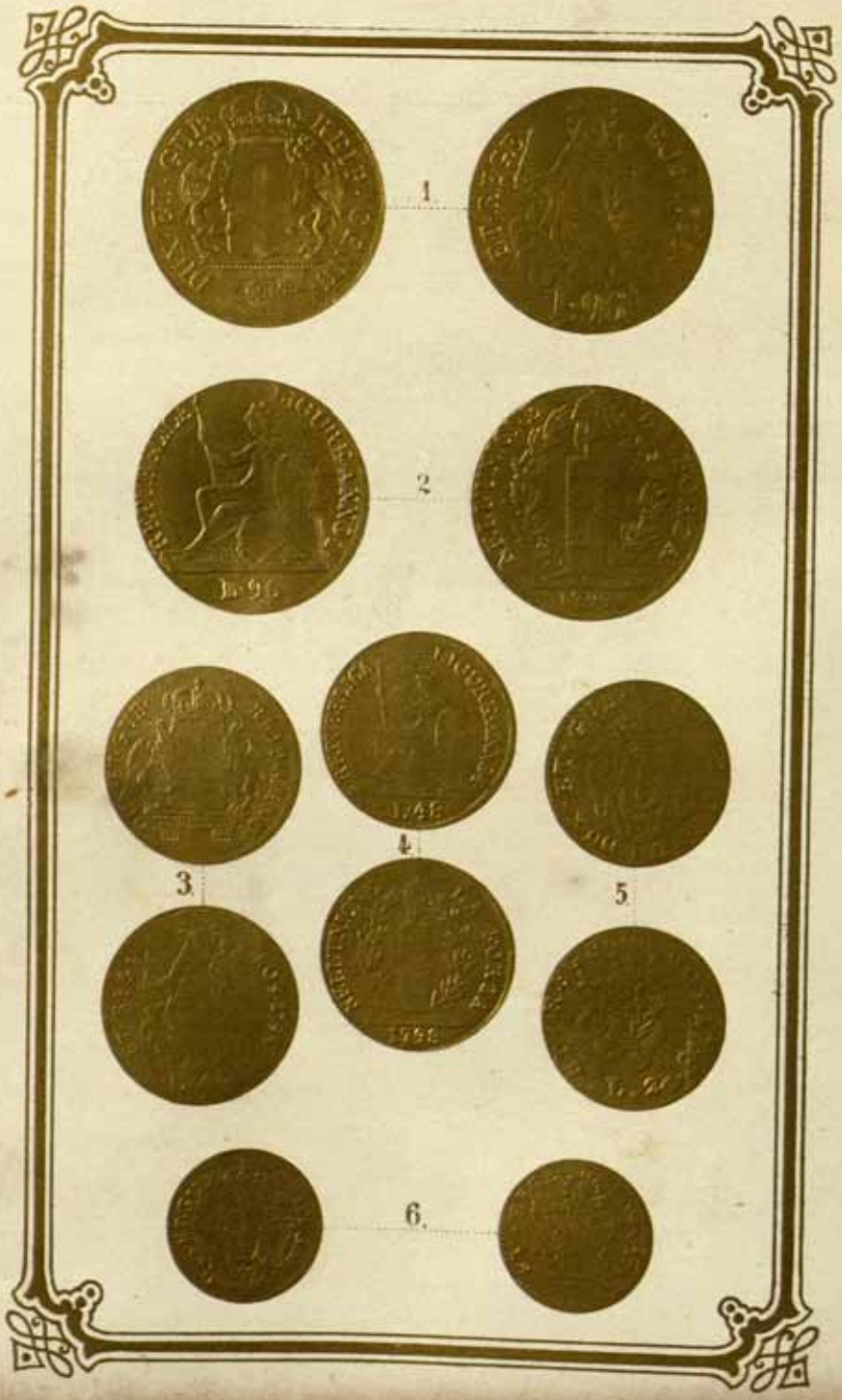
No. 5. $\frac{1}{5}$-*Scudo,* of 20 bajocchi, of 1850. Weight, value, &c., in proportion to No. 3.

No. 6. $\frac{1}{10}$-*Scudo,* of 10 bajocchi, of 1850. Weight, value, &c., in proportion to No. 3.

No. 7. $\frac{1}{20}$-*Scudo,* of 5 bajocchi, of 1849. Weight, value, &c., in proportion to No. 3.

55

Genoa.



GENOA.

GOLD COINS.

No. 1. 96-*Lire piece* of 1796. Weight about 387½ Eng. troy grains, about $\frac{895}{1000}$ fine. Mean value about £3 2*s.* 6*d.*

No. 2. 96-*Lire piece* of 1798. Of about the same weight and value as No. 1.

No. 3. 48-*Lire piece* of 1794. Weight, value, &c., in proportion to No. 1.

No. 4. 48-*Lire piece* of 1798. Weight, value, &c., in proportion to No. 1.

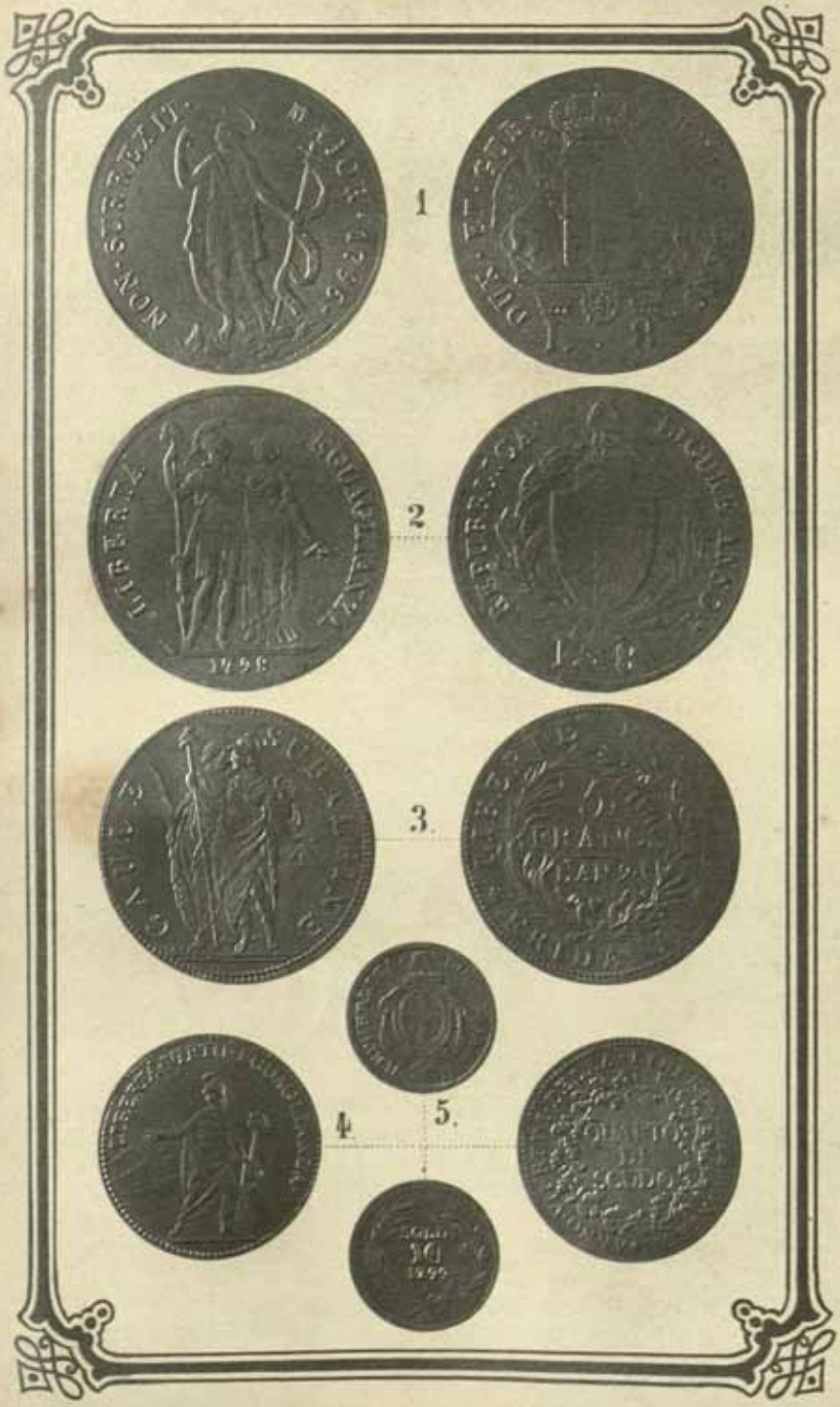
No. 5. 24-*Lire piece* of 1793. Weight, value, &c., in proportion to No. 1.

No. 6. 12-*Lire piece* of 1760. Weight, value, &c., in proportion to No. 1.

The weight and fineness of these coins appear to have varied: the above estimate is to be considered a fair medium.

56

Piedmont.



PIEDMONT.

SILVER COINS.

No. 1. *Scudo* of 1796. (Genoa.) Weight about 513 Eng. troy grains, $\frac{8}{9}$ fine. Mean value 5*s*. 4*d*.

No. 2. *Scudo* of 1798. (Ligurian Republic.) The weight, fineness, and value of this coin are respectively something less than those of No. 1.

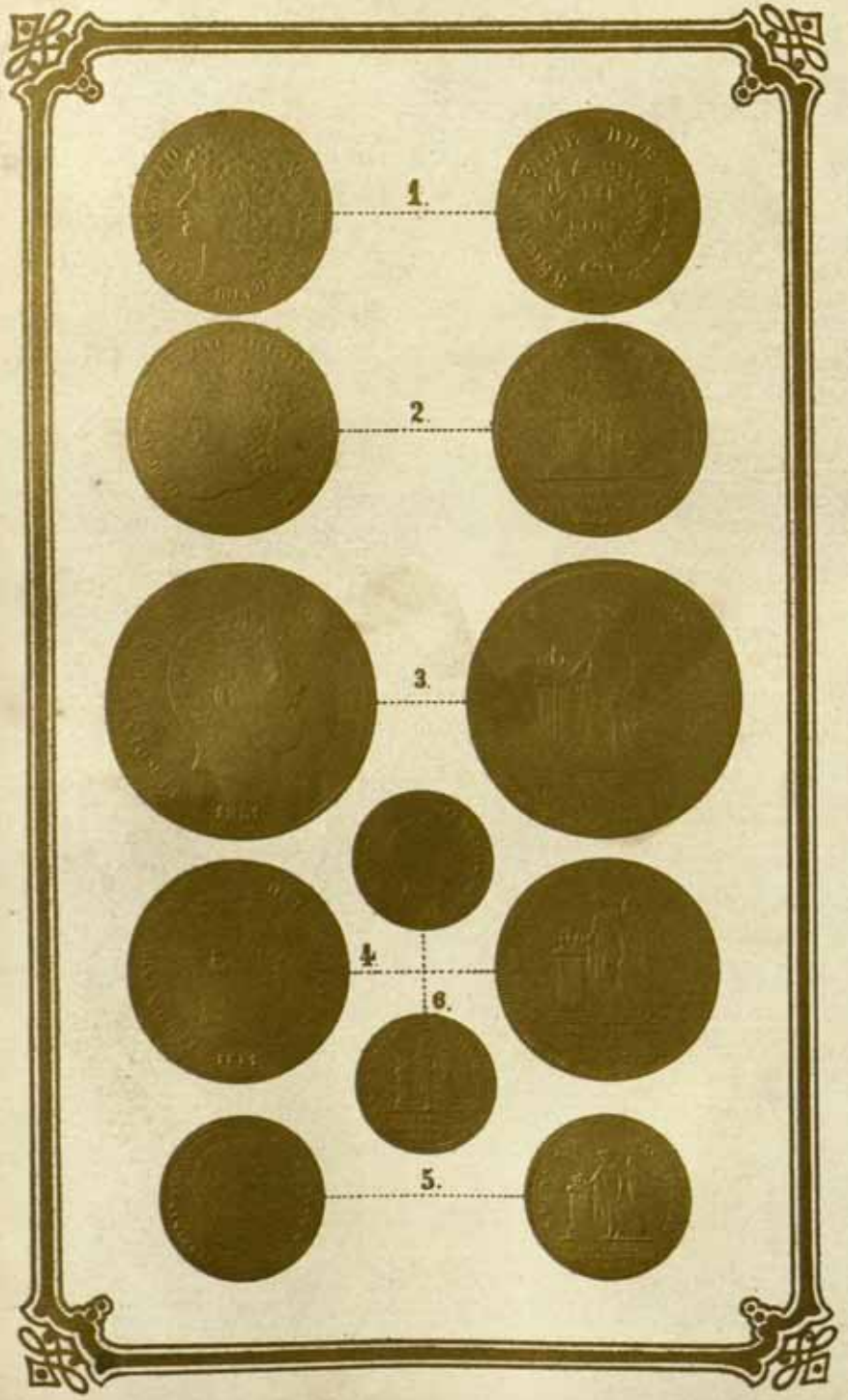
No. 3. *Five-Franc piece* of Cisalpine Gaul. 40 to the kilogramme, $\frac{9}{10}$ fine; about 15 to the troy pound. Average value 4*s*. 0¼*d*.

No. 4. ¼-*Scudo*, of 2 lire, of 1799 (Piedmont). Weight about 135 Eng. troy grains, about $\frac{903}{1000}$ fine. Mean value 1*s*. 5¼*d*.

No. 5. *Ten-Soldi piece* of 1799. Value about 1¾*d*.

57

The Two Sicilies.



THE TWO SICILIES.

GOLD COINS.

No. 1. *Forty-Lire piece* of 1813 (Jerome Napoleon). $77\frac{1}{2}$ to the Fr. kilogramme, $\frac{9}{10}$ fine. $28._{9261}$ to the troy pound. Mean value £1 11*s.* $8\frac{1}{2}$*d.*

No. 2. *Fifteen-Ducat piece* (5 oncette) of 1818. Weight 425 Neapolitan acini, or 292 Eng. troy grains, legally $\frac{996}{1000}$ fine. Legal value £2 11*s.* 6*d.*, but often found only £2 11*s.* 3*d.*

No. 3. *Thirty-Ducat piece* of 1851. Weight, value, &c., in proportion to No. 2.

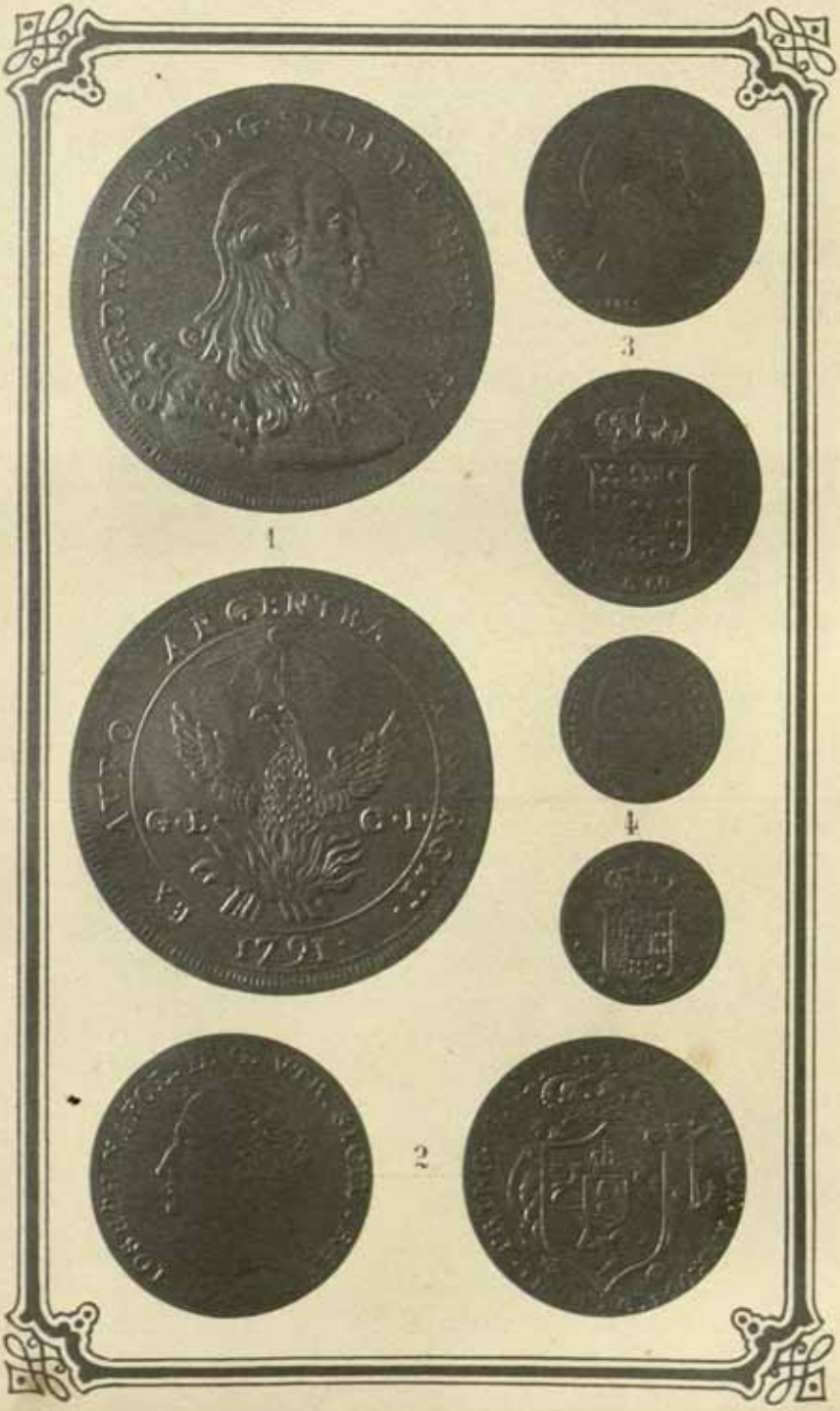
No. 4. *Fifteen-Ducat piece* of 1851. Weight, value, &c., the same as No. 2.

No. 5. *Six-Ducat piece* of 1851. Weight, value, &c., in proportion to No. 2.

No. 6. *Three-Ducat piece* of 1851. Weight, value, &c., in proportion to No. 2.

58

The Two Sicilies.



THE TWO SICILIES.

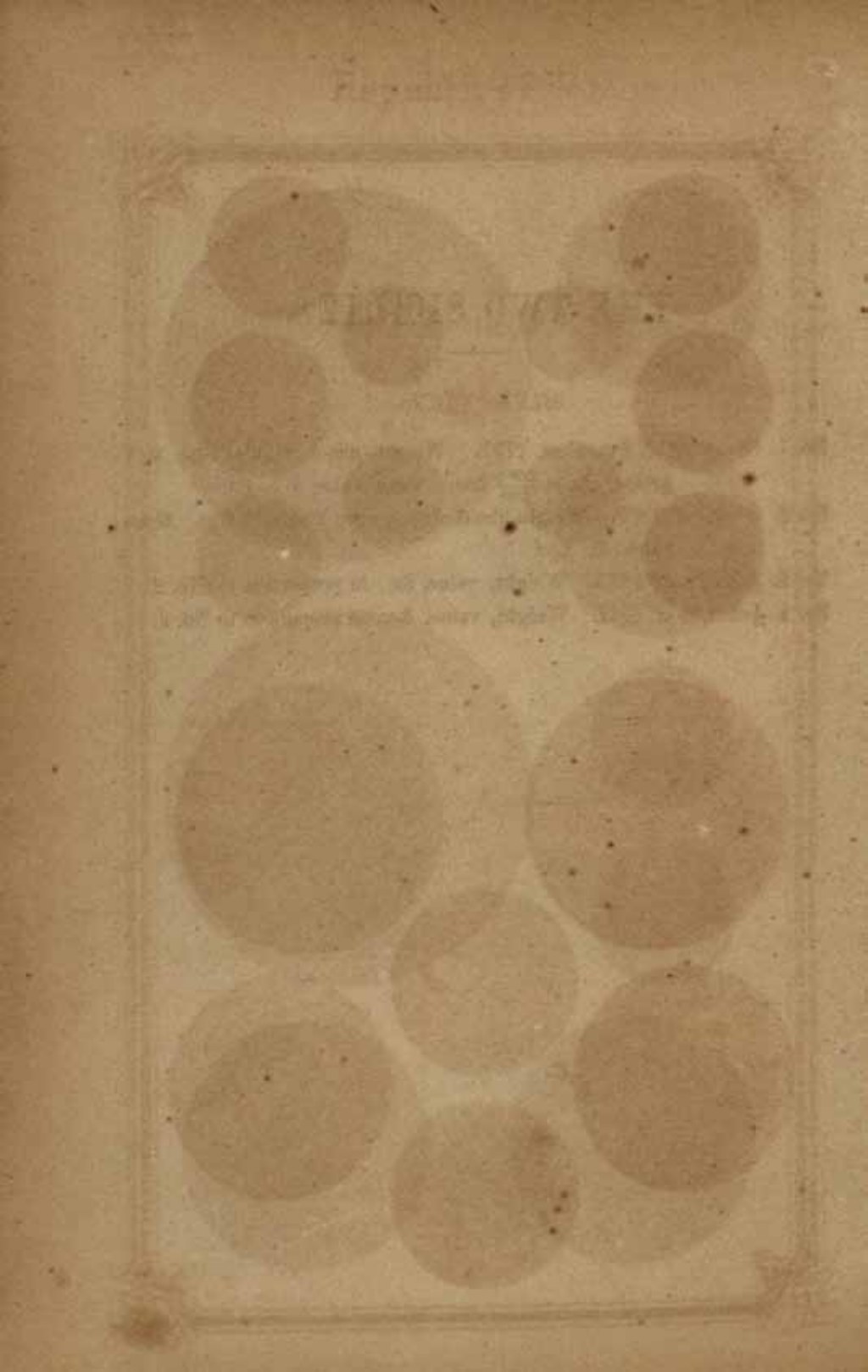
SILVER COINS.

No. 1. *Oncia* of 3 ducati of 1791. Weight about 1052¼ Eng. troy grains, about $\frac{840\frac{1}{4}}{1000}$ fine. Mean value 10*s*. 3*d*.

No. 2. *Scudo* of 1808. Weight about $424_{.89}$ troy grains, $\frac{5}{6}$ fine. Mean value 4*s*. 1¼*d*.

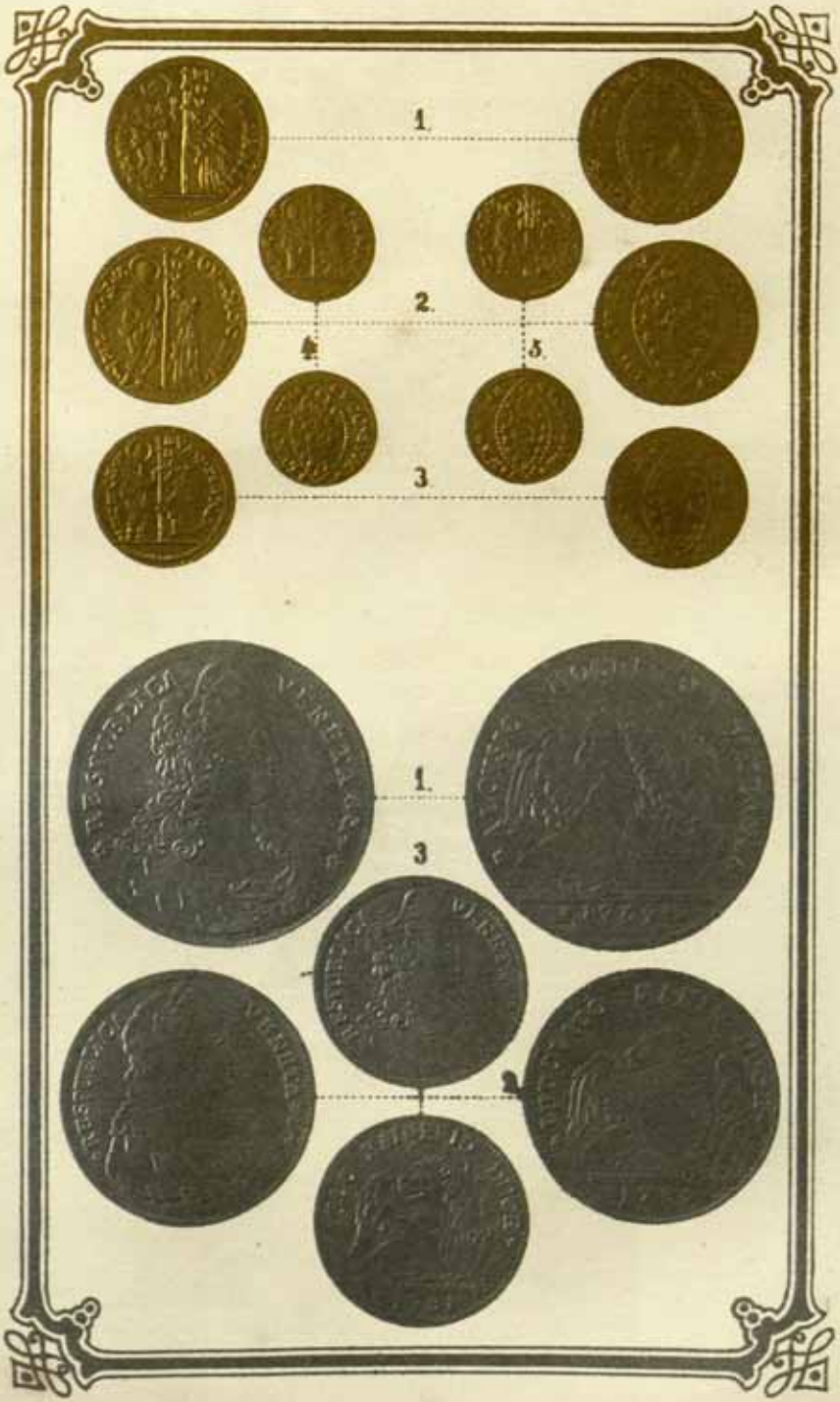
No. 3. ½-*Scudo* of 1833. Weight, value, &c., in proportion to No. 2.

No. 4. ¼-*Scudo* of 1847. Weight, value, &c., in proportion to No. 2.



59

Republic of Venice.



REPUBLIC OF VENICE.

GOLD COINS.

No. 1. *Ducat* of Ludovico Manin. Weight $33._6$ Eng. troy grains, $\frac{996}{1000}$ fine. Mean value 5*s*. 11*d*.

No. 2. *Ducat* of Aloys Mocenico. Weight, value, &c., the same as No. 1.

No. 3. *Halb-Ducat* of L. Manin. Weight, value, &c., in proportion No. 1.

No. 4. *Halb-Ducat* of Aloys Mocenico. do. do.

SILVER COINS.

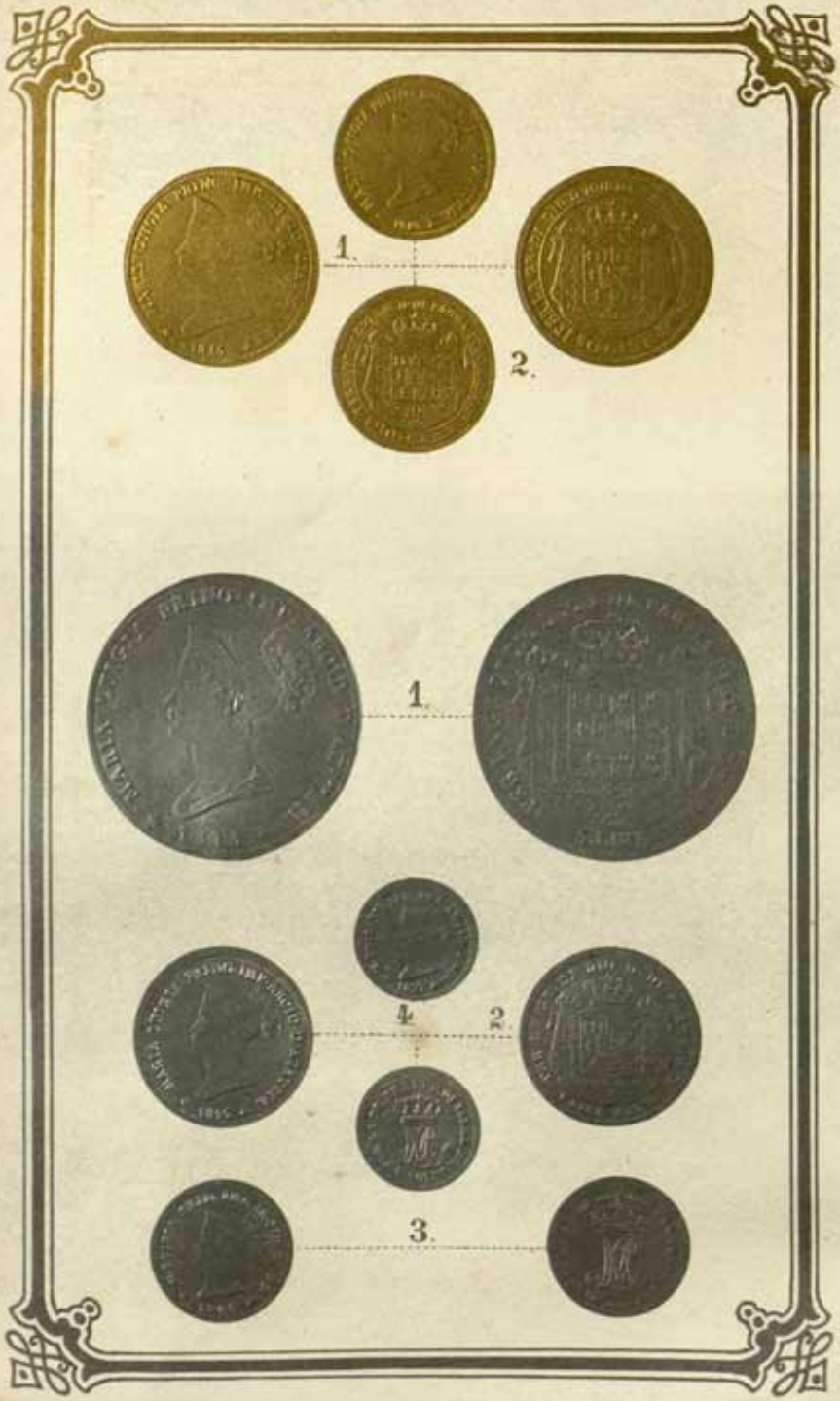
No. 1. *Tallaro* of Aloys Mocenico, of 1769. Weight $439._6$ Eng. troy grains, about $\frac{833}{1000}$ fine. Mean value 4*s*. 3*d*.

No. 2. *Halb-Tallaro* of L. Manin, of 1789. Weight, value, &c., in proportion to No. 1.

No. 3. *Quarter-Tallero* of Paulo Rainer; 1781. Weight, value, &c., in proportion to No. 1.

60

Parma.



DUCHY OF PARMA.

GOLD COINS.

No. 1. *Forty-lire piece* of 1815. $77_{\cdot 3}$ to the French kilogramme, by $\frac{9}{10}$ fine; 28_{926} to the troy pound. Mean value £1 11*s*. 8½*d*.

No. 2. *Twenty-lire piece* of 1812. Weight, &c., in proportion to No. 1.

SILVER COINS.

No. 1. *Five-lire piece* of 1815. 40 to the French kilogramme, $\frac{9}{10}$ fine; 14_{9296} to the troy pound. Mean value 4*s*. 0¼*d*.

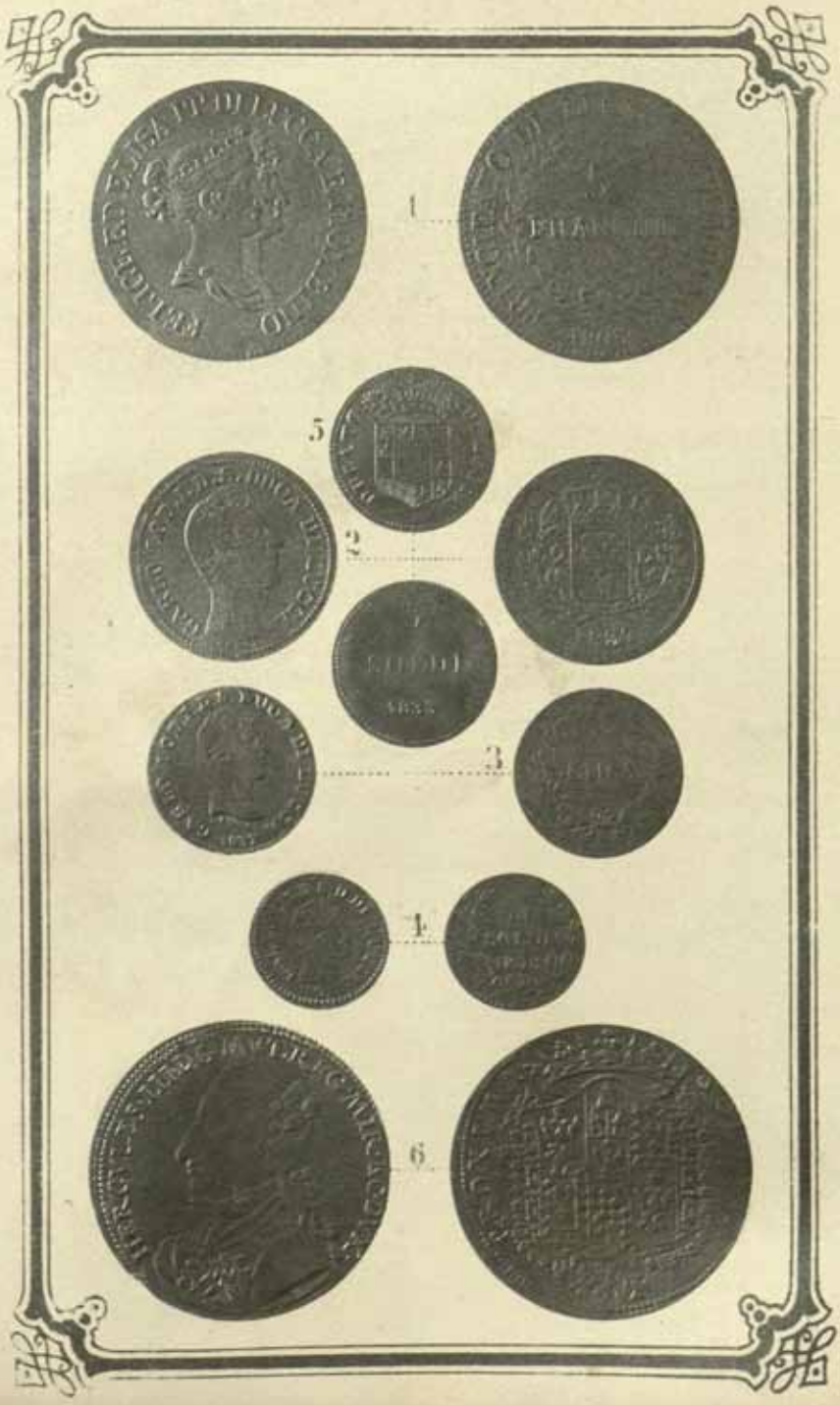
No. 2. *Lira* of 1815. 200 to the French kilogramme, $\frac{9}{10}$ fine; 74_{648} to the troy pound. Mean value 9¾*d*.

No. 3. ½-*Lira*, or *ten-soldi piece*. 1815. Weight, &c., in proportion to No. 2.

No. 4. ¼-*Lira*, or *five-soldi piece*. 1815. Weight, &c., in proportion to No. 2.

61

Lucca-Modena.



LUCCA. — MODENA.

SILVER COINS.

No. 1. *Five-Francchi piece* of Lucca (1808). 40 to the French kilogramme, $\frac{9}{10}$ fine; $14_{\cdot 9256}$ to the Eng. troy pound. Mean value 4*s*. 0¼*d*.

No. 2. *Two-Lire piece* of Lucca (1837). 100 to the kilogramme, $\frac{9}{10}$ fine; $37_{\cdot 324}$ to the troy pound. Mean value 1*s*. 7½*d*.

No. 3. *Lira* of Lucca (1837). 200 to the kilogramme, $\frac{9}{10}$ fine; $74_{\cdot 648}$ to the troy pound. Mean value $9_{\cdot 657}$*d*.

No. 4. *Ten-Soldi piece* of Lucca (1838). This coin is a half-lira, and its weight, value, &c., are in proportion to No. 3.

No. 5. *Five-Soldi piece*, or ½ lira. Current value $2_{\cdot 414}$*d*.

No. 6. *Scudo* of Modena, of 1782. (Hercules III.) Weight about $427_{\cdot 7}$ Eng. troy grains, about $\frac{913}{1000}$ fine. Mean value 4*s*. 6¾*d*.

N.B. Other scudi of Modena, dating 1796, contain much less silver, and are worth about 3*s*. 3¾*d*.

62

Malta.

MALTA.

GOLD COINS.

No. 1. 4-*Zecchini piece* without date, of Emmanuel Pinto Fonseca, Grand-master of Malta. $28._{52}$ to the Eng. troy pound, about $\frac{21}{22}$ fine. Approximate value £1 14*s*.

No. 2. 2-*Zecchini piece* of Emmanuel Pinto Fonseca. Weight, value, &c., in proportion to No. 1.

No. 3. *Zecchino* of Emmanuel Pinto Fonseca. Weight, value, &c., in proportion to No. 1.

No. 4. *Double-Doppia*, of 20 scudi, of Emmanuel de Rohan, Grand-master of Malta, 1778. 22 to the Eng. troy pound, $\frac{11}{12}$ fine. Approximate value £1 18*s*. 3½*d*.

No. 5. *Doppia* of Emmanuel de Rohan, 1782. Weight, value, &c., in proportion to No. 4.

No. 6. ½-*Doppia* of Emmanuel de Rohan, 1779. Weight, value, &c., in proportion to No. 4.

SILVER COINS.

No. 1. *Oncia* of 2½ scudi, of Ferdinand Hompesch, Grand-master of Malta, 1798. $12._{6}$ to the troy pound, $\frac{833}{1000}$ fine. Value about 4*s*. 5½*d*.

No. 2. 2-*Tari piece* of Emmanuel de Rohan, 1779. $221._{4}$ to the troy pound, $\frac{17}{25}$ fine, Value about 2½*d*.

M A L T A

GOLD COINS.

No. 1. 2 Zecchini, [illegible] date, of Emanuel Pinto, Prince Grand Master of Malta. [illegible] in the first type, [illegible] the Grand Cross. Value [illegible]

No. 2. 2 Zecchini, [illegible] of Emanuel Pinto, Prince [illegible] in the second type, [illegible] to No. 1.

No. 3. Zecchino of Emanuel Pinto, Prince [illegible] in the first type, [illegible] to No. 1.

No. 4. Double Tornese of Emanuel de Rohan, Grand Master of Malta, 1776. [illegible] in the first type, [illegible] Value [illegible]

No. 5. Tornese of Emanuel de Rohan, 1776. [illegible] in the second type, [illegible] to No. 4.

No. 6. Tornese of Emanuel de Rohan, 1776. [illegible] in the first type, [illegible] to No. 4.

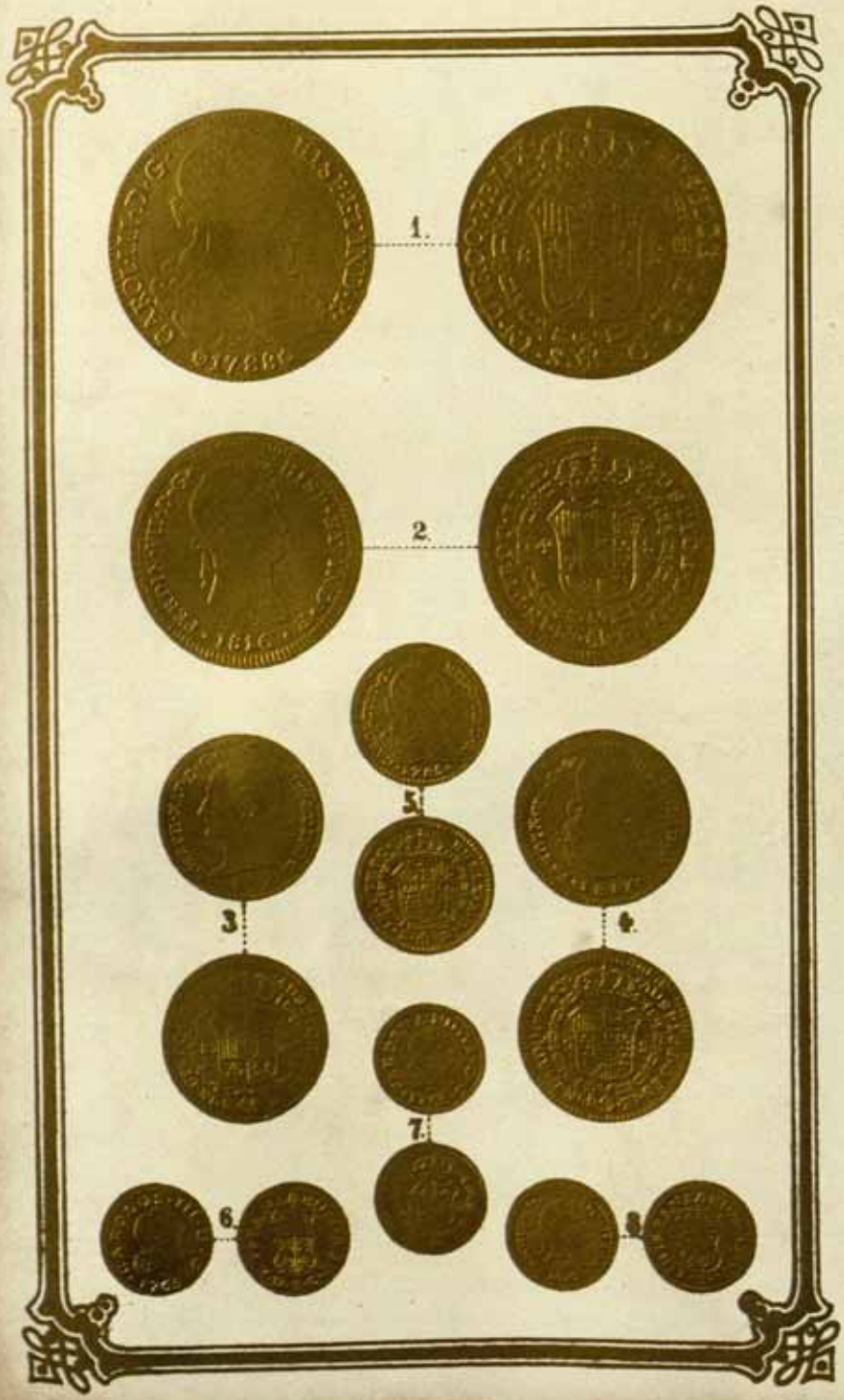
SILVER COINS.

No. 1. Crown of 12 tarins of Emanuel Pinto, Prince Grand Master of Malta, 1776. [illegible] in the first type, [illegible] Value about [illegible]

No. 2. 2 Tari piece of Emanuel de Rohan, 1776. [illegible] in the first type, [illegible] Value about [illegible]

63

Spain.



SPAIN.

GOLD COINS.

No. 1. *Onza de oro*, of 8 escudos de oro, of 1788. $8\frac{1}{4}$ to the Castilian mark, $\frac{7}{8}$ fine; about 13.$_8$ to the Eng. troy pound. Mean value about £3 4*s*. 4*d*.

No. 2. *Doblon de á cuarto*, or *Medio-Metalla*, of 4 escudos de oro, of 1816. Weight, value, &c., in proportion to No. 1.

No. 3. *Doblon de oro efectivo*, or *doppia*, of 2 escudos de oro, of 1809 (Joseph Napoleon). Weight, value, &c., in proportion to Nr. 1.

Nr. 4. *Doblon de oro efectivo*, of 2 escudos de oro, of 1817. Coined in America. Weight, value, &c., in proportion to Nr. 1.

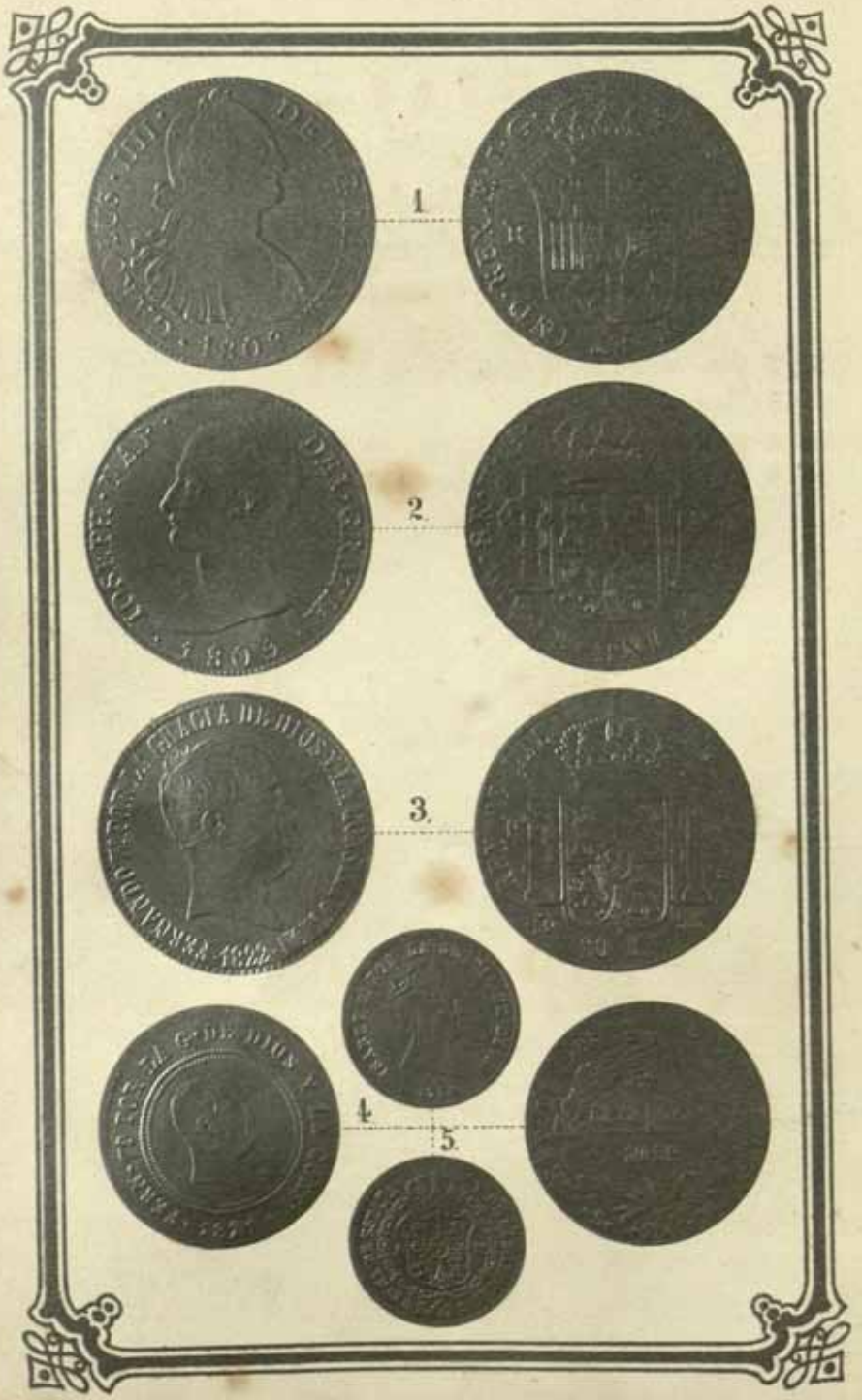
No. 5. *Medio-Doblon efectivo*, 1 escudo de oro, of 1785. Weight, value, &c., in proportion to No. 1.

No. 6. *Escudillo de oro*, or *Coronilla*, of 1765. Weight nearly 27 Eng. troy grains; legally $\frac{861}{888}$ fine, but found to be in general only $\frac{855}{888}$ fine. Mean value 4*s*. $3\frac{1}{2}$*d*.

No. 7. *Escudillo de oro*, of 1758. Weight, value, &c., the same as Nr. 6.

Nr. 8. *Escudillo*, or gold piaster, of 1816. Weight 26.$_{121}$ Eng. troy grains; legally $\frac{853}{888}$ fine, but found to be only $\frac{849}{888}$ fine. Mean value 3*s*. $10\frac{1}{4}$*d*.

Spain.



SPAIN.

SILVER COINS.

No. 1. *Peso*, or piaster, of 1808. Weight sometimes 415 sometimes 416½ Eng. troy grains, from $\frac{107}{110}$ to $\frac{112}{114}$ fine. Value from 4*s.* 3½*d.* to 4*s.* 4½*d.*

No. 2. *Peso* of 1809. Weight, &c., as No. 1.

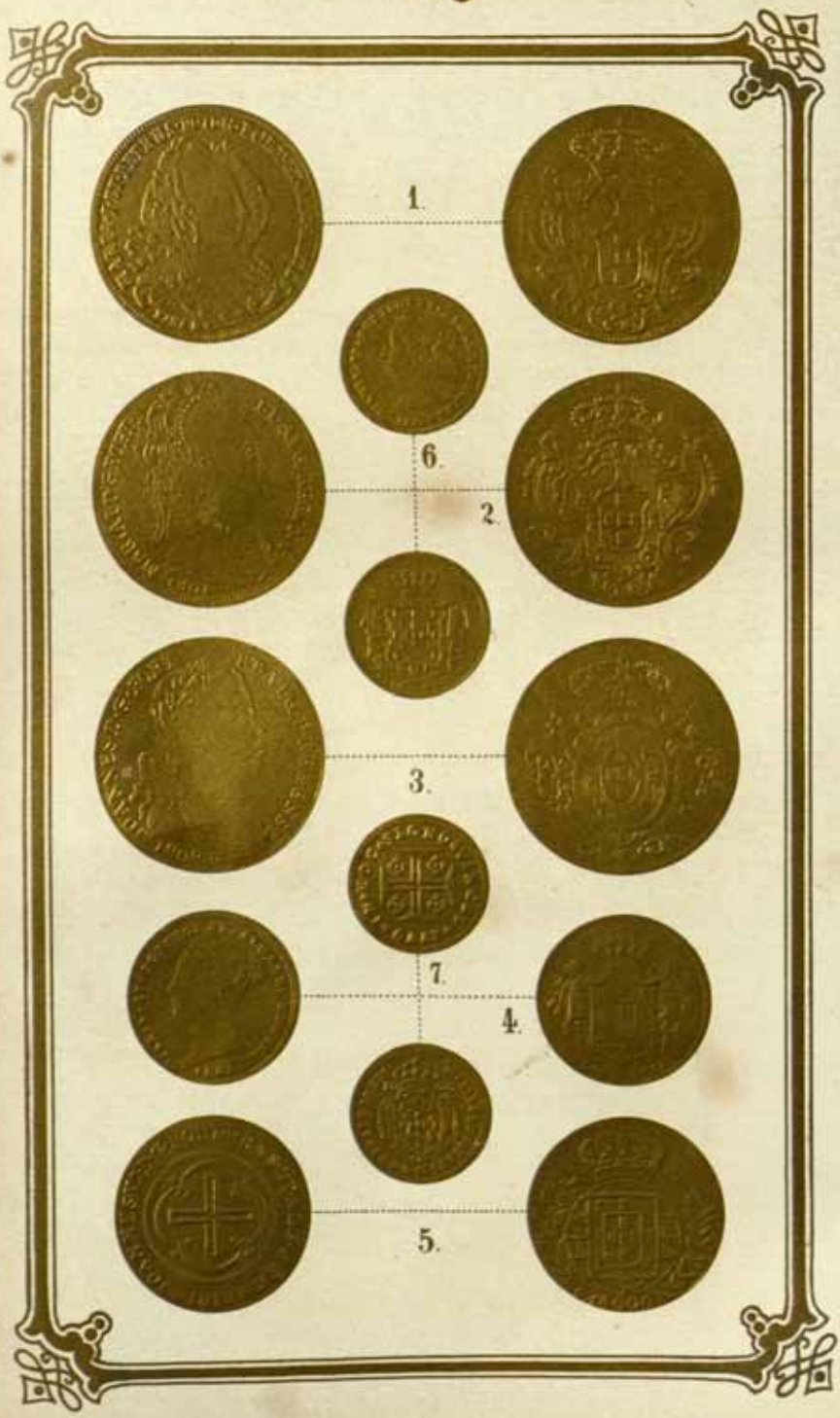
No. 3. *Peso* of 1822. do. do.

No. 4. ½-*Peso* of 1821. Weight, &c., in proportion to No. 1.

No. 5. ⅕-*Peso* of 1834. Weight about 92 troy grains, about $\frac{812}{1000}$ fine. Mean value 10½*d.*

65

Portugal.



PORTUGAL.

No. 1. *João,* or *half-dobra,* of 1781; originally of 6400 *rees,* but raised in 1847 to 8000. Legal weight 4 Portuguese *oitavas,* by $\frac{11}{12}$ fine; 26 to the English troy pound. Mean value £1 16*s.*

No. 2. *João* of 1801, of the same weight, value, &c., as No. 1.

No. 3. *João* of 1808, of the same weight, value, &c., as No. 1.

No. 4. *Corõa-d'ouro* (crown of gold) of 1851; originally of 5000 *rees,* but raised in 1847 to 5333 *rees.* Legal weight $2\frac{2}{3}$ *oitavas,* about $\frac{11}{12}$ fine; $38_{\cdot 919}$ to the troy pound. Mean value £1 3*s.* 11$\frac{1}{4}$*d.*

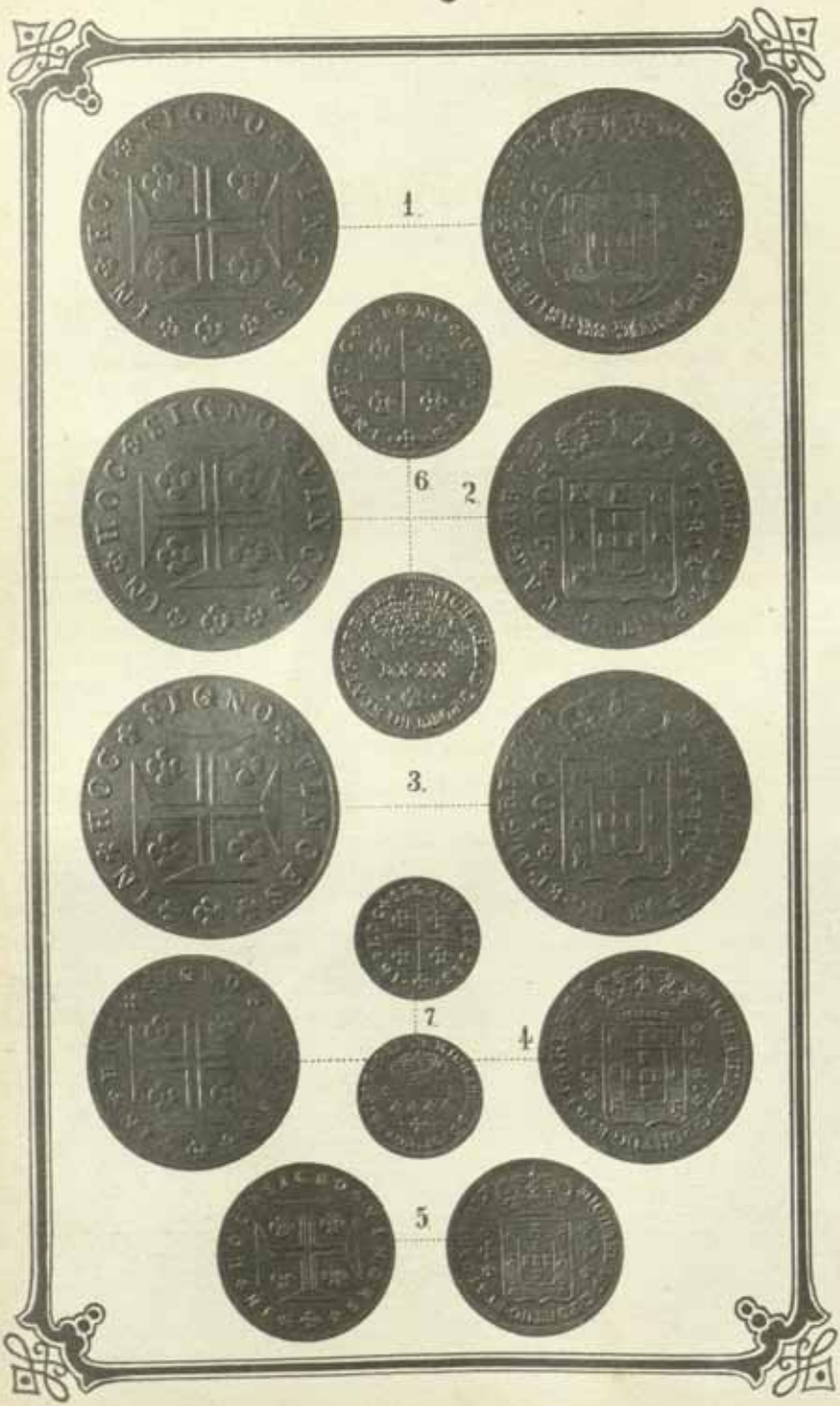
No. 5. *Moeda-d'ouro* of 1818; originally of 4000 *rees,* but raised to 4800. Legal weight 3 *oitavas,* about $\frac{11}{12}$ fine; $34_{\cdot 7}$ to the troy pound. Mean value £1 6*s.* 11*d.*

No. 1. *Meia-corõa-d'ouro,* or half-crown, of 1851. Weight, value, &c., in proportion to No. 4.

No. 7. *Milrees,* or 1000 *rees,* of 1779; raised to 1250 *rees.* Legal weight $40_{\cdot 5}$ grãos, $\frac{11}{12}$ fine; 185 to the troy pound. Mean value 6*s.* 9*d.*

66

Portugal.



PORTUGAL.

SILVER COINS.

No. 1. *Cruzado nuovo* of 1818, of 480 rees. Legal weight 342 grãos, or 270 Eng. troy grains, $\frac{906}{1000}$ fine. Mean value 2*s.* 8½*d.*

No. 2. *Cruzado nuovo* of 1831. Weight, &c., the same as No. 1.

No. 3. *Meia Corõa* (half-crown) of 500 rees, of 1835. Legal weight $297\frac{1}{29}$ grãos, or 228 troy grains, $\frac{11}{12}$ fine. Mean value 2*s.* 5½*d.*

No. 4. ½-*Cruzado* of 1829. Weight, value, &c., in proportion to No. 1.

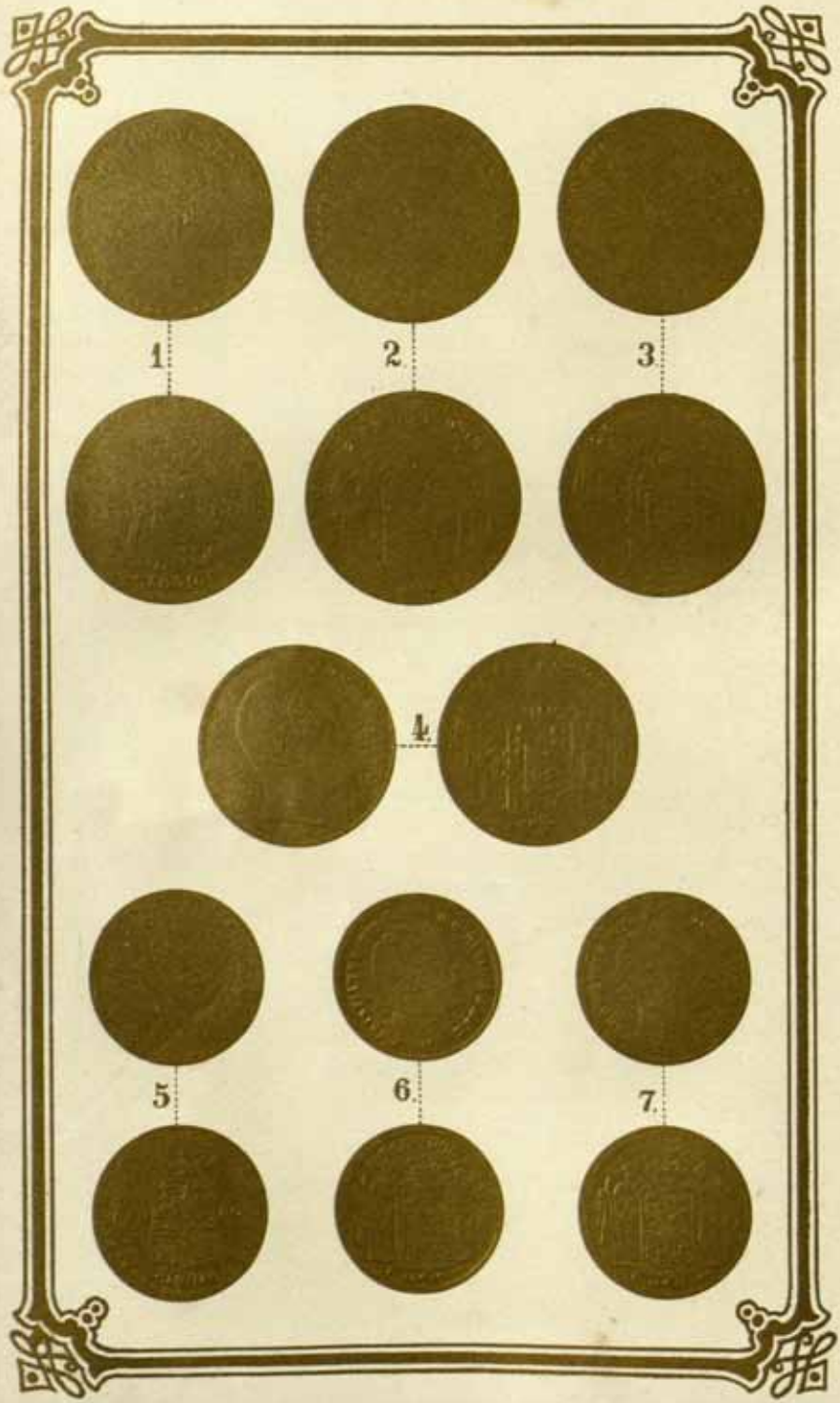
No. 5. *Tostão* of Michael I., of 100 rees. 126 to the troy pound, $\frac{11}{12}$ fine. Value about 6¼*d.*

No. 6. *Tostão* of 1802, of 100 rees. 120 to the troy pound, $\frac{887\frac{1}{2}}{1000}$ fine. Value about 6¼*d.*

No. 7. ½-*Tostão* of 1802. Weight, &c., in proportion to No. 6.

67

Denmark.



DENMARK.

GOLD COINS.

No. 1. *Doppel-Frederikd'or* of 1830. $17\frac{42}{45}$ to the Cologne mark, $\frac{895}{900}$ fine; about 28 to the troy pound. Mean value £1 12*s.* $5\frac{1}{2}$*d.*

No. 2. *Doppel-Frederikd'or* of 1837. Weight, value, &c., same as No. 1.

No. 3. *Doppel-Christiand'or* of 1847. do. do.

No. 4. *Doppel-Frederikd'or* of 1854. do. do.

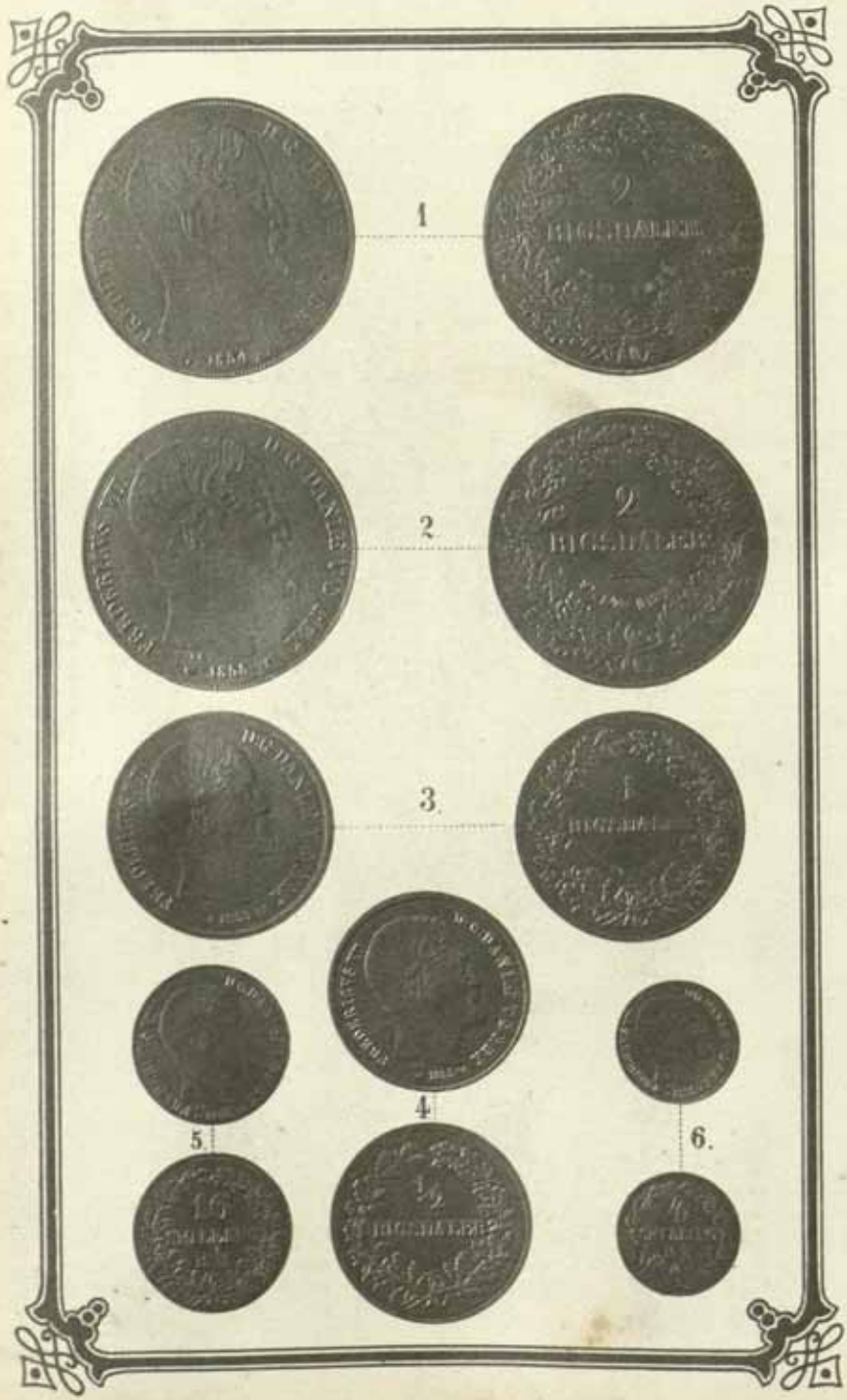
No. 5. *Frederikd'or* of 1831. Weight, &c., in proportion to No. 1.

No. 6. *Christiand'or* of 1845. do. do.

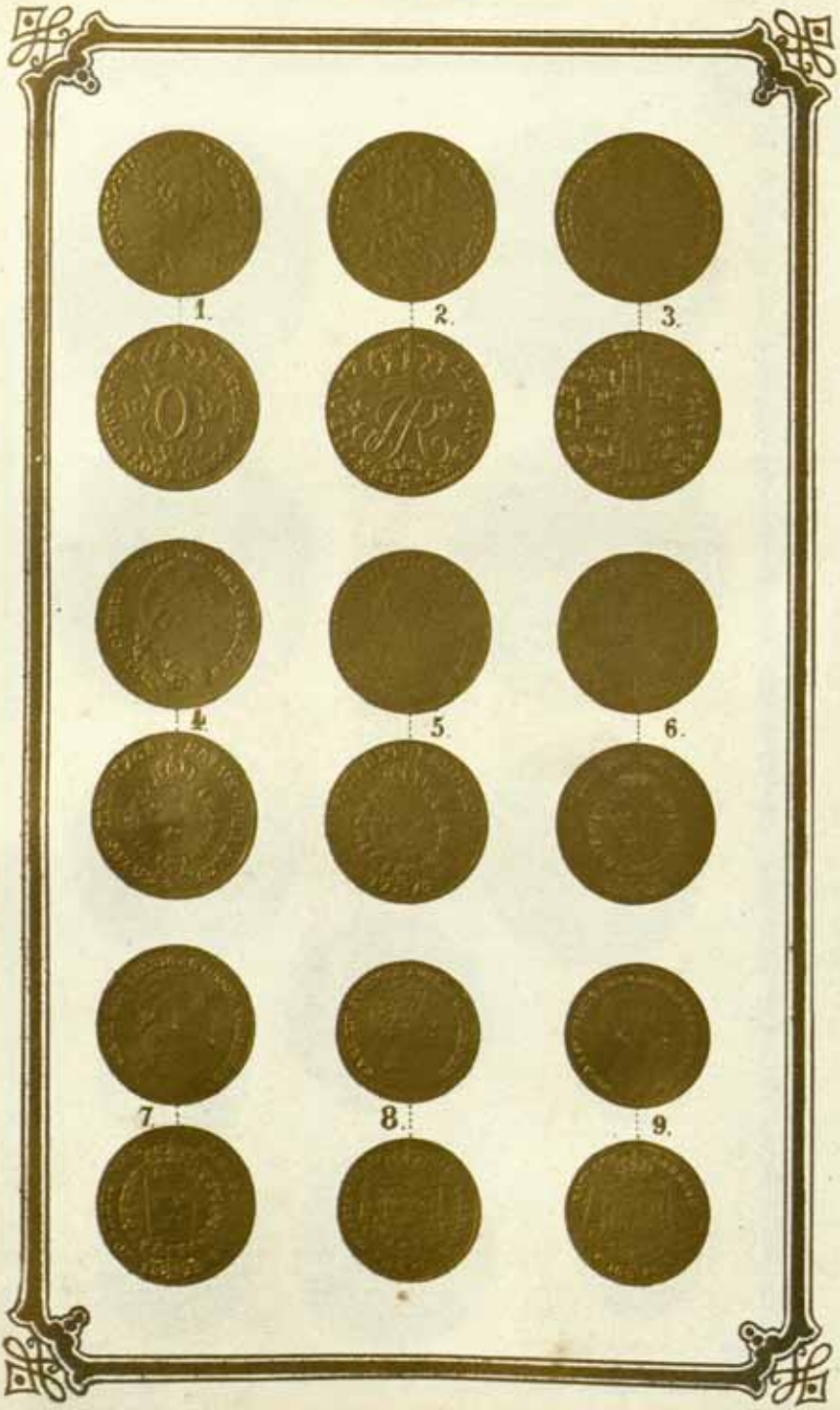
No. 7. *Frederikd'or* of 1852. do. do.

68

Denmark.



Sweden.



SWEDEN.

GOLD COINS.

No. 1. *Ducat* of 1718, of Charles XII. $60\frac{1}{2}$ to the Swedish mark of 4384 Swedish *as*, $\frac{881}{888}$ fine; $107_{\cdot 08}$ to the Eng. troy pound. Value about 9*s*. 4*d*.

No. 2. *Ducat* of 1722. Weight, value, &c., as No. 1.

No. 3. *Do.* of 1732. " " "

No. 4. *Do.* of 1768. " " "

No. 5. *Do.* of 1774. " " "

No. 6. *Do.* of 1808. " " "

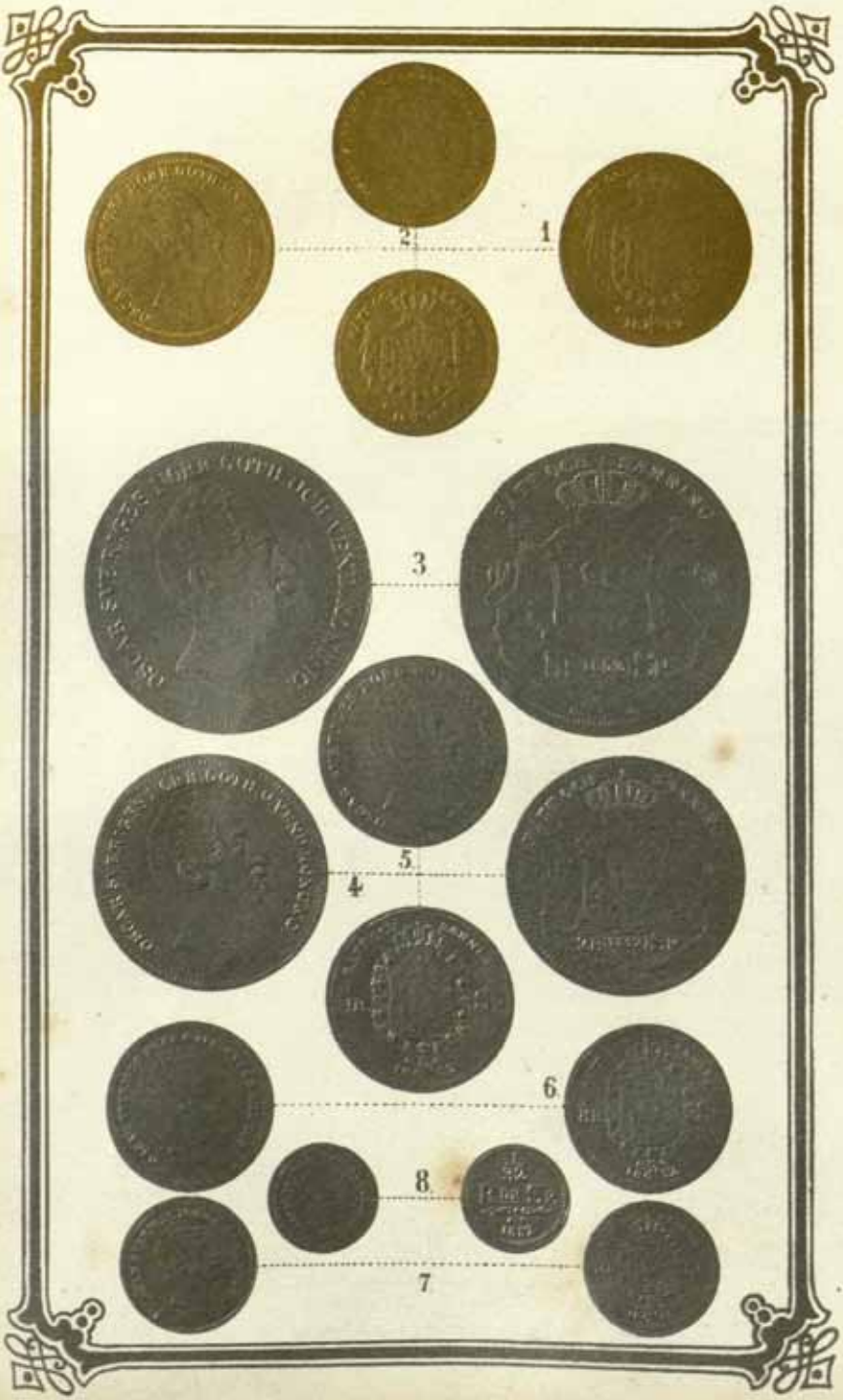
No. 7. *Do.* of 1813. " " "

No. 8. *Do.* of 1843. About the same weight, but a trifle more valuable.

No. 9. *Do.* of 1846. Same as No. 8.

70

Sweden.



SWEDEN.

GOLD COINS. 1852.

No. 1. *Four-ducat piece.* 30_{488} to the Swedish skålpound, $975\frac{25}{41}$ fine; 26_{77} to the Eng. troy pound. Mean value £1 17*s* $1\frac{3}{4}$*d*.

No. 2. *Two-ducat piece.* Weight, value, &c., in proportion to No. 1.

SILVER COINS. 1852.

No. 3. *Species-daler.* 12_{5} to the Swedish skålpund, $\frac{3}{4}$ fine; 10_{97} to the troy pound. Mean value 4*s*. $6\frac{1}{2}$*d*.

No. 4. $\frac{1}{2}$-*Species-daler.* Weight, value, &c., in proportion to No. 3.

No. 5. $\frac{1}{4}$-*Species-daler.* do. do. do.

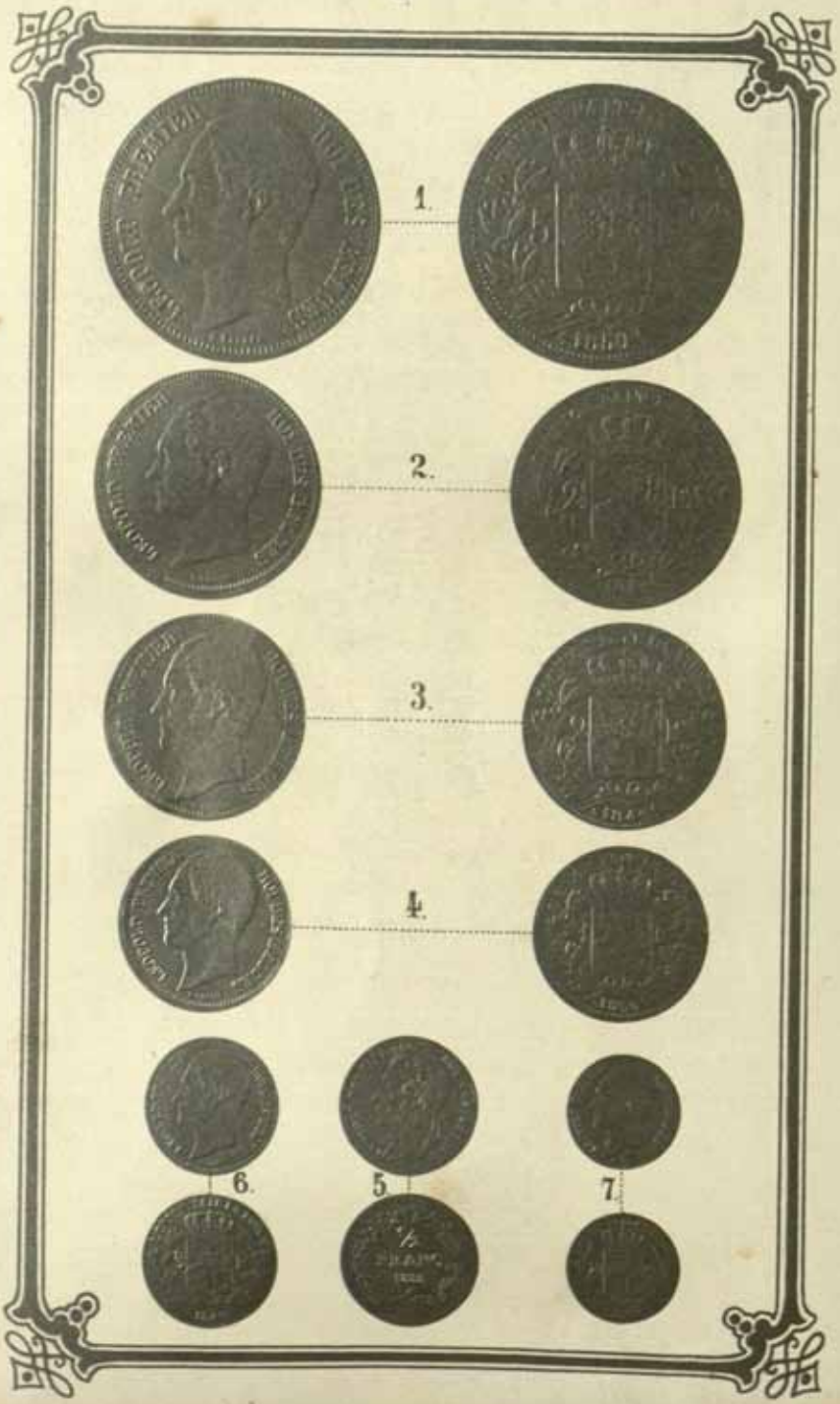
No. 6. $\frac{1}{8}$-*Species-daler.* do. do. do.

No. 7. $\frac{1}{16}$-*Species-daler.* do. do. do.

No. 8. $\frac{1}{32}$-*Species-daler.* do. do. do.

71

Belgium.



BELGIUM.

GOLD COINS.

No. 1. *Twenty-five-franc piece* of 1848. $126_{.2224}$ to the French kilogramme, by $\frac{9}{10}$ fine; $47_{.1526}$ to the Eng. troy pound. Mean value 19*s*. 5¾*d*.

No. 2. *Ten-franc piece* of 1850. $315_{.824}$ to the French kilogramme, by $\frac{9}{10}$ fine; $117_{.48}$ to the troy pound. Mean value 7*s*. 9½*d*.

By virtue of a royal decree of the 28th. December 1850, the gold coinage in general was done away with.

SILVER COINS.

No. 1. *Five-franc piece* of 1850. 40 to the French kilogramme, $\frac{9}{10}$ fine; $14_{.9296}$ to the troy pound. Mean value 4*s*. 0¼*d*.

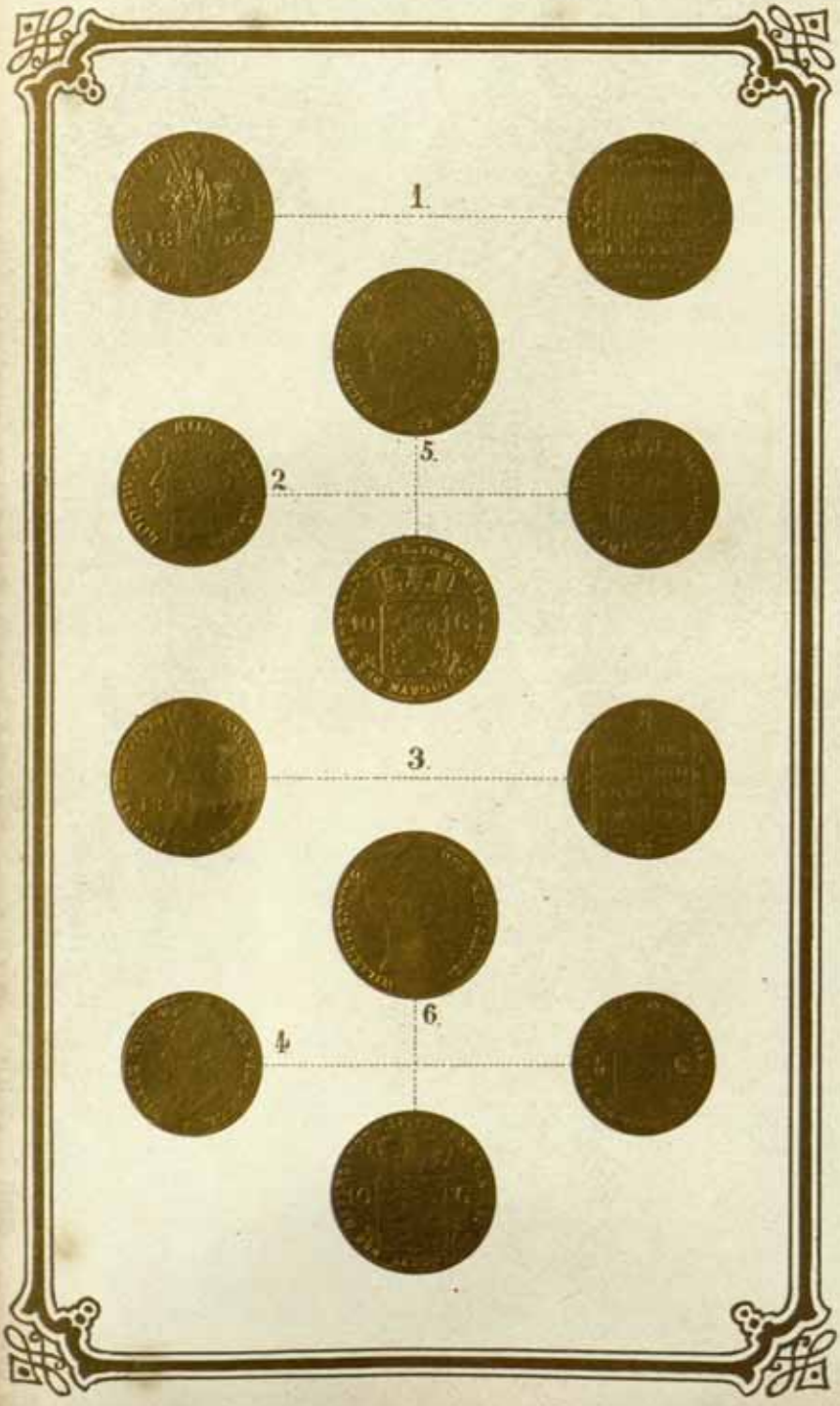
No. 2. 2½-*franc-piece* of 1848. Weight, value, &c., in proportion to No. 1.

No. 3. *Two-franc piece* of 1849. 100 to the French kilogramme, $\frac{9}{10}$ fine; $37_{.224}$ to the troy pound. Mean value 1*s*. 7½*d*.

No. 4. *Franc* of 1850. 200 to the French kilogramme, $\frac{9}{10}$ fine; $74_{.648}$ to the troy pound. Mean value 9¾*d*.

72

Holland.



HOLLAND.

GOLD COINS.

No. 1. *Ducat* of Utrecht, of 1806. 67 to the Cologne mark, $\frac{1128}{1152}$ fine; about 107 to the Eng. troy pound. Mean value 9*s*. 4*d*.

No. 2. *Ducat* of Louis Napoleon, of 1809. Weight, value, &c., same as No. 1.

No. 3. *Ducat* of 1817. Weight, value, &c., the same as No. 1.

No. 4. *Five-Gulden piece* of 1827. Weight 70 Dutch *as*, $\frac{9}{10}$ fine; about 111 to the troy pound. Mean value 8*s*. 3*d*.

No. 5. *Ten-Gulden piece* of 1840. Weight, value, &c., in proportion to No. 4.

No. 6. *Ten-Gulden piece* of 1842. Weight, value, &c., in proportion to No. 4.

HOLLAND.

GOLD COINS.

No. 1. Ducat of Gueldre, of 1606. Cu. is the Gelderse mark; [illegible] grains, 97½ to the King's troy pound. Mint value, [illegible] 9d.

No. 2. Ducat of Lower Saxony, of 1666. Weight, value, &c. same as No. 1.

No. 3. Ducat of 1717. Weight, value, &c. the same as No. 1.

No. 4. Two-Ducats piece of 1737. Weight 70 grains, or ⅞ dwt. mint value [illegible]

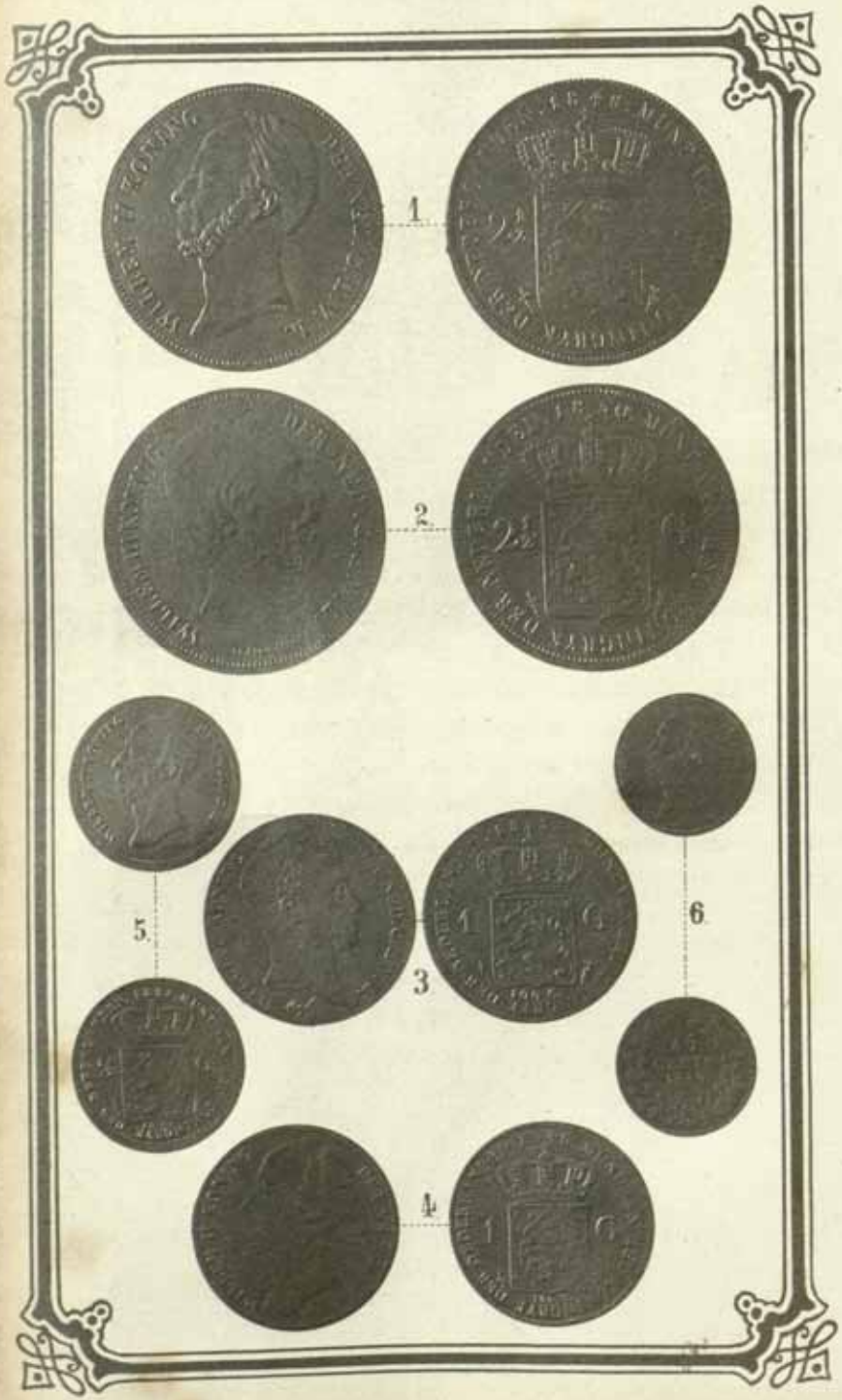
III. In the troy pound. Mint value 5s. 3d.

No. 5. Two-Ducats piece of 1780. Weight, value, &c. in proportion to No. 4.

No. 6. Two-Ducats piece of 1812. Weight, value, &c. in proportion to No. 4.

73

Holland.



HOLLAND.

SILVER COINS.

No. 1. *Thaler*, or $2\frac{1}{2}$-*Gulden piece* of 1838. 40 to the Dutch pond (equal to 1 Fr. Kilogramme), $\frac{183}{200}$ fine; about 15 to the Eng. troy pound. Mean value 4*s.* 3*d.*

No. 2. *Thaler*, or $2\frac{1}{2}$-*Gulden piece* of 1850. Weight, value, &c., same as No. 1.

No. 3. *Gulden*, of 100 cents, of 1831. Weight about 166 Eng. troy grains, $\frac{823}{1000}$ fine. Mean value 1*s.* 9*d.*

No. 4. *Gulden* of 1846. 100 to the Dutch pond (= 1 Fr. Kilogramme), $\frac{183}{200}$ fine; $37_{.324}$ to the troy pound. Mean value 1*s.* $8\frac{3}{4}$*d.*

No. 5. $\frac{1}{2}$-*Gulden* of 1848. Weight, value, &c., in proportion to No. 4.

No. 6. $\frac{1}{4}$-*Gulden* of 1849. do. do.

HOLLAND.

SILVER COINS.

No. 1. Ducaton of 1803. With the Inscription [illegible]
[illegible] Mean value 4s. 6d.

No. 2. Ducaton of 1800. Weight, value, &c. same as No. 1.

No. 3. Ducaton, of 100 years, of 1801. Weight, value, &c. same as No. 1.

No. 4. Ducaton of 1800. 100 to the Dutch pound (=1 Fr. [illegible]) [illegible] 37 to the troy pound. Mean value 1s. [illegible]

No. 5. ½-Ducaton of 1803. Weight, value, &c. [illegible] to No. 4.

No. 6. ½-Ducaton of 1810. do. do.

Switzerland.

SWITZERLAND.

GOLD COINS.

No. 1. *Double-Pistole* of the Helvetian Republic, of 1800. Weight 236 Eng. troy grains, about $\frac{9}{10}$ fine. Mean value £1 17*s.* 6*d.*

No. 2. *Pistole* of 1800 (Helv. Republic). Weight, value, &c., in proportion to No. 1.

No. 3. *Ducat* of Lucern, of 1741. Weight $53._{27}$ Eng. troy grains: the fineness varies from $\frac{881}{888}$ to $\frac{883}{888}$. Mean value 9*s.* 2½*d.*

No. 4. *Threefold-Pistole* of Geneva, of 1771. Weight 264 Eng. troy grains, $\frac{863}{888}$ fine. Mean value £2 2*s.* 8*d.*

No. 5. *Pistole* of Geneva, of 1762. Weight $87._{7}$ Eng. troy grains, $\frac{131}{144}$ fine. Mean value 14*s.* 1¼*d.*

No. 6. *Double-Pistole* of Bern, of 1795. Weight 236 Eng. troy grains, $\frac{541}{576}$ fine. Mean value £1 17*s.* 6¼*d.*

No. 7. *Ducat* of Unterwalden, of 1743. Weight $53._{27}$ Eng. troy grains, $\frac{1131}{1152}$ fine. Mean value 9*s.* 4*d.*

No. 8. *Ducat* of Zurich, of 1775. Weight $53._{27}$ Eng. troy grains, $\frac{17}{18}$ fine. Mean value 9*s.* 2¾*d.*

SWITZERLAND.

GOLD COINS.

No. 1. *Double-Ducat* of the Helvetian Republic, of 1800. Weight 206 grains, very pretty, about ~~[illegible]~~ fine. Mean value £1 17s. 6d.

No. 2. *Ducat* of 1800 (Helv. Republic). Weight [illegible] grains, &c., in proportion to No. 1.

No. 3. *Ducat* of Lucerne, of 1671. Weight [illegible] grains, very pretty, the numerous varies from [illegible] fine. Mean value 9s. 2½d.

No. 4. *Double-Ducat* of Geneva, of 1771. Weight 204 grains, very pretty, [illegible] fine. Mean value £2 2s. 2d.

No. 5. *Ducat* of Geneva, of 1762. Weight 67½ grains, very pretty, [illegible] fine. Mean value 14s. 1½d.

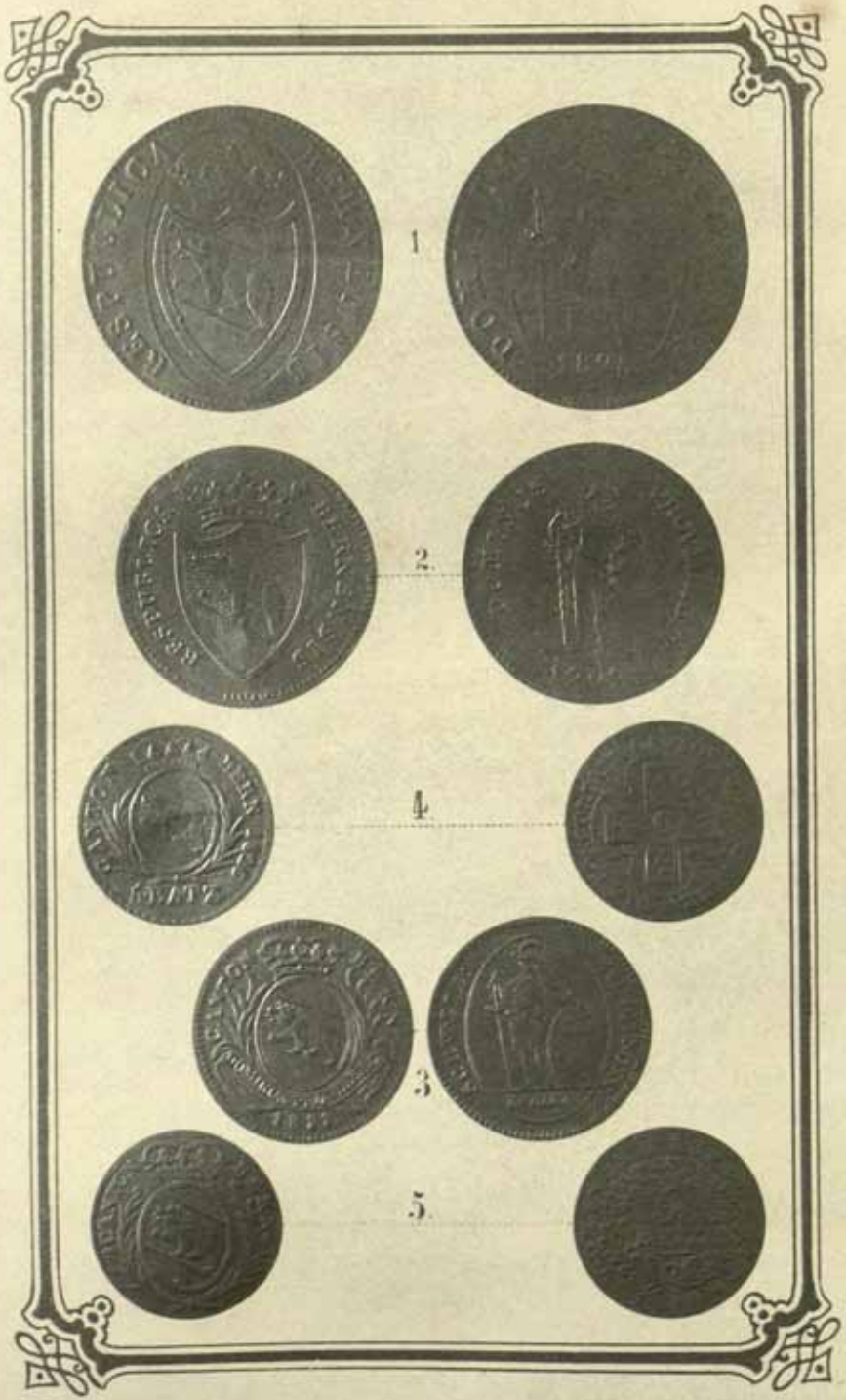
No. 6. *Double-Ducat* of Berne, of 1795. Weight 230 grains, very pretty, [illegible] fine. Mean value £1 17s. 0½d.

No. 7. *Ducat* of Berne, of 1718. Weight 68 grains, very pretty, [illegible] fine. Mean value 10s. 6d.

No. 8. *Ducat* of Zurich, of 1775. Weight 67½ grains, very pretty, [illegible] fine. Mean value 9s. 2½d.

75

Switzerland.



SWITZERLAND.

SILVER COINS.

No. 1. *Neuthaler* of four franken, of the Helvetian Republik (1799). Weight 453¼ Eng. troy grains, about $\frac{9}{10}$ fine. Mean value 4*s.* 9¼*d.*

No. 2. *Ten-Batzen piece* of the Helvetian Republic (1799). Weight about 123 troy grains, $\frac{816}{1000}$ fine. Mean value 1*s.* 2*d.*

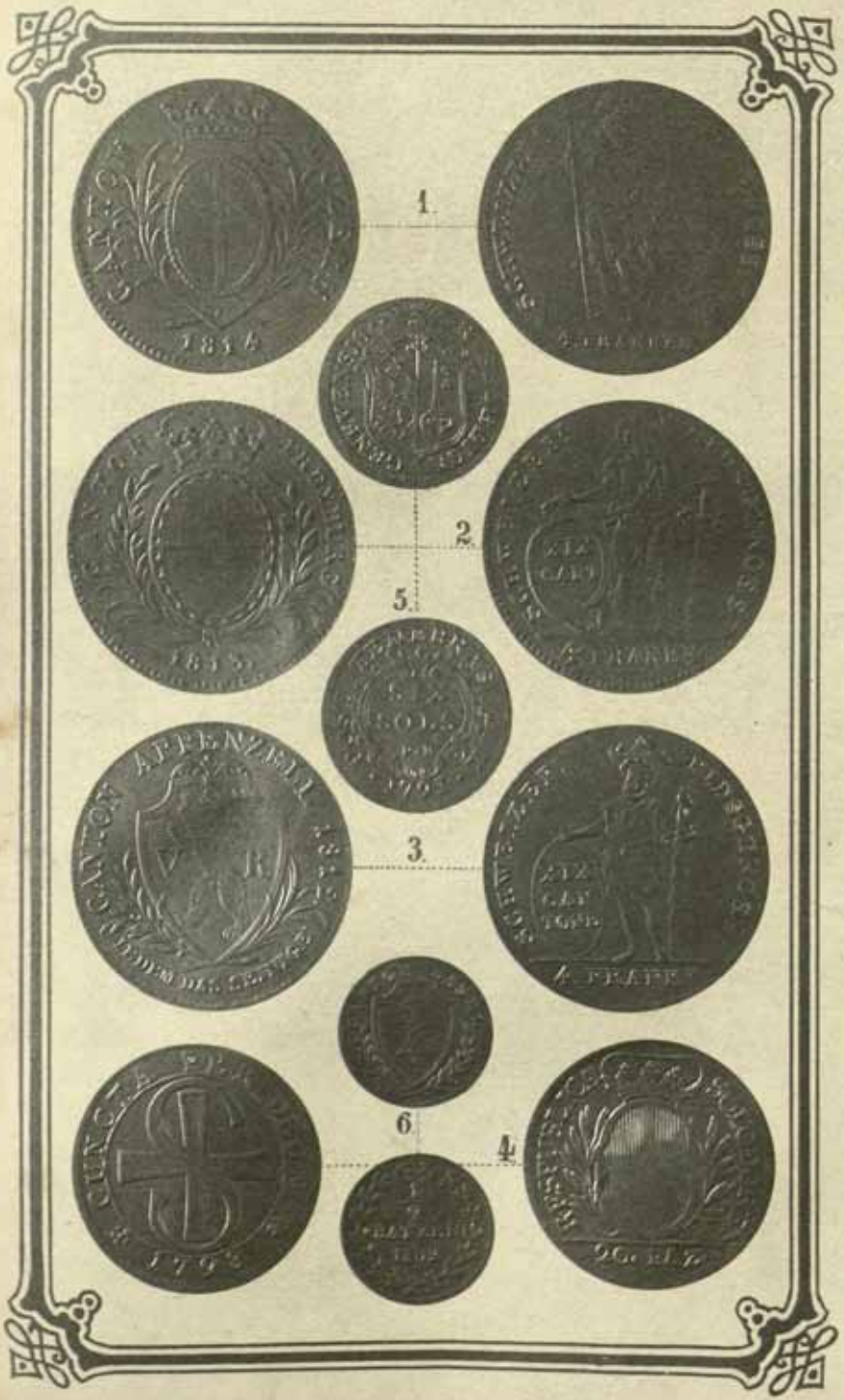
No. 3. *Five-Batzen piece* of the Helvetian Republic (1799). Weight about 73¼ troy grains, $\frac{667}{1000}$ fine. Mean value 6¾*d.*

No. 4. *Forty-Batzen piece* of Zürich (1813). Weight 451¼ Eng. troy grains, $\frac{1}{8}$ fine. Mean value 4*s.* 7½*d.*

No. 5. *Forty-Batzen piece* of Waadt (1812). Weight from 452 to 454 troy grains, $\frac{800\frac{1}{3}}{1000}$ to $\frac{808\frac{1}{2}}{1000}$ fine. Value from 4*s.* 9*d.* to 4*s.* 9½*d.*

76

Switzerland.



SWITZERLAND.

SILVER COINS.

No. 1. *Neuthaler* of 4 franken, of Lucern (1814). Weight 463 Eng. troy grains $\frac{984\frac{1}{2}}{1000}$ fine. Mean value 4*s*. 10¼*d*.

No. 2. *Neuthaler* of 4 Franken, of Freiburg (1813). Weight 462 Eng. troy grains, $\frac{9}{10}$ fine. Mean value 4*s*. 10¼*d*.

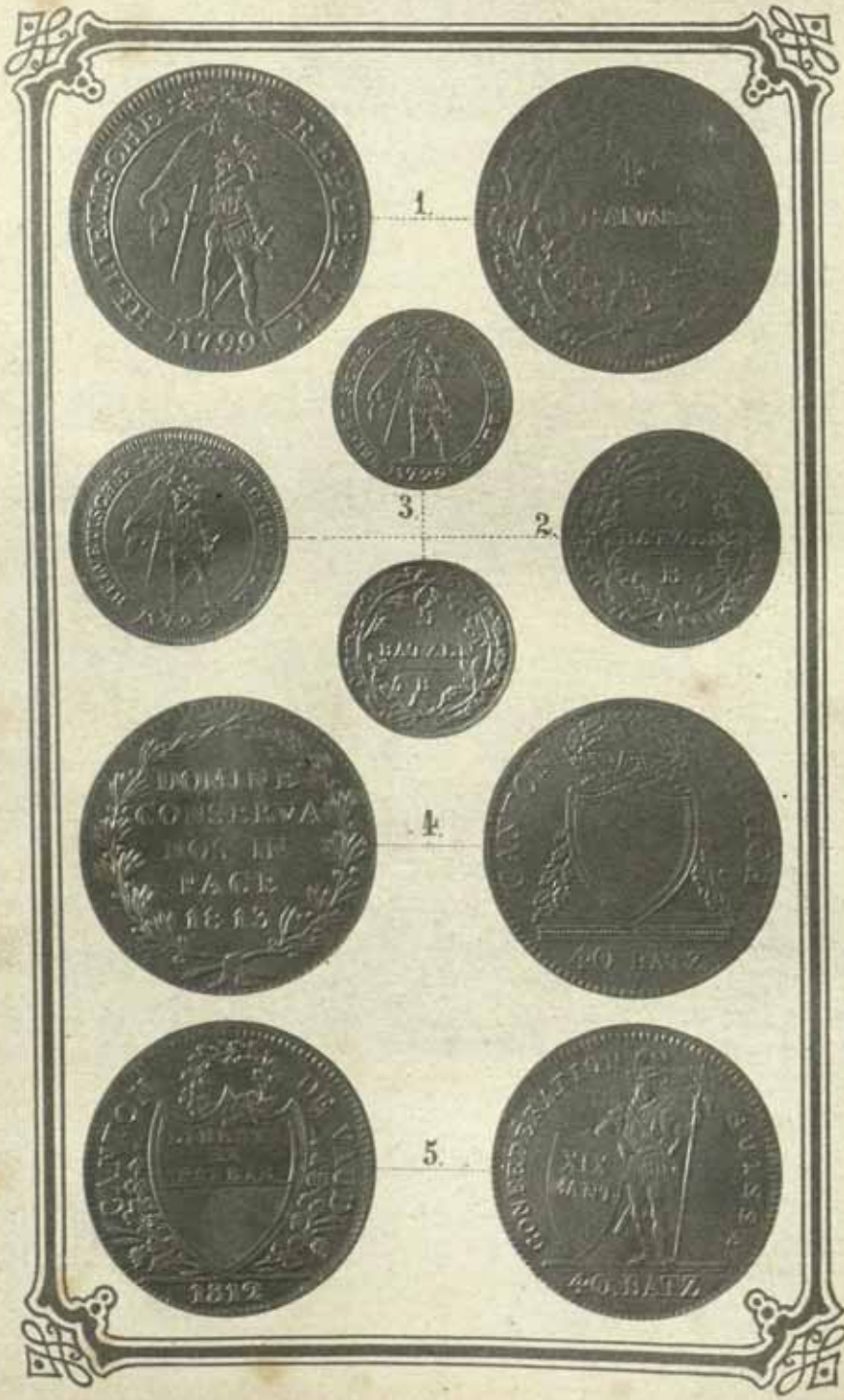
No. 3. *Neuthaler* of 4 franken, of Oppenzell (1812). Weight 463 Eng. troy grains, $\frac{9}{10}$ fine. Mean value 4*s*. 10¾*d*.

No. 4. ½-*Neuthaler* of Solothurn (1798). Weight about 231¼ Eng. troy grains from $\frac{833}{1000}$ to $\frac{846}{1000}$ fine. Mean value 2*s*. 3¼*d*. or 2*s*. 3½*d*.

No. 5. *Six-Sol piece* of Geneva (1791). Worth about 1½*d*.

No. 6. ½-*Batzen* of Basle (1809). Worth about ½*d*.

Switzerland



SWITZERLAND.

SILVER COINS.

No. 1. *Five-Franc piece* of 1851. 40 to the French Kilogramme, $\frac{9}{10}$ fine; $14_{.929}$ to the Eng. troy pound. Average value 4*s.* 0¼*d.*

No. 2. *Two-Franc piece* of 1850. 100 to the Fr. Kilogramme, $\frac{9}{10}$ fine; $37_{.324}$ to the troy pound. Mean value 1*s.* 7½*d.*

No. 3. *Franc* of 1850. 200 to the Fr. Kilogramme, $\frac{9}{10}$ fine; $74_{.648}$ to the troy pound. Mean value $9_{.65}$*d.*

No. 4. *Half-Franc*, of 50 rappen, of 1850. Weight, value, &c., in proportion to No. 3.

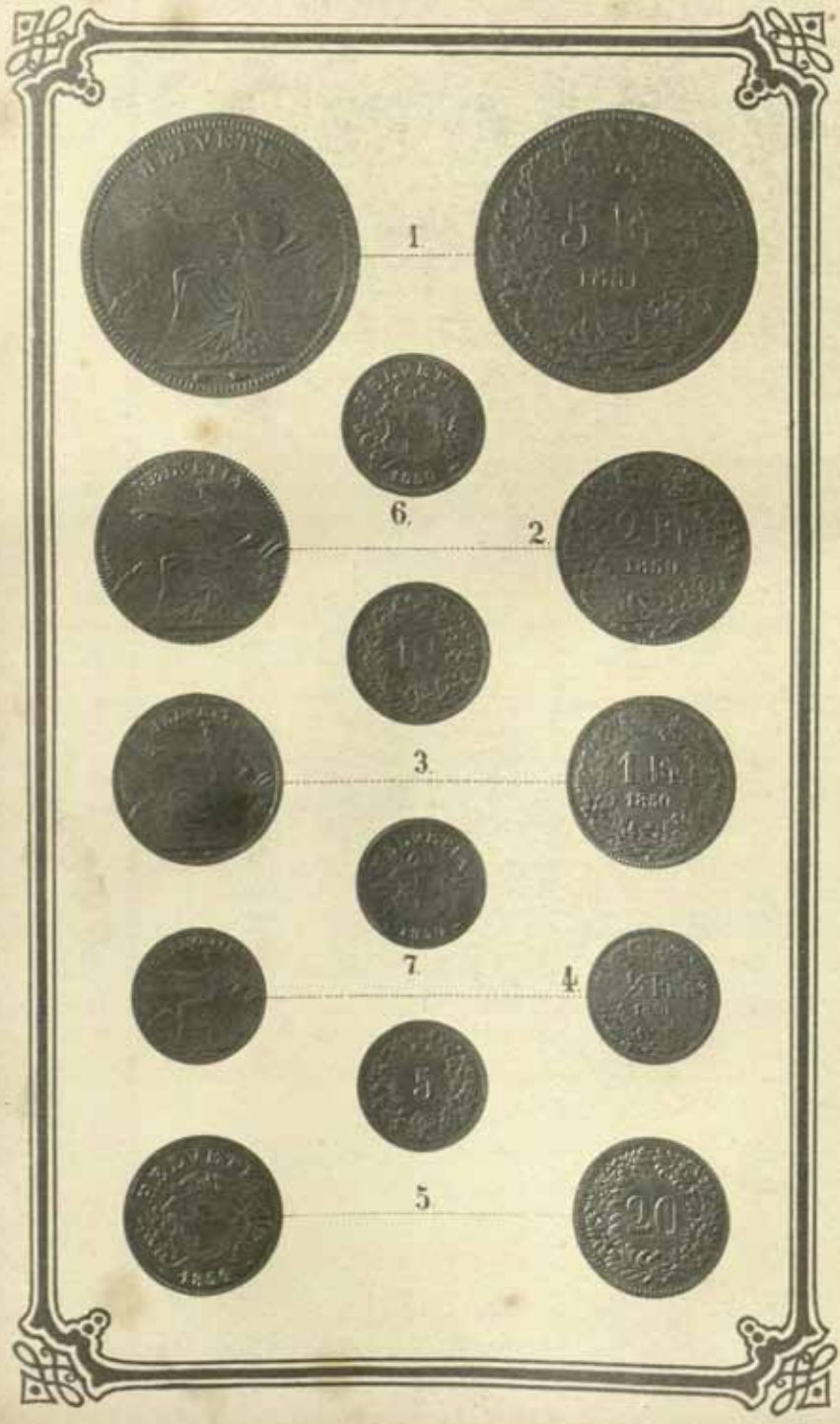
No. 5. *Twenty-Rappen piece* of 1850. Weight 3¼ Fr. grammes, $\frac{15}{100}$ fine. Nominal value ⅕ franc, real value less.

No. 6. *Ten-Rappen piece* of 1850. Weight 2½ Fr. grammes, $\frac{1}{10}$ fine. Nominal value $\frac{1}{10}$ franc.

No. 7. *Five-Rappen piece* of 1850. Weight 1⅔ Fr. grammes, $\frac{1}{20}$ fine. Nominal value $\frac{1}{20}$ franc, or about ½*d.*

78

Switzerland.



SWITZERLAND.

BERNESE SILVER COINS.

No. 1. *Neuthaler*, of 4 Franken, of 1823. Weight $29._{345}$ Fr. grammes, or $446._{86}$ Eng. troy grains, $\frac{9}{10}$ fine. Mean value 4*s*. 9½*d*.

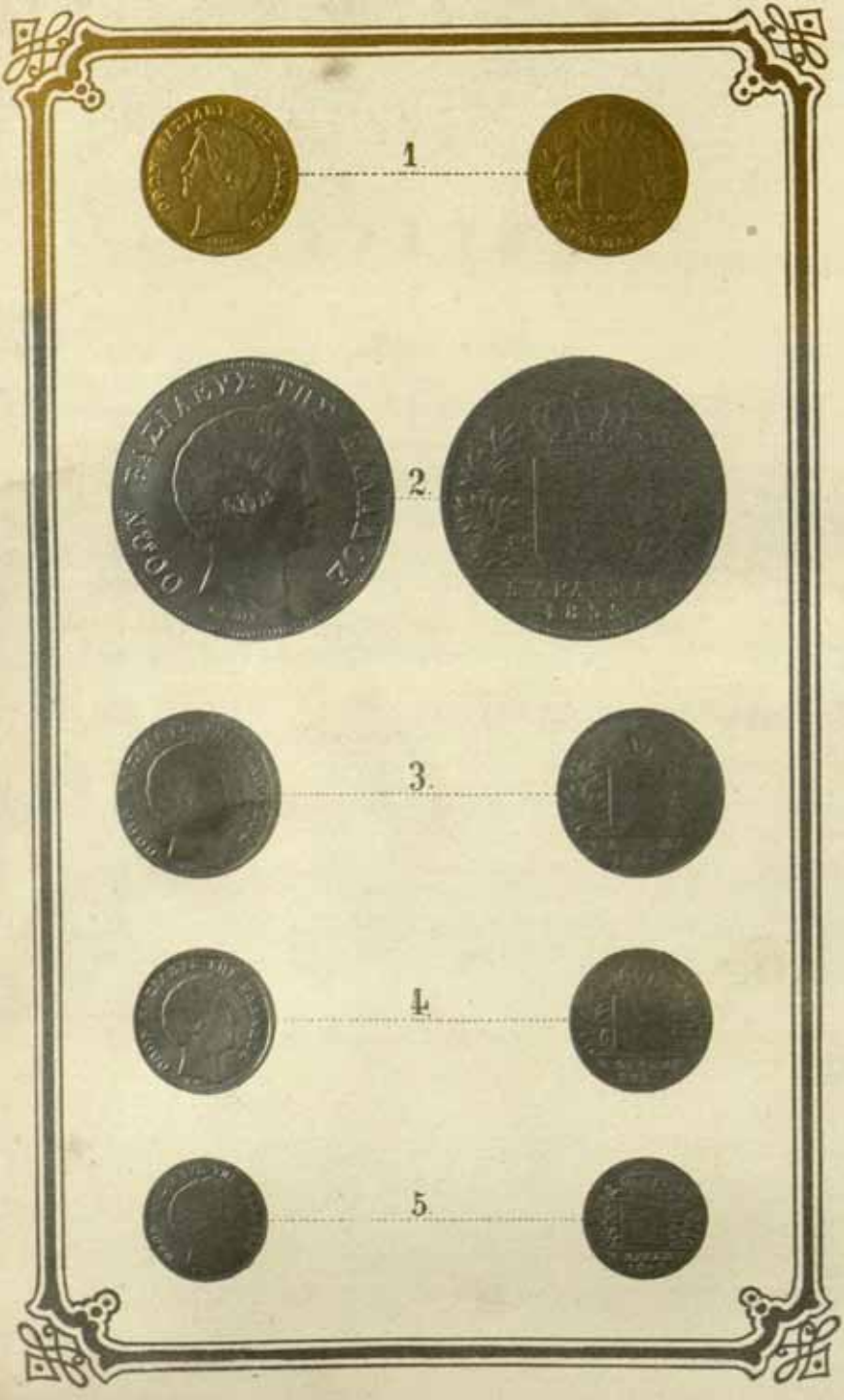
No. 2. *Half-Neuthaler*, of 2 Franken, of 1797. Weight 227 Eng. troy grains, $\frac{65}{72}$ fine. Mean value 2*s*. 4⅛*d*.

No. 3. *Frank*, of 10 batzen, of 1811. Weight 123 Eng. troy grains, $\frac{4}{5}$ fine. Mean value 1*s*. 2⅜*d*.

No. 4. *Five-Batzen piece* of 1826. Weight 70 Eng. troy grains, $\frac{168}{250}$ fine. Mean value 6⅜*d*.

No. 5. *Five-Batzen piece* of 1810. Weight about 70½ troy grains, $\frac{168}{250}$ fine. Mean value 6½*d*.

Greece.



GREECE.

GOLD COINS.

No. 1. 20-*Drachma piece* of 1833. Weight 5_{776} Fr. grammes, or 89_{1375} Eng. troy grains, $\frac{9}{10}$ fine. Mean value 14*s*. 2¼*d*.

SILVER COINS.

No. 2. *Five-Drachma piece* of 1833. Weight 22_{385} Fr. grammes, or 345_{454} Eng. troy grains, $\frac{9}{10}$ fine. Mean value 3*s*. 7½*d*.

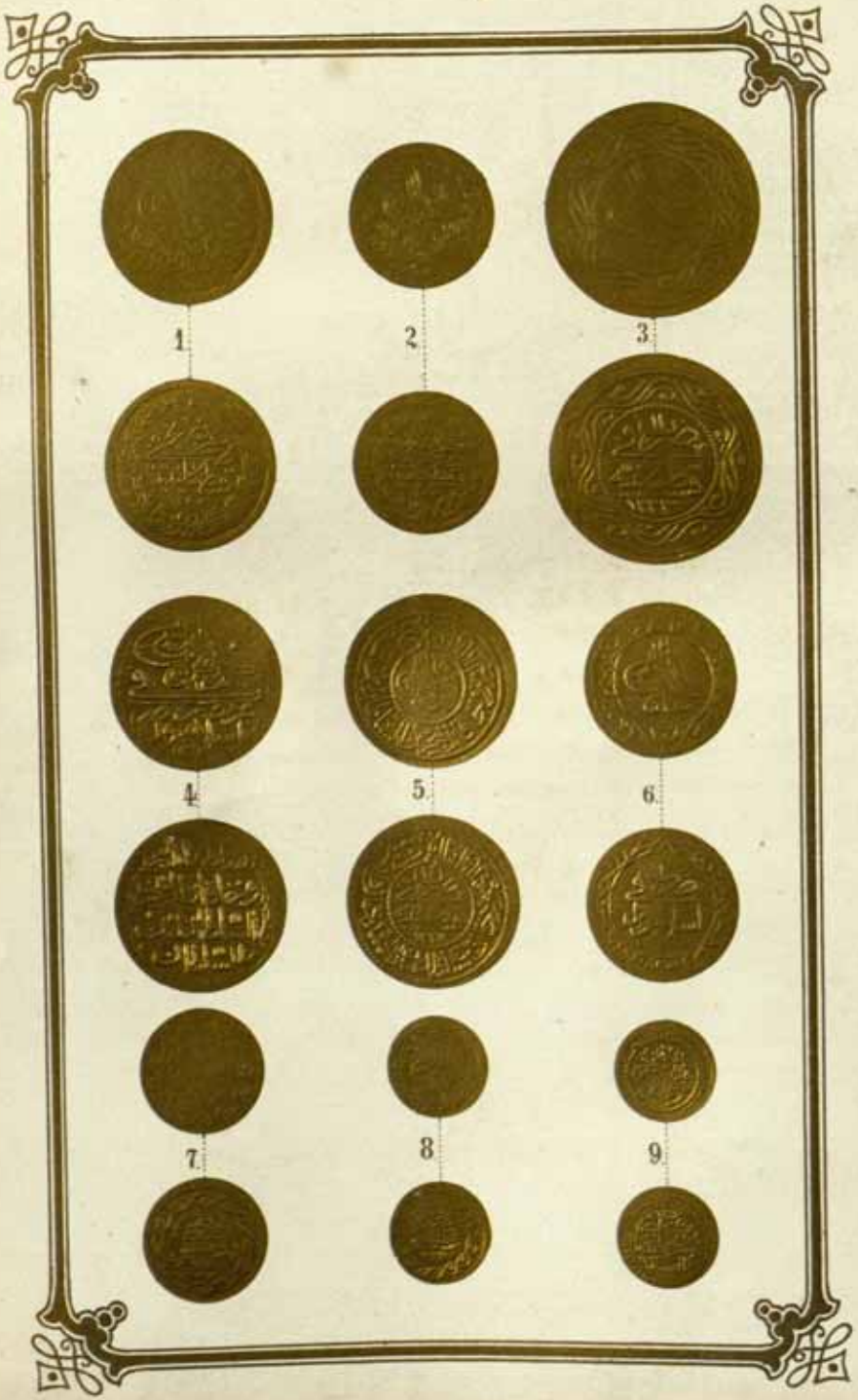
No. 3. *Drachma* of 1832. Weight 4_{477} Fr. grammes, or about 69 Eng. troy grains, $\frac{9}{10}$ fine. Mean value about 8¾*d*.

No. 4. ½-*Drachma* of 1833. Weight, &c., in proportion to No. 3.

No. 5. ¼-*Drachma* of 1845. do. do.

80

Turkey.



TURKEY.

GOLD COINS.

No. 1.	Gold coin	of 1839	A.D.	worth	about	18*s.* 0½*d.*
No. 2.	Do.	of 1839	"	"	"	9*s.* 0½*d.*
No. 3.	Do.	of 1787	"	"	"	7*s.* 6*d.*
No. 4.	Do.	of 1787	"	"	"	5*s.* 3*d.*
No. 5.	Do.	of 1807	"	"	"	5*s.* 3*d.*
No. 6.	Do.	of 1787	"	"	"	3*s.* 9*d.*
No. 7	Do.	of 1807	"	"	"	1*s.* 10*d.*
No. 8.	Do.	of 1807	"	"	"	11*d.*
No. 9.	Do.	of 1807	"	"	"	11*d.*

These coins all bear on the one side the imitation of the sign manual of the different sultans under whom they were issued; on the other are given the date and place of coining.

TURKEY.

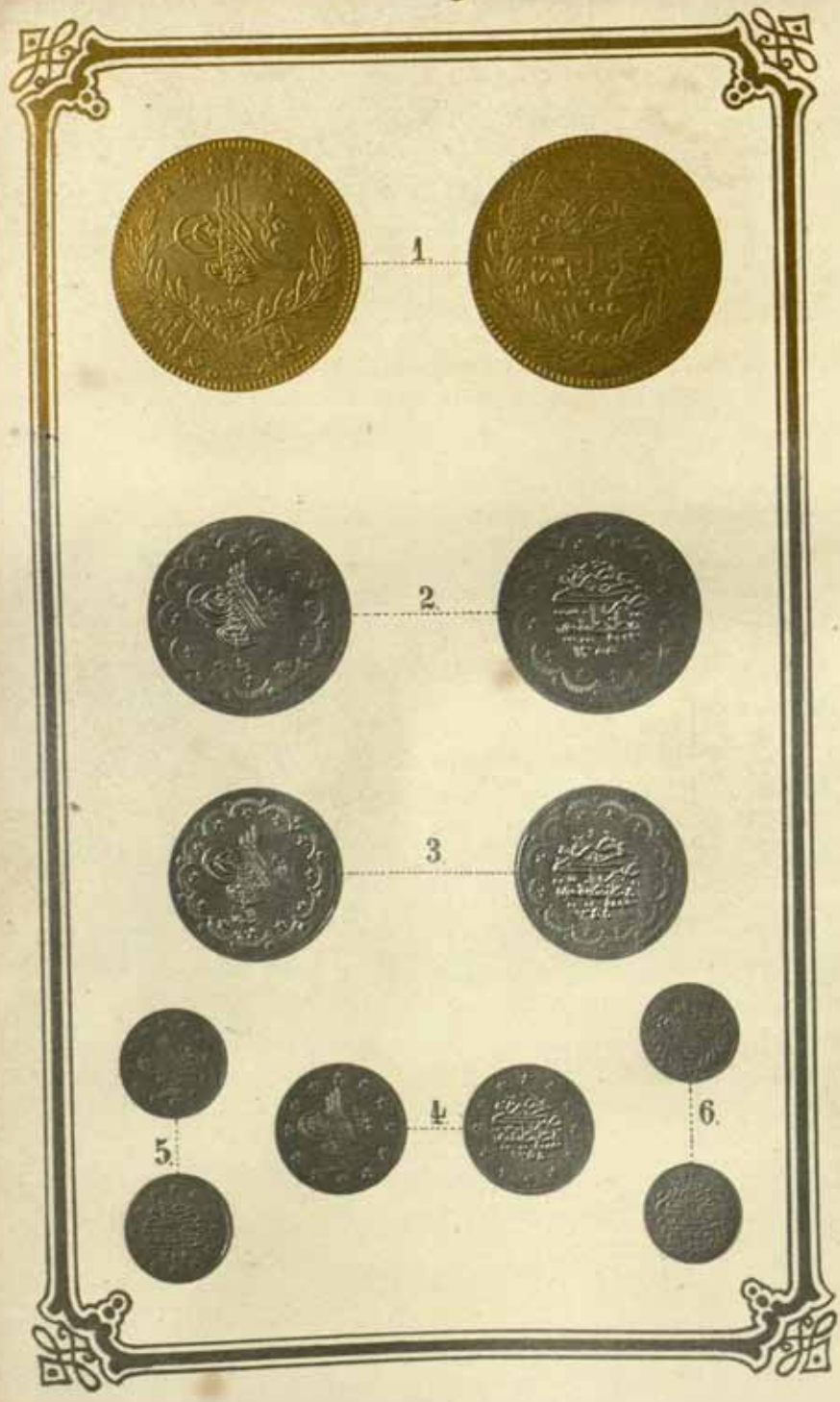
GOLD COINS.

No. 1.	Lira	of 1299 A.D.	weighs about	7s. 0½d.
No. 2.	Do.	of 1703	"	6s. 0½d.
No. 3.	Do.	of 1781	"	7s. 3d.
No. 4.	Do.	of 1787	"	5s. 3d.
No. 5.	Do.	of 1807	"	5s. 3d.
No. 6.	Do.	of 1821	"	5s. 3d.
No. 7.	Do.	of 1827	"	5s. 3d.
No. 8.	Do.	of 1831	"	5s. 10d.
No. 9.	Do.	of 1840	"	11d.
				11d.

These coins all bear on the one side the indication of the sign, manual of the different sultans under whom they were issued, on the other are given the date and place of coining.

81

Turkey.



TURKEY.

No. 1. Gold coin of Sultan Mahmoud, of 1839-40 A.D. Value about £4 19*s.* 4*d.*

No. 2. *Onlik*, of 10 piasters. Weight about 185 Eng. troy grains; value about 1*s.* 9¾*d.*

No. 3. *Peshlik* of 5 piasters. Weight and value about one-half those of No. 2.

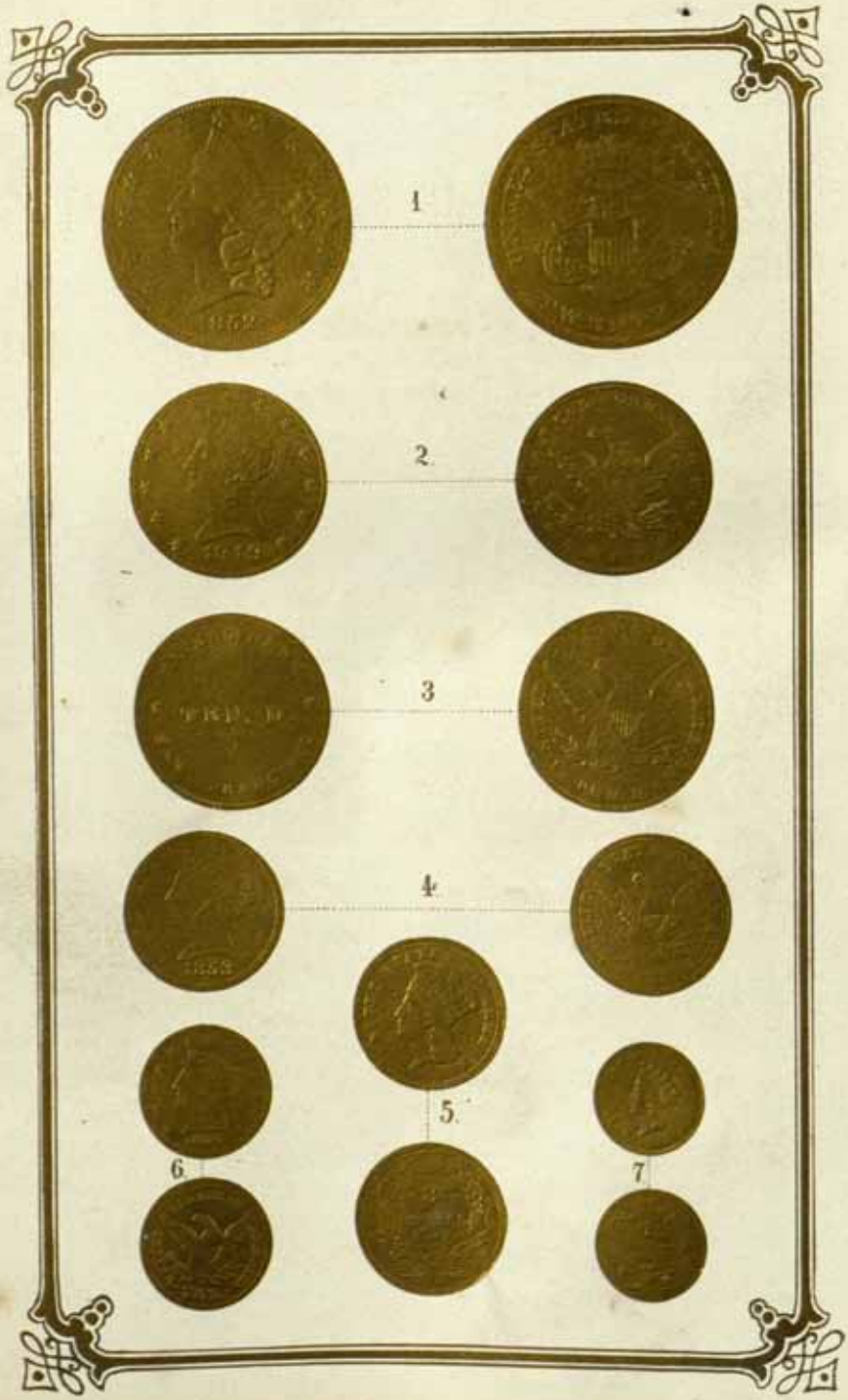
No. 4. *Iklik*, of 2 piasters. Value about 4½*d.*

No. 5. *Birlik*, or *gers*, of 1 piaster. Value about 2¼*d.*

No. 6. *Tscherek-Messire*, or ½ piaster. Value about 1½*d.*

82

United States of America.



UNITED STATES OF NORTH AMERICA.

GOLD COINS.

No. 1. *Double-Eagle*, of 20 dollars, of 1852. Weight 516 troy grains, of $\frac{9}{10}$ fine. Mean value £4 2*s*. 2½*d*.

No. 2. *Eagle*, of 10 dollars, coined at San Francisco in 1849. Weight 258 troy grains, $\frac{9}{10}$ fine. Mean value £2 1*s*. 1¼*d*.

No. 3. *Eagle*, coined at the Miners Bank in San Francisco.

No. 4. ½-*Eagle*. Weight and value in proportion to No. 2.

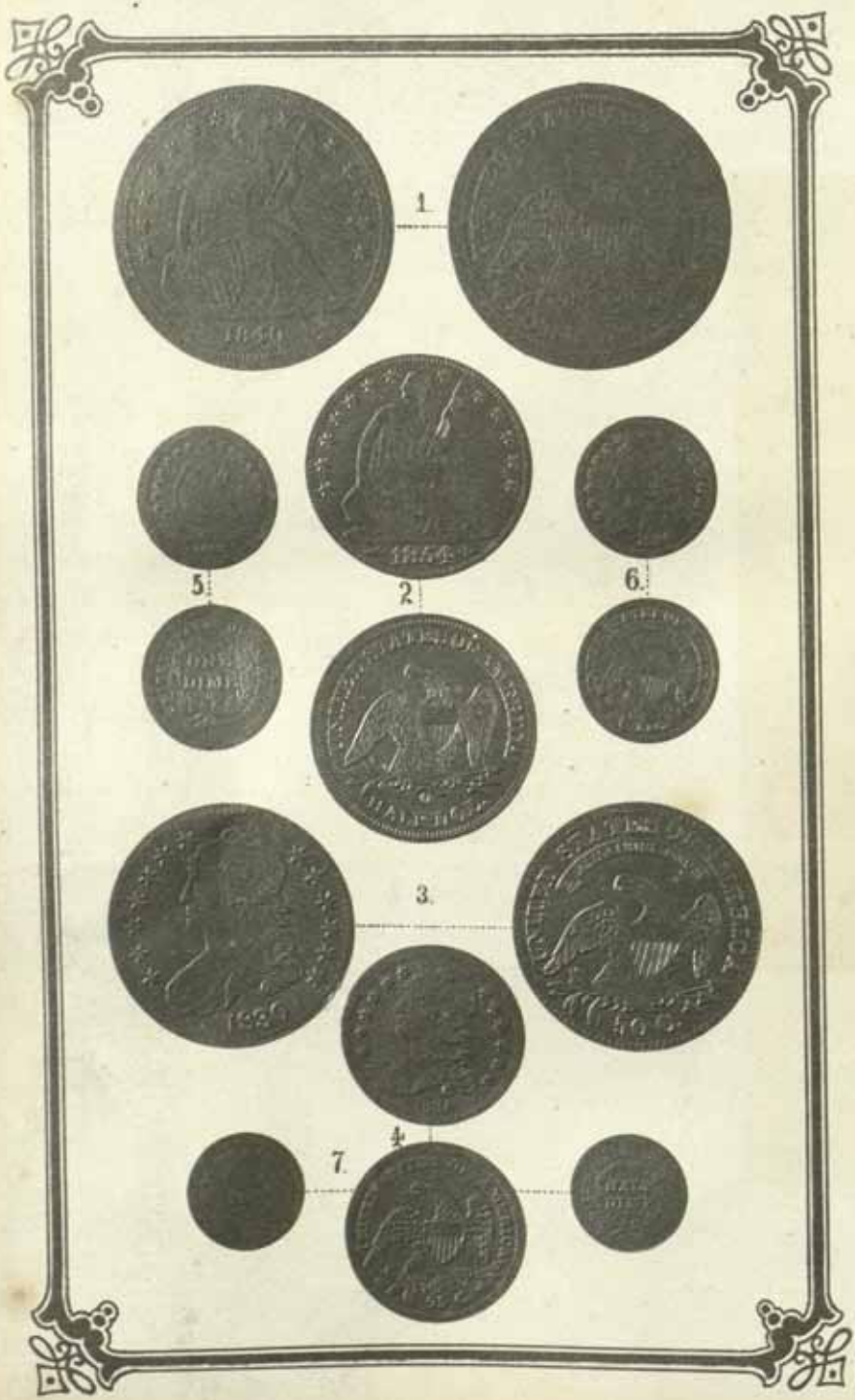
No. 5. *Three-dollar piece* of 1854. Weight 77$\frac{2}{5}$ troy grains, $\frac{9}{10}$ fine. Mean value 14*s*. 3¼*d*.

No. 6. ¼-*Eagle*. Weight and value in proportion to Nos. 2 and 4.

No. 7. *Dollar* of 1854. Weight 25.$_8$ grains, $\frac{9}{10}$ fine. Mean value 4*s*. 1¼*d*.

83

United States of America.



UNITED STATES OF NORTH AMERICA.

SILVER COINS.

No. 1. *Dollar* of 100 cents of the year 1840. Weight 412½ troy grains, $\frac{9}{10}$ fine. Mean value: 4*s*. 4*d*. (Silver dollar-pieces have not been issued since 1853.)

No. 2. ½-*Dollar* of 50 cents, of 1854. Weight 192 troy grains, $\frac{9}{10}$ fine. Mean value: 2*s*. 0¼*d*.

No. 3. ½-*Dollar*, of 50 cents, of 1830. Weight 208 troy grains, of which 185⅝ fine silver = $\frac{1485}{1664}$ fine. Mean value: 2*s*. 1¾*d*.

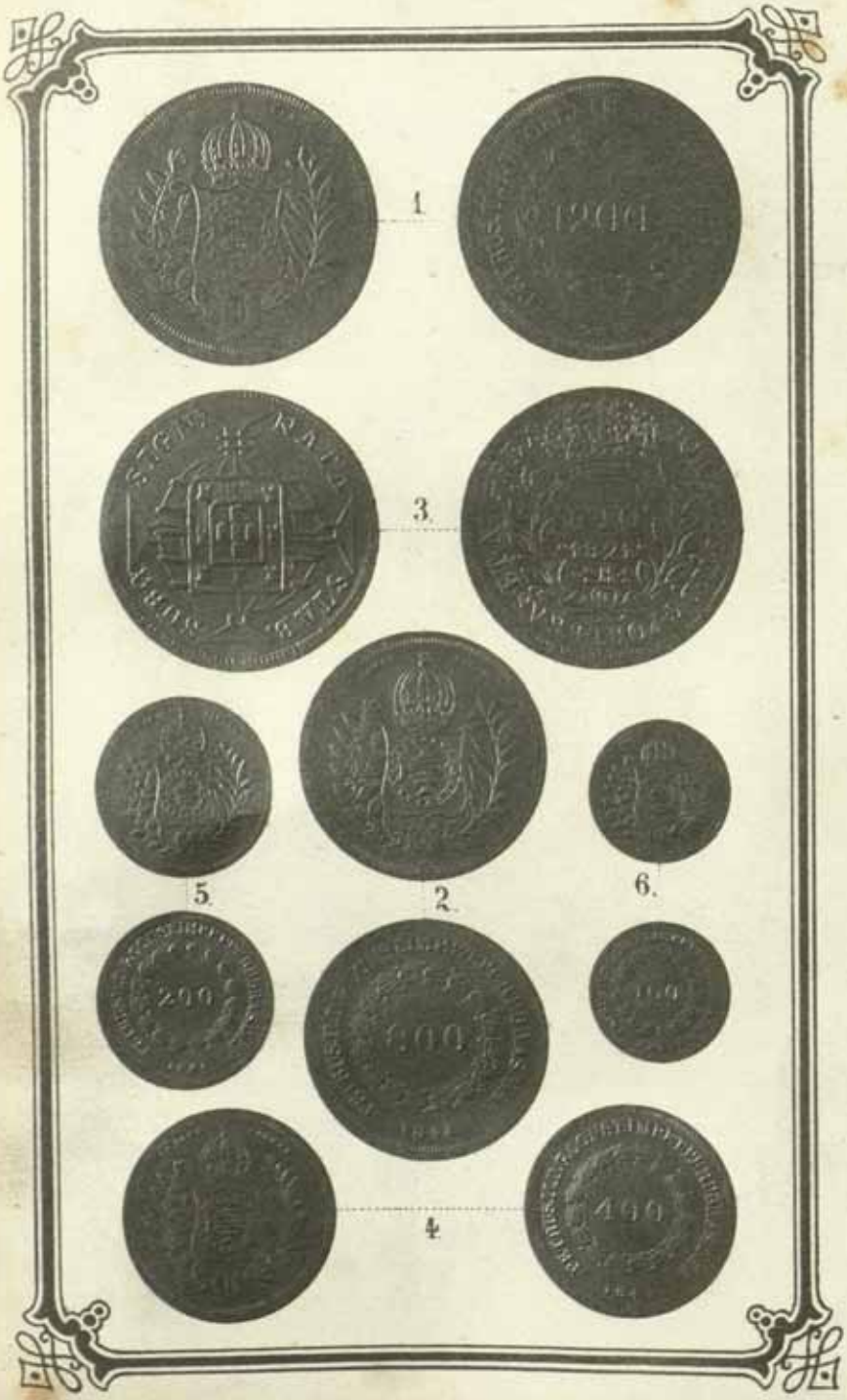
No. 4. ¼-*Dollar* of 25 cents, of 1834. Weight, value, &c., in proportion to Nos. 1 and 3.

No. 5. *Dime* of 10 cents, of 1839. Weight 41¼ troy grains, $\frac{9}{10}$ fine. Mean value 5½*d*.

No. 6. *Dime* of 1834. Weight 41⅓ troy grains, of which 37⅓ fine silver. Mean value 5½*d*.

No. 7. ½-*Dime*, or 5-*cent* piece, of 1849. Weight, value, &c., in proportion to No. 5.

Brazil.



BRAZIL.

SILVER COINS.

No 1. 1200-*Rees piece* of 1843. Weight 414 Eng. troy grains, $\frac{921}{1000}$ fine. Mean value 4*s.* 4¼*d.*

No. 2. 800-*Rees piece* of 1844. Weight 276 Eng. troy grains, $\frac{921}{1000}$ fine. Mean value 3*s.*

No. 3. *Double-Patacа* of 640 *rees,* of 1821. Weight 275 Eng. troy grains, $\frac{91}{100}$ fine. Mean value 2*s.* 11½*d.*

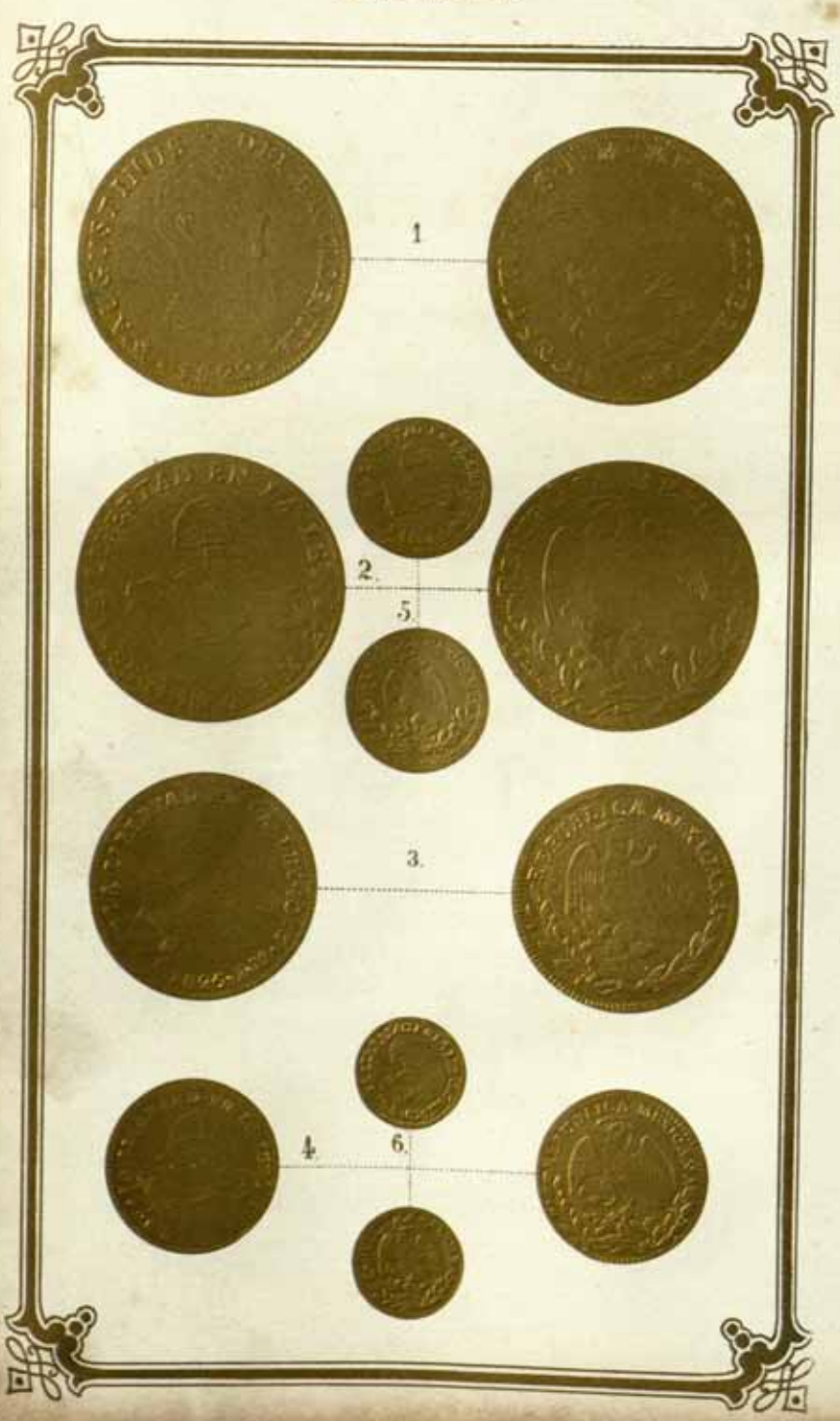
No. 4. 400-*Rees piece* of 1845. Weight 138 Eng. troy grains, $\frac{888}{1000}$ fine. Mean value 1*s.* 5½*d.*

No. 5. 200-*Rees piece* of 1846. Weight, value, &c., in proportion to No. 4.

No. 6. 100-*Rees piece* of 1837. Weight, value, &c., in proportion to Nos. 4 and 5.

85

Mexico.



MEXICO.

GOLD COINS.

No. 1. *Onza de oro,* or *doblon,* of 1822. $8\frac{1}{2}$ to the Mexican mark, $\frac{7}{8}$ fine, $13._{789}$ to the English troy pound. Value about £3 4*s.* $8\frac{1}{4}$*d.*

No. 2. *Onza de oro* of 1847. Weight and value something less than No. 1.

No. 3. *Half-onza de oro* of 1825. Weight and value in proportion to No. 1.

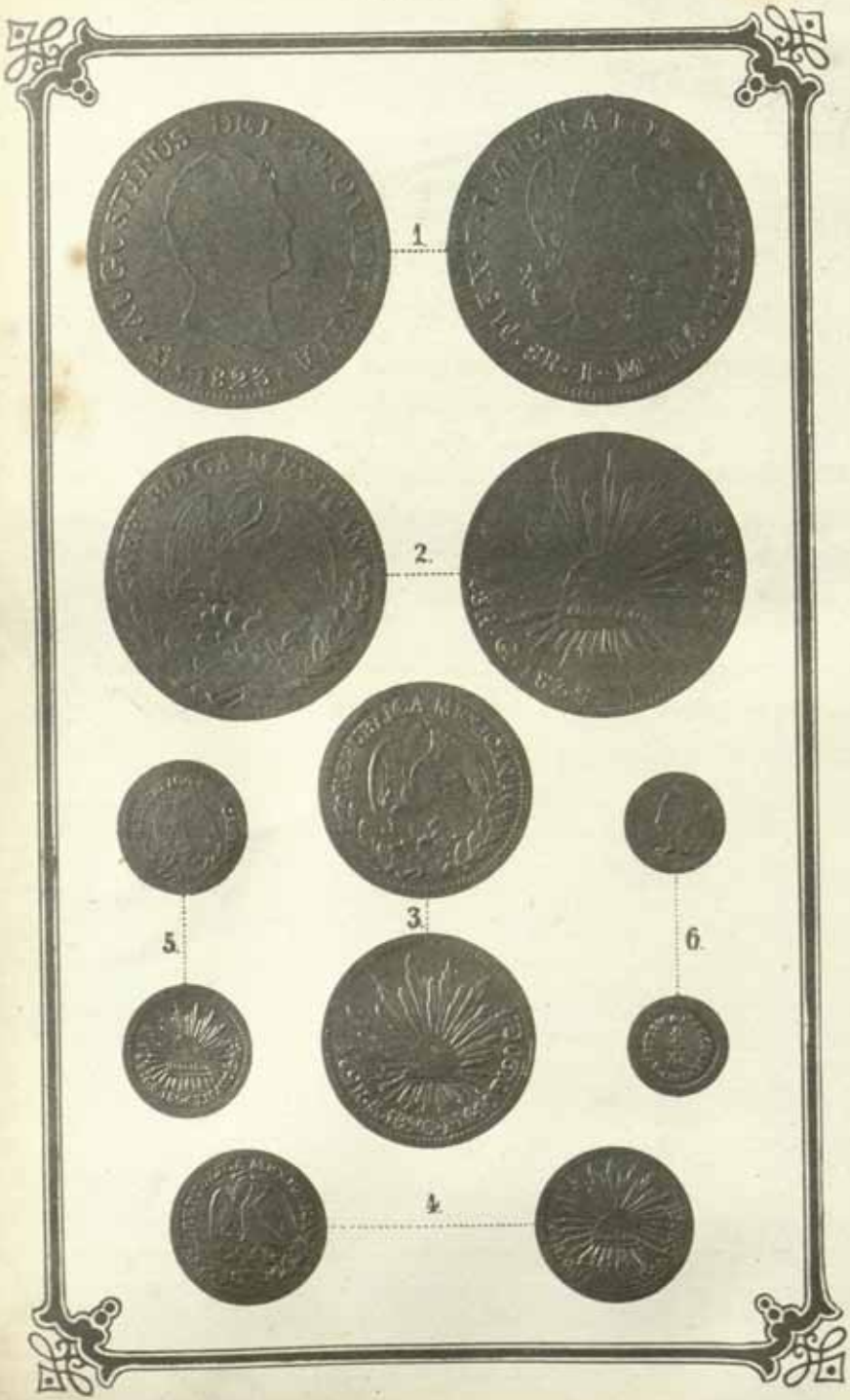
No. 4. *Quarter-onza de oro* of 1825. Weight and value in proportion to No. 1.

No. 5. *Escudo,* one-eighth of an onza, of 1825. Weight and value in proportion to No. 1.

No. 6. *Half-Escudo* of 1825. Weight and value in proportion to No. 1.

86

Mexico.



MEXICO.

SILVER COINS.

No. 1. *Peso* of the Emperor Augustinus, of 1823. Legally $8\frac{1}{2}$ to the Mexican (Spanish) mark; weight $416\frac{1}{2}$ troy grains about $\frac{6}{7}\frac{5}{2}$ fine. Mean value 4*s.* $4\frac{1}{2}$*d.*

No. 2. *Peso* of the republic, of 1839. Weight, value, &c., as near as possible those of No. 1.

No. 3. $\frac{1}{4}$-*Peso* of 1826. Weight, value, &c., in proportion to No. 1.

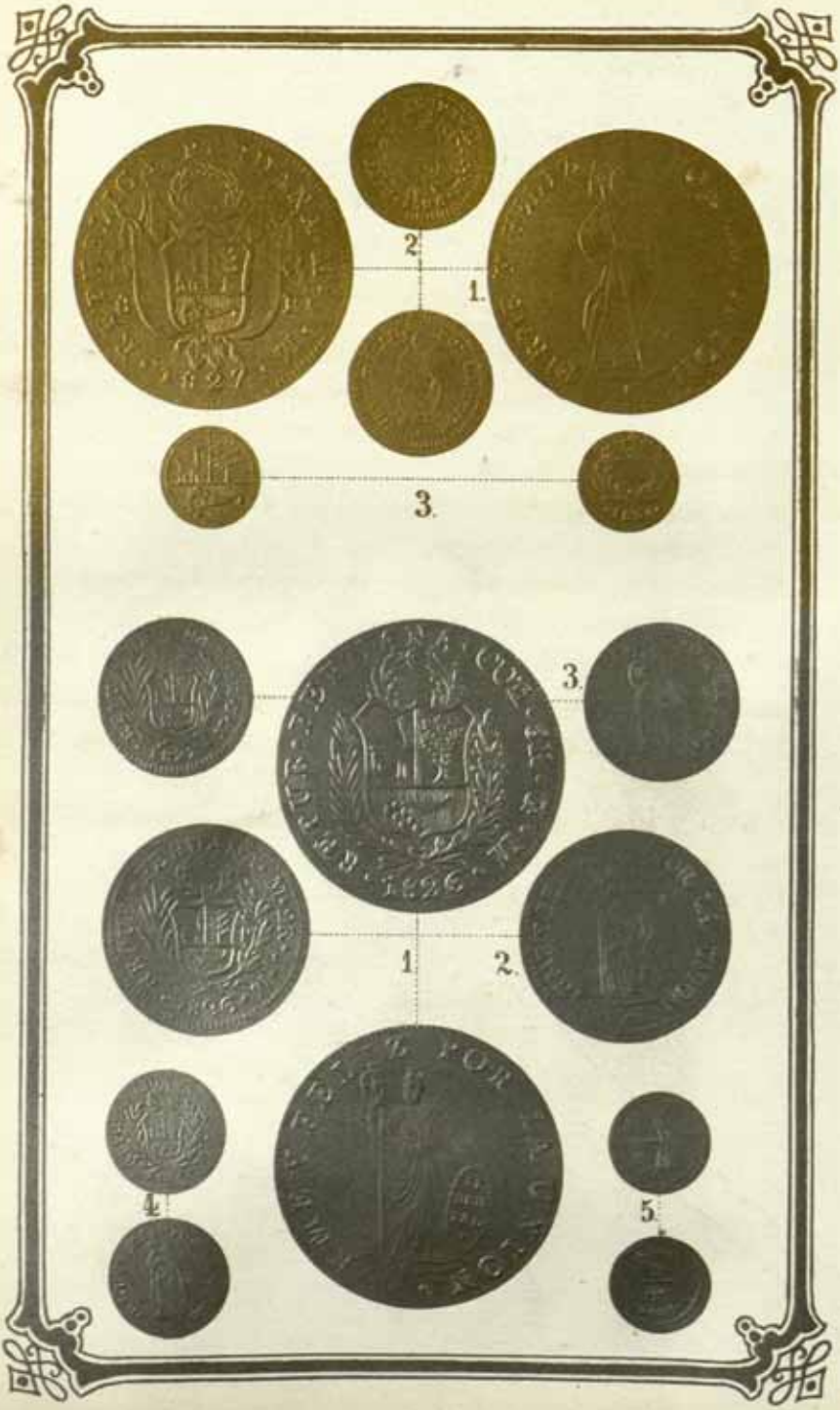
No. 4. *Real,* or $\frac{1}{8}$-*Peso,* of 1826. Weight, value, &c., in proportion to No. 1.

No. 5. $\frac{1}{2}$-*Real* of 1826. Weight, value, &c., in proportion to No. 1.

No. 6. $\frac{1}{4}$-*Real* of 1842. Seldom met with: value about $1\frac{5}{8}$*d.*

87

Peru.



PERU.

GOLD COINS.

No. 1. *Onza de oro,* or *doblon,* of 1827. Legally 8½ to the Peruvian (Castilian) mark, $\frac{7}{8}$ fine, but often somewhat below this standard; $13_{\cdot 189}$ to the English troy pound. Average value £3 4*s*.

No. 2. *Escudo,* or ½-*onza,* of 1826. Weight, value, &c., in proportion to No. 1.

No. 3. ½-*Escudo* of 1826. Weight, value, &c., in proportion to Nos. 1 and 2.

SILVER COINS.

No. 1. *Peso* of 8 reales, of 1826. 8½ to the Peruvian (Spanish-Castilian) mark $\frac{9}{10}$ fine; $13_{\cdot 189}$ to the English troy pound. Mean value 4*s*. 4*d*.

No. 2. ¼-*Peso* of 2 reales, of 1826. Weight, value, &c., in proportion to No 1.

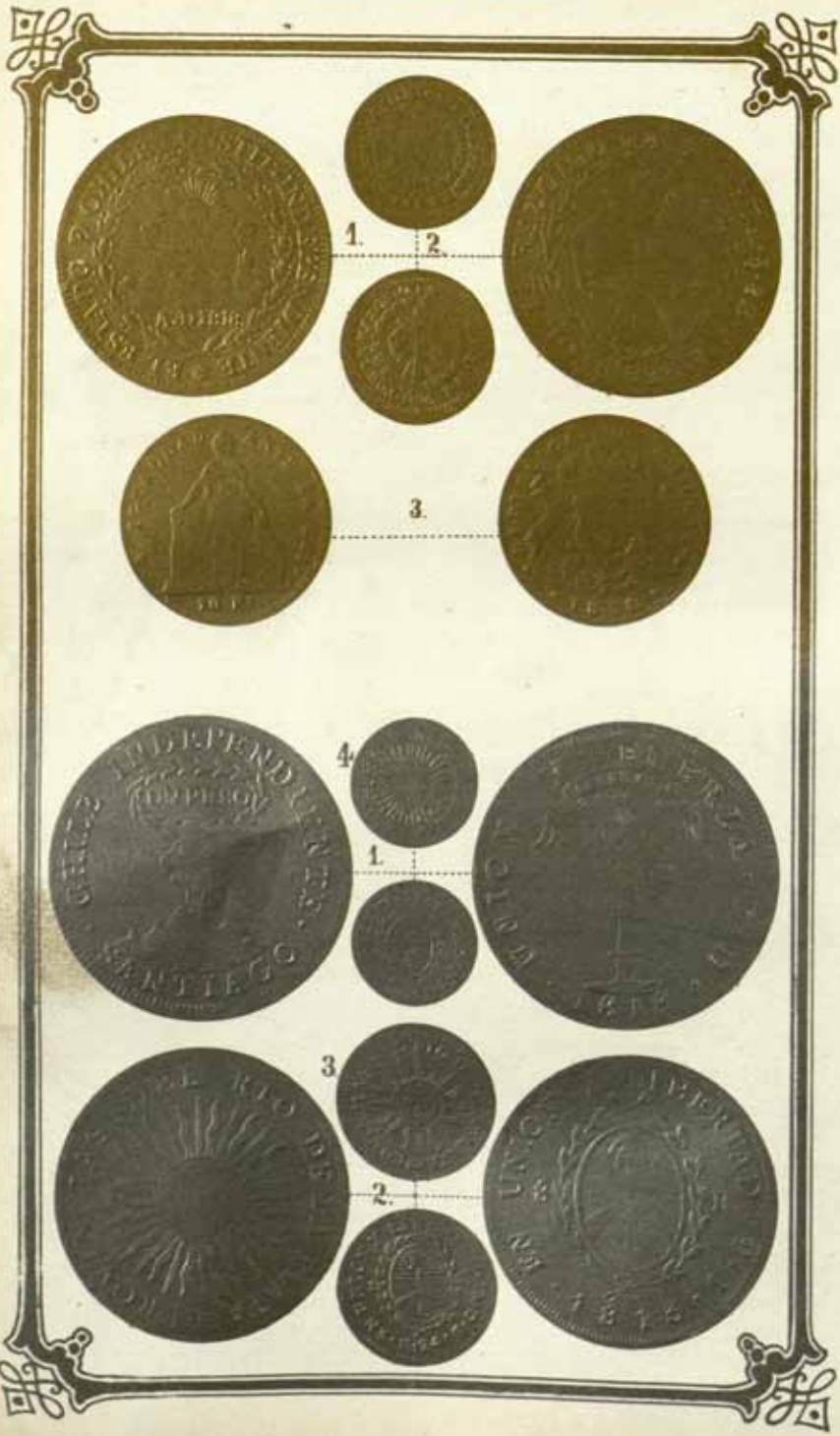
No. 3. *Real* of 1825. Weight, &c., in proportion to No. 1.

No. 4. ½-*Real* of 1827. " " " "

No. 5. ¼-*Real* of 1827. " " " "

88

Chili.-La Plata.



CHILI.—LA PLATA.

GOLD COINS.

No. 1. *Onza de oro,* or *doblon,* of 8 escudos, of 1823. (Chili.) $8\frac{1}{2}$ to the Chilian (Spanish-Castilian) mark, $\frac{7}{8}$ fine; $13._{79}$ to the English troy pound. Average value £3 4*s.*

No. 2. *Escudo,* or $\frac{1}{8}$-*doblon,* of 1826. (Chili.) Weight, value, &c., in proportion to No. 1.

No. 3. *Condor* of 10 pesos, of 1858 (Chili). $65._{56}$ to the French kilogramme, $\frac{9}{10}$ fine; $24._{5}$ to the troy pound. Average value £1 17*s.* $5\frac{3}{4}$*d.*

SILVER COINS.

No. 1. *Peso* of 8 reales, of 1818 (Chili). $8\frac{1}{2}$ to the Chilian (Spanish-Castilian) mark $\frac{227}{250}$ fine; $13._{83}$ to the troy pound. Average value 4*s.* 5*d.*

No. 2. *Peso* of 8 reales, of 1813 (La Plata). $8\frac{1}{2}$ to the mark, $\frac{9}{10}$ fine; $13._{79}$ to the troy pound. Average value 4*s.* 4*d.*

No. 3. *Real* of 1824 (La Plata). Weight, value, &c., legally in strict proportion to No. 2.

No. 4. $\frac{1}{2}$-*Real* of 1813 (La Plata). Weight, value, &c., legally in strict proportion to No. 2.

89

Columbia. New Granada.

COLUMBIA.—NEW GRANADA.

GOLD COINS.

No. 1. *Onza de oro,* of 8 escudos, of 1826 (Columbia). 8¼ to the Columbian (Spanish-Castilian) mark, $\frac{87}{100}$ fine; $13._{789}$ to the troy pound. Average value £3 4*s.*

No. 2. *2-Escudo piece* of 1825 (Columbia). Weight, value, &c., in proportion to No. 1.

No. 3. *Escudo* of 1825 (Columbia). Weight, value, &c., in proportion to No. 1.

SILVER COINS.

No. 1. *Peso* of 8 reales, of 1819 (New Granada). $15._9$ to the troy pound, $\frac{729}{1000}$ fine on an average. Mean value 3*s.* 1¼*d.*

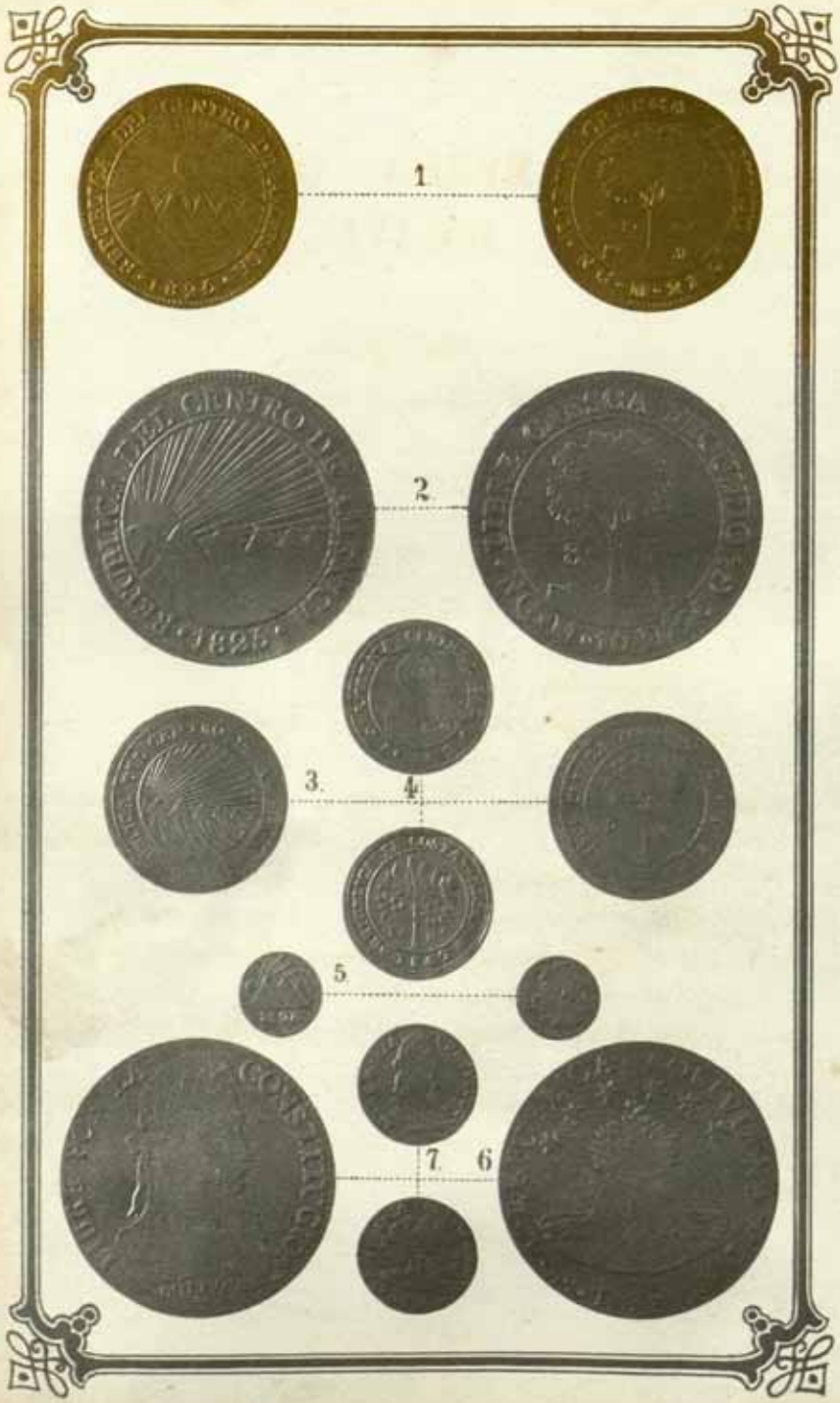
No. 2. *2-Reales piece* of 1820 (New Granada). About 78 to the Eng. troy pound, $\frac{63}{100}$ fine. Average value 7½*d.*

No. 3. *Real* of 1819 (New Granada). Weight, value, &c., in proportien to No. 2.

No. 4. *Real* of 1833 (Ecuador and Columbia). About the same in weight and value as No. 3.

90

Bolivia. Costa-Rica.



CENTRAL AMERICA.—COSTA RICA.—BOLIVIA.

GOLD COINS.

No. 1. ½-*Onza de oro* of 4 escudos, of 1825 (Central America). 17 to the Castilian mark, $\frac{834}{1000}$ fine; $27_{\cdot 518}$ to the Eng. troy pound. Average value £3 1*s*. 6*d*.

SILVER COINS.

No. 2. *Peso* of 8 reales, of 1825 (Central America). 8½ to the Castilian mark, $\frac{826}{1000}$ fine on an average; $13_{\cdot 789}$ to the troy pound. Mean value 4*s*. 4½*d*.

No. 3. ¼-*Peso* of 1849 (Central America). Weight, value, &c., in proportion to No. 2.

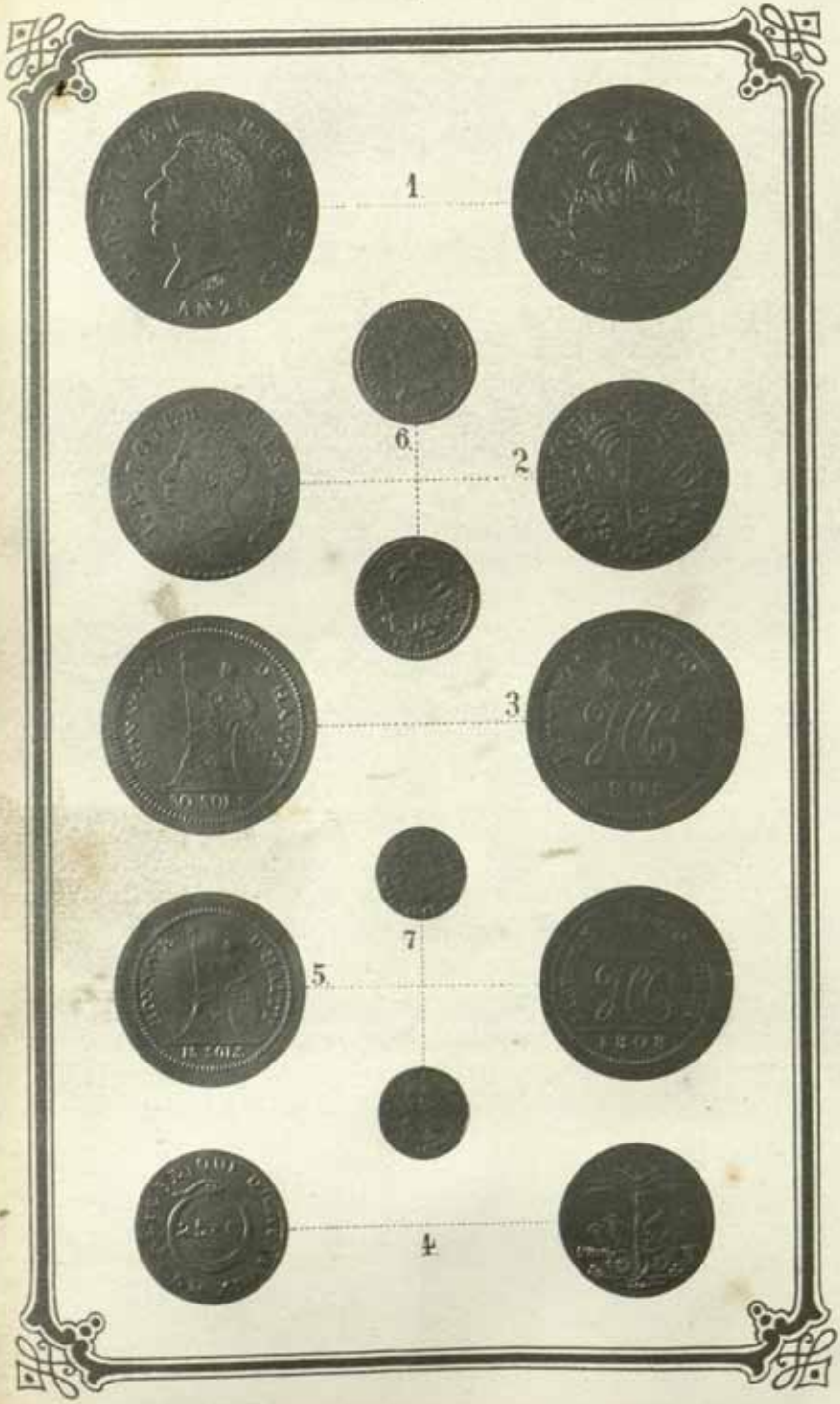
No. 4. *Real* of 1849 (Costa Rica). These coins differ in weight from 29 to 45 Eng. troy grains, and in fineness from $\frac{550}{1000}$ to $\frac{637}{1000}$. Value in proportion; on an average 4*d*.

No. 5. ¼-*Real* of 1826 (Central America). Average value 1*d*.

No. 6. *Peso* of 1830 (Bolivia). 8½ to the Castilian mark, $\frac{887}{1000}$ fine on an average; $13_{\cdot 789}$ to the troy pound. Mean value 4*s*. 4*d*.

No. 7. ½-*Real* of 1830 (Bolivia). Worth about 2*d*.

Hayti.



HAITY.

SILVER COINS.

No. 1. *Gourde* of 100 *centimes:* anno 26 of the republic. Approximate value 1*s.* $1\frac{1}{4}$*d.*

No. 2. $\frac{1}{2}$-*Gourde,* anno 25 of the republic. Approximate value $6\frac{5}{8}$*d.*

No. 3. *Double-Escalin* of 30 sols, of 1808. Approximate value $4\frac{1}{8}$*d.*

No. 4. $\frac{1}{4}$-*Gourde,* anno 11 of the republic. Approximate value $3\frac{5}{16}$*d.*

No. 5. *Escalin* of 15 sols, of 1808. Value half of No. 3.

No. 6. 12-*Cent piece.* Value in proportion to No. 1.

No. 7. 6-*Cent piece.* Value in proportion to No. 1.

D A I T E.

92

Persia.

PERSIA.

GOLD COINS.

No. 1. *Toman* of Abbas III., 1732-3. A.D. Weight $53._8$ Eng. troy grains, $\frac{138}{148}$ fine. Value about 9*s.* 4*d.*

No. 2. *Toman* of the Sultan Nadir, 1735-6 A.D. Weight and value as No. 1.

No. 3. Gold coin of Sultan Nadir, 1738-9. A.D. $71._{819}$ to the troy pound, about $\frac{48}{49}$ fine. Approximate value 14*s.*

No. 4. Gold coin of Sultan Nadir, 1739-40 A.D. Weight $18._{48}$ Eng. troy grains, about $\frac{204}{214}$ fine. Approximate value 3*s.* 2½*d.*

No. 5. Gold coin of Nadir, 1744-5 A.D. Weight $50._{3437}$ Eng. troy grains, about $\frac{55}{56}$ fine. Approximate value 12*s.* 2½*d.*

No. 6. Gold coin of Shah Roch, who ascended the throne in 1748 A.D. Weight $171._1$ troy grains, about $\frac{45}{46}$ fine. Approximate value £1 9*s.* 8¾*d.*

No. 7. *Toman* of Kerim, about 1775 A.D. Weight and value the same as No. 1.

No. 8. Gold coin of Kerim, 1776-7 A.D. Weight $171._1$ troy grains, about $\frac{45}{46}$ fine. Value about £1 9*s.* 8¾*d.*

No. 8. Gold coin of Shadik Chan, 1782-3 A.D. Weight 40¼ troy grains, $\frac{263}{265}$ fine. Value about 7*s.*

No. 10. Gold coin of Teth Ali, 1828-9 A.D. Weight, value, &c., as No. 9

93

Hindostan.

HINDOSTAN.

(The explanations of the inscriptions are by Prof. Stickel.)

GOLD COINS.

No. 1. Gold Coin weighing 68½ Eng. troy grains, issued by some Great Mogul; but the inscriptions are imperfect.

Obverse:—*The victorious Padischah.*

Reverse:—*Coin of ... bad, in the year of the happy reign ....*

No. 2. Gold coin weighing 96 troy grains; issued by Schah Alem II.

Obverse:—*This piece of money, as one current in the seven climates* (=the whole earth), *was coined by the shadow of the grace of God, the protector of the Mahometan faith Schah Alem, Padischah* 1185.

Reverse:—*Coin of Murschischabad, in the* 12*th. year of the most happy reign,* that is. in 1771 A.D. The five-leaved rose is the coining mark of the E. I. Company.

No. 3. Gold coin weighing 192 troy grains, issued by the same Schah, and bearing the same inscriptions, except as to the dates that on the obverse being 1202 (of the Hegira), and that—of the reverse 19. These two dates do not agree; but this fact would seen to be explained by the supposition that the stamp of the observe was used same years in succession, the reverse only being renewed every year.

No. 4. Gold coin of the same weight and bearing the same inscriptions as No. 3.

SILVER COINS.

No. 1. *Rupee* of Schah Alem II., with the same inscriptions as No. 2 of the gold coins; date on the obverse 1181, of the Hegira =1768-69 A.D.; on the reverse 9, as year of issue.

No. 2. ½-*Rupee;* the legends are imperfect.

No. 3. *Rupee* of Schah Alem II.

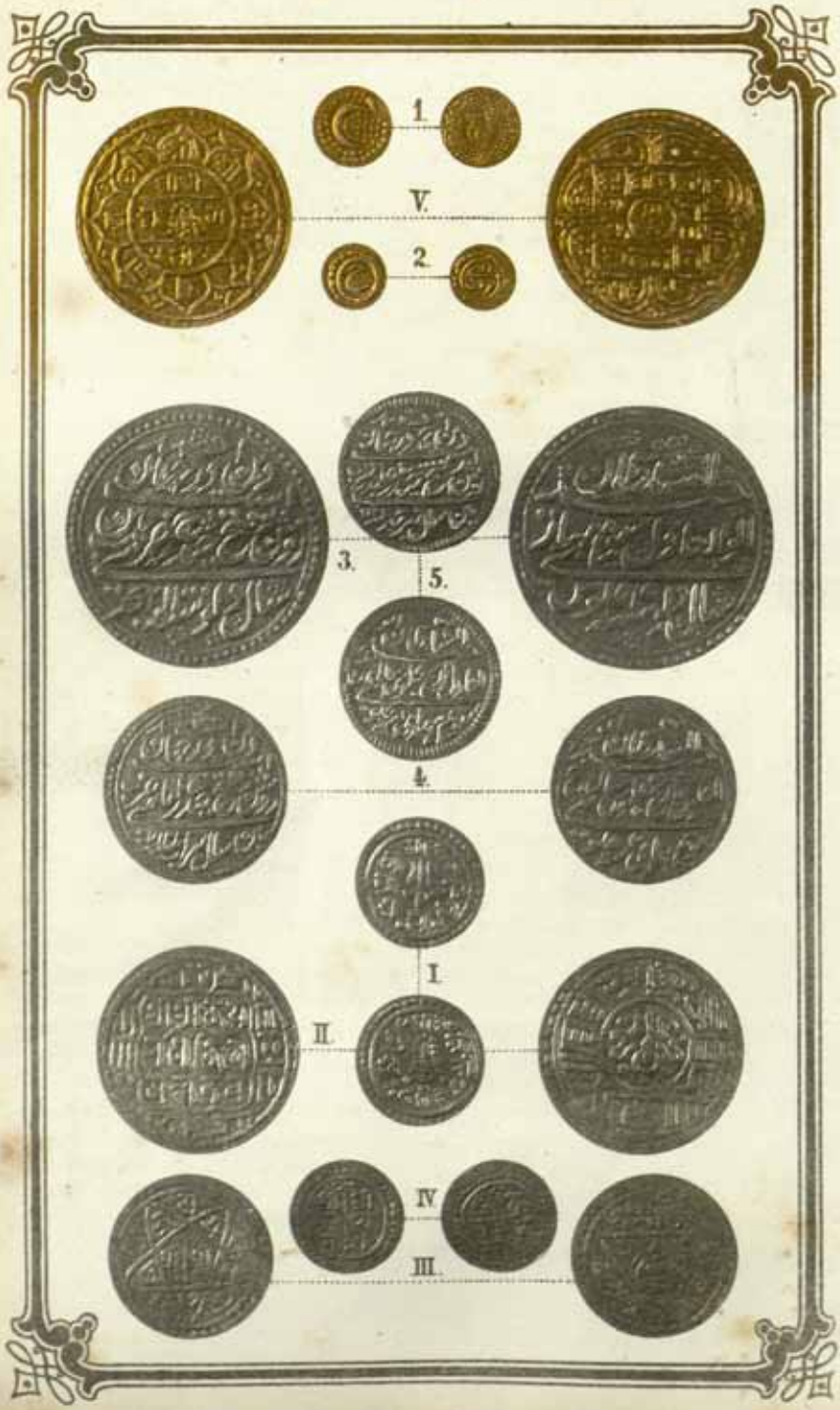
Obverse:—*Blessed coin of the victorious Padischah, Schah Alem.* 1215.

Reverse:—*Coin of Surat in the* 46*th. year of the happy reign;* that is 1804-5 A.D.

No. 4. ½-*Rupee* of the same sovereign, with the same inscriptions as No. 3.

No. 5. ¼-*Rupee,* of the same sovereign, and with the same legends as No. 3, but bearing the date 49 of the reign, or 1807-8 A.D.

Nepaul = Mysore.



NEPAUL.

(The explanations of the inscriptions are by Prof. Stickel.)

No. I. ¼-*Mohur* of the Rajah Dschaja Prakâsa Malla.

Obverse:—In the middle the trident of Siva; above it and at the sides, in Devanagari characters—*Holy, holy Dschaja Prakâsa Malla.*

Reverse:—The *phallus*, as symbol of creative power; above, right and left, the crescent and the sun; the inscription runs—*Holy, holy, holy Guhêtschwari* 823. This date is of the Nevari era, beginning 879 A.D. =1702 AD.

No. II. *Mohur* of the last ruler of the dynasty Surja Bansi, the Rajah Ranadschit Malla Dêva.

Obverse:—In the enclosed space—*Holy, holy Dschaja Ranadschit Malla Dêva*, in Nevari characters. Beneath is the somewhat illegible date 842 = 1721 A.D., the first year of the long and unfortunate reign of this Rajah.

Reverse:—In the middle is Siva's trident, and above it the *phallus:* the remainder of the inscription consists, as is supposed, of mystic characters.

No. III. ½-*Mohur* of Rajah Ranadschit Malla Dêva.

Obverse:—In the middle is the *phallus*, on each side of which—*Holy, holy.* In the five corners of the double triangle—*Dschajah Ranadschit;* in the intermediate spaces—*Malla Dêva.*

Reverse:—In the triangle is Siva's trident, with the crescent and sun in the top corners. In the exergue, to the right—*Samvat;* to the left 842, or 1721 A.D.; above—*Waisakh* 19, i. e. on the 19th. of the first moon of the Hindoo year. The triangle here is the symbol of Vishnu, but it is evident that the originator of this coin did not belong to the adorers of that god, from the presence of the Siva symbol. A new sect, considering themselves holier than all, combine in honouring both gods, and indicate this union of worship by two triangles crossed, as on the obverse of this coin.

No. IV. ½-*Mohur* of Raja Ranadschit Malla Dêva.

Obverse:—The *phallus*, with crescent and sun. Inscription—*Holy, holy Dschaja Rana.*

Reverse:—*Dschita Malla Dêva.*

No. V. Gold Coin weighing 87½ Eng. troy grains; coined by the founder of the powerful Gorgha (or Gourgkha) dynasty of Nepaul, Prithi Nârâjana.

Obverse:—In the middle of the smaller circle is the *phallus*, surrounded by—*Holy, holy Bhawani*, the wife of Siva. In the outer circle —*Holy, holy, holy Gôraschanâtha*, the lord of Gôrascha, the patron saint of the reigning family.

Reverse:—In the middle is Siva's trident, surrounded by—*Holy, holy Prithi Nârâjana Sâha Dêva.* Underneath is the date 1693, of the Saka era, beginning 78 A.D., and therefore = 1771 A.D., the last year of the reign of the prince above mentioned. Over the square, on the right, is the crescent, on the left the sun; at the sides are the symbols of Siva: the shell, the lotus (*padma*), the discus (*kakra*), and the club (*gadâ*).

MYSORE.

(The explanations of the inscriptions are by Prof. Stickel.)

GOLD COINS OF TIPPOO SAHIB.

No. 1. *Pagoda*, weighing 53 Eng. troy grains, $\frac{34}{35}\frac{1}{35}$ fine, and worth about 8*s*.

Obverse:—The Persian **H.**, as initial of the name of Hyder Ally, the father of Tippoo Sahib.

Reverse:—The same letter **H.** in the Nevari character.

No. 2. Gold Coin weighing about $\frac{1}{8}$ of the preceding.

Obverse:—The Persian **H.**

Reverse:—*Coin of Patan* 1212, that is from the birth of Mahomet, or 1783 A.D. Patan means Seringpatam.

SILVER COINS OF TIPPOO SAHIB.

No. 3. *Double Rupee*, worth about 4*s*. 4*d*.

Obverse:—*The religion of Ahmed* (Muhammed) *is glorious in the world through the victory of* **H.** (Hyder). *Coin of Patan, in the year Dalu* (40th. of the cyclus), *in the year* 1200 *of the Hegira*, or 1785-86 A.D.

Reverse:—*He is the only just sultan. On the* 3*rd of* (the month) *Bahari, in the year Dalu, in the fourth year since the accession to the throne.*

No. 4. *Rupee.*

Obverse:—*The religion of Ahmed shines in the world through the victory of* **H.** *Imami. Coin of Patan in the year Sarab* (43rd. of the cyclus), *in the year* 1217, that is from the birth of Mahomet=1203 of the Hegira, of 1788-89 A.D.

Reverse:—*He is the only just sultan. The determining of the time since the accession to the throne in the year Sach* (37th. of the cyclus) *is the* 3*rd. of Behari, of the* 7*th. year since the accession to the throne.*

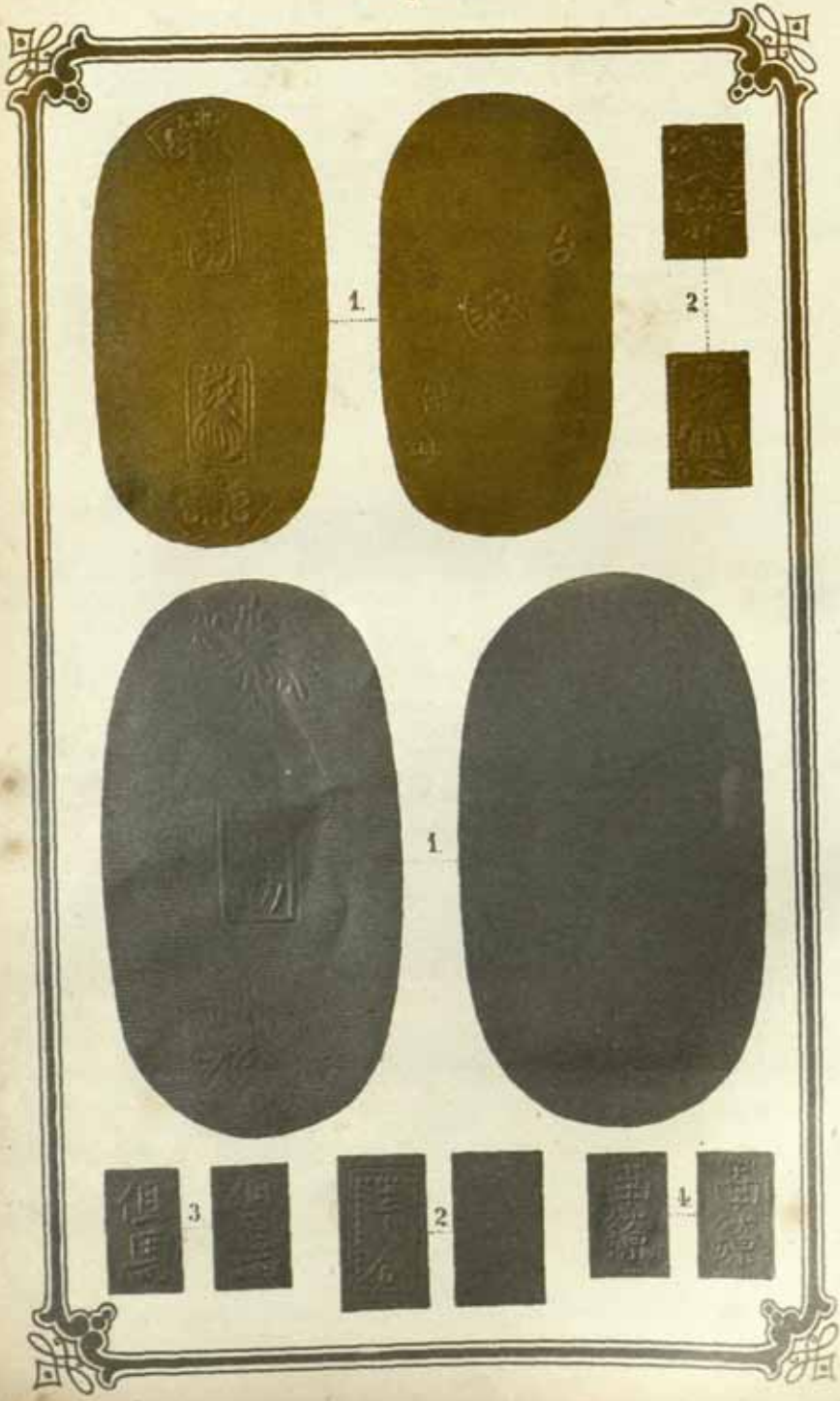
No. 5. $\frac{1}{4}$-*Rupee*, or *abidi.*

Obverse;—*The religion of Ahmed shines in the world by the victory of* **H.** *One abidi. Coin of Patan of the year Sabardschah* (45th. of the cyclus) *in the year* 1219; that is, from the birth of Mahomet=1205 of the Hegira, or 1790-91 A.D.

Reverse:—*He is the only just sultan. The determining of the time since the accession to the throne in the year .... is the* 3*rd. of Behari, of the ninth year since the accession to the throne.*

95

Japan.



JAPAN.

(The inscriptions explained by Prof. Stickel.)

GOLD COINS.

No. 1. *Ko-ban*, or *copang*. Of the Ko-bans assayed by the Dutch in later times some were found to weigh 272½ Dutch *as*, equal to 200 Eng. troy grains, by $\frac{161}{288}$ fine; and some only 260⅝ *as*, or 193¼ troy grains, by $\frac{154}{288}$ fine. According to this the value of the former is about £1, and of the latter 18*s*. 5*d*.

The leaf-like design at the top and bottom of the obverse represents the coat of arms of the Dairi; the characters immediately beneath the former give the weight, value, &c., while above the lower coat of arms is the name of the master of the mint. In the middle of the reverse is the mark of the general director of the gold and silver coins; the smaller ones have been stamped on the coin by private individuals, to show that it has passed through their hands, and not been found wanting.

No. 2. *Itchebo*, or *itjib*. The older coins of this kind weigh about 68 Eng. troy grains, by $\frac{569}{1000}$ fine; value 6*s*. 10¼*d*. The present *itchebo* weighs about 50 troy grains by $\frac{656}{1000}$ fine; value 5*s*. 10¼*d*.

On the obverse is the imperial coat of arms, and on the reverse that of the master of the mint.

SILVER COINS.

No. 1. *Ita-kane*, or *itaganne*, or *rjoo-gin*, Dutch *schuit;* the Japanese name means *flat*, or *plate metal*. The present *ita-kane* weighs on an average 1160 Eng. troy grains, $\frac{336}{288}$ fine; value about 12*s*.

Stamped with the imperial arms at the top and bottom, with declaration of weight, value, &c., in the middle.

No. 2. Coin like those described by Marsden in his *Num. Orient. II. No. MCCLXIV.* Weight about 150 troy grains. The characters on the one side are the Chinese words *i fun*, that is, *a part*.

No. 3. Coin weighing about 37½ troy grains. The inscription has, we believe, never been satisfactorily explained; according to Chinese pronunciation it is *Tan ma*.

No. 4. Coin weighing about 30 troy grains. Inscription hitherto unexplained.

96

Cochin = China.

1

2

3

4

COCHIN CHINA.

(The inscriptions explained by Prof. Stickel.)

No. 1. Silver piece of Kia-Loung weighing 292 troy grains and worth about 3*s*. Obverse: *Beginning of the years Kia-Loung.* Reverse: *Money of equal half—five tsien.*

No. 2. Silver piece of Ming-Ming (son of Kia-Loung), who ascended the throne of Annam in 1819. The piece is double the weight and value of No. 1. Obverse: *Beginning of the years Ming-Ming.*—Reverse: *Government money—one liang.*

No. 3. Silver piece of Ming-Ming, weighing 412 troy grains and worth about 4*s*. 3*d*. Obverse: *Ming-Ming—Current money.*—On the reverse is the figure of the flying dragon, and under it: *thirty.*

No. 4. Silver piece of Ming-Ming, of the same weight and value as No. 1. Obverse: *Ming-Ming—Current money.*—In the middle of the reverse is the sun, above it the head and fore-feet of the flying dragon, and under it the hind-feet and tail; the characters mean: *Dragon coin.*
