Before 1833 the mainland was divided into thirteen provinces, also enumerated below, which took their names from the ancient kingdoms and principalities out of which the modern kingdom was gradually built up. The present provinces are subdivided into judicial districts (*partidos judiciales*) and communes (*ayuntamientos*).

It is probable that the population of Spain attained its highest development during the period of the early Roman empire, when it has been estimated, though of course on imperfect data, to have numbered forty or fifty millions. The best evidence of a dense population in those days is that afforded by the specific estimates of ancient writers for some of the larger cities. The population of Tarraco (Tarragona) was estimated at 2½ millions, and that of Nova Carthago (Cartagena), Italica (Sevilla la Vieja), and others at several hundreds of thousands. Emerita Augusta (Merida) had a Roman garrison of 90,000 men, which also implies a large population.[1]

Table II.—Area and Population of the Former and Present Provinces.

Provinces.	Area in Square Miles.	Population 1857.	Population Dec. 31, 1877.	Increase or Decrease.	Pop. per sq. m. 1877.
NEW CASTILE	28,018	1,477,915	1,627,131	+ 10·1	58
Madrid	2,997	475,785	594,194	+ 24·8	198
Guadalajara	4,869	199,088	201,288	+ 1·1	41
Toledo	5,586	325,755	335,093	+ 1·8	60
Cuenca	6,726	229,959	236,253	+ 3·3	34
Ciudad Real	7,840	244,328	260,358	+ 6·6	33
OLD CASTILE	25,409	1,609,948	1,654,718	+ 2·8	65
Burgos	5,631	333,356	332,625	− 0·2	59
Logroño	1,945	173,812	174,425	+ 0·4	89
Santander	2,112	214,441	235,299	+ 9·7	111
Avila	2,982	164,039	180,436	+ 10·0	60
Segovia	2,714	146,839	150,052	+ 2·1	55
Soria	3,836	147,468	153,652	+ 4·2	40
Palencia	3,126	185,970	180,771	− 2·8	58
Valladolid	3,043	244 023	247,458	+ 1·4	80
ASTURIAS	4,091	524,529	576,352	+ 9·9	140
Oviedo	4,091	524,529	576,352	+ 9·9	140
LEON	15,242	861,434	885,625	+ 3·0	57
Salamanca	4,940	263,516	283,695	+ 8·3	58
Zamora	4,135	249,162	249,720	+ 0·2	60
Leon	6,167	348,756	350,210	+ 0·4	57
ESTREMADURA	16,702	707,115	739,403	+ 4·6	44
Badajoz	8,688	404,981	432,809	+ 6·9	50
Caceres	8,014	302,134	306,594	+ 1·5	38
GALICIA	11,343	1,776,879	1,848,027	+ 4·0	163
Coruña	3,078	551,989	596,436	+ 8·0	193
Lugo	3,787	424,186	410,810	− 3·3	110
Orense	2,739	371,818	388,835	+ 4·6	142
Pontevedra	1,739	428,886	451,946	+ 5·4	260
ANDALUSIA	33,926	2,937,183	3,283,436	+ 11·7	94
Almeria	3,302	315,664	349,076	+ 10·8	106
Granada	4,937	444,629	479,066	+ 7·5	96
Malaga	2,824	451,406	500,322	+ 10·8	177
Cordova	5,300	351,536	385,482	+ 9·7	73
Jaen	5,184	345,879	423,025	+ 22·3	82
Cadiz (with Ceuta)	2,828	390,192	429,206	+ 10·2	152
Seville	5,429	463,436	506,812	+ 9·3	93
Huelva	4,122	174,391	210,447	+ 20·8	51
ALENCIA	8,897	1,246,485	1,374,592	+ 10·1	154
Castellon de la Plana	2,446	260,919	283,981	+ 8·8	116
Valencia	4,353	606,538	679,046	+ 11·9	156
Alicante	2,098	378,958	411,565	+ 8·6	194
MURCIA	10,449	582,087	670,669	+ 15·2	64
Albacete	5,972	201,118	219,058	+ 8·9	36
Murcia	4,477	380,969	451,611	+ 18·5	101
CATALONIA	12,483	1,652,291	1,752,033	+ 5·9	140
Lerida	4,775	306,994	285,339	− 7·6	60
Gerona	2,272	316,970	293,702	− 8·9	131
Barcelona	2,985	713,734	838,857	+ 17·2	280
Tarragona	2,451	320,593	330,105	+ 3·0	138
ARAGON	17,979	880,643	894,991	+ 1·6	50
Huesca	5,878	257,839	252,239	− 2·2	44
Saragossa	6,607	384,176	400,587	+ 4·2	60
Teruel	5,494	238,628	242,165	+ 1·5	44
NAVARRA	4,046	297,422	304,184	+ 2·3	75
NAVARRE	4,046	297,422	304,184	+ 2·3	75
BASQUE PROVINCES	2,782	413,470	450,699	+ 8·9	162
Vizcaya (Biscay)	849	160,579	189,934	+ 18·3	224
Guipuzcoa	728	158,493	167,207	+ 5·8	229
Alava	1,205	96,398	93,538	− 3·1	78
Balearic Islands	1,860	262,893	289,035	+ 9·9	155
Canary Islands	2,944	234,046	280,974	+ 19·9	95
Total	196,171	15,464,340	16,631,869	+ 7·5	85
Presidios of North Africa (exclusive of Ceuta)			2,476	...	...
			16,634,345	...	...

[1] Garrido, *La España Contemporanea*, i. 489.

The first Spanish census was made in 1594, but some of the provinces now included in the kingdom were for one reason or another not embraced in the enumeration, so that the total population assigned to Spain within its present limits for that date is obtained by adding the results of enumerations at different dates in the provinces then excluded. The total thus arrived at is 8,206,791. No other census took place till 1787, when the total was found to be 10,268,150; and this census was followed by another in 1797, when the population was returned as 10,541,221. Various estimates were made within the next sixty years, but the census of 1857 proved that some of these estimates must have been greatly below the truth. The total population then ascertained to exist in Spain was 15,464,340, an increase of not much less than 50 per cent. since the census of 1797. The last census took place on December 31, 1877, and the total population then ascertained, 16,631,869, shows an increase of only 7½ per cent., equal to an annual increase at the rate of 0·35 per cent.—lower than in any other country in Europe except France.

As Table II. shows, the density of population in Spain as a whole is little more than that of the most thinly peopled county of England in 1881 (Westmoreland, 82 to the square mile). Looking at the old provinces, we find that the most thickly peopled are all maritime, and that all the maritime provinces except Andalusia and Murcia have a density exceeding 100 to the square mile. The most densely peopled province of all is not Catalonia, in which manufacturing industries are so highly developed, nor the Basque Provinces with their great iron industry, but Galicia, where there are neither manufactures nor minerals to speak of, but where tillage occupies a relatively larger area than anywhere else in Spain. Of the modern provinces the most thinly peopled are Cuenca and Ciudad Real, in the barren region of the east and south of New Castile, and Albacete in the Murcian steppe, in each case the density being less than half of that of the most thinly peopled English county. The column indicating the increase (or decrease) per cent. of the population between 1857 and 1877 shows that, outside of the province in which the capital is situated, the increase points chiefly to the recent development of manufactures and mining,—to the development of copper mines in Huelva, lead mines in Jaen, iron mines in Vizcaya, cotton manufactures in Barcelona. In Murcia it points no doubt to the great development of the trade in esparto as well as in southern fruits. On the other hand the decrease in Lerida and Gerona indicates how the attraction of higher wages in the manufacturing districts of Catalonia tends to deplete the neighbouring country districts.

As regards the distribution of population between town and country, Spain contrasts in a marked manner with Italy, Spain having but few large towns and a relatively large country population. In 1877 there were only five towns with more than 100,000 inhabitants:—Madrid (397,816), Barcelona (248,943), Valencia (143,861), Seville (134,318), and Malaga (115,882). Only nine had a population between 50,000 and 100,000, and besides these only 171 had a population above 10,000.

The birth-rate in Spain is 33·9 per thousand as against 35·1 in England and Wales, the death-rate 29·1 (21·4 in England and Wales); the number of marriages per thousand inhabitants was 7·32[2] (8·08 in England and Wales). The percentage of illegitimacy is 5·6. The number of males born for every 100 females averages 107, a higher proportion than in any other country of Europe for which statistics are obtainable except Greece (112) and Roumania (111).

Foreign Possessions.—The population of the principal foreign possessions of Spain in 1877 numbered 7,822,123, made up as follows:—

Cuba	1,521,684	Philippine Islands	5,567,685
Porto Rico	731,648	Fernando Po	1,106

Besides the Philippine Islands in the Eastern Archipelago, Spain possesses the greater part of the Sulu Archipelago, and, in the Pacific, the Marianne, Pelew, and Caroline Islands. Off the Guinea coast she possesses the Island of Annobon as well as that of Fernando Po, and on the coast itself the district round Corisco Bay. She has likewise declared a protectorate over the West African coast between Capes Bojador and Blanco (desert of Sahara). The presidios, whose population is given in Table II., are Peñon de Velez, Alhucemas, and Melila (besides Ceuta).

Agriculture.—Agriculture is by far the most important Spanish industry, nearly 73 per cent. of those whose occupations were classified at the census of 1877 being entered under that head. In general it is in a backward condition, and is now much less productive than in the time of the Romans and again under the Moors. The expulsion of the latter people in many places inflicted upon agriculture a blow from which it has not recovered to this day. Aragon and Estremadura, the two most thinly peopled of all the old provinces, and the eastern half of Andalusia (above Seville),

[2] In all these cases the figures for Spain are the means of the years 1863–70 and 1880–83 inclusive.

have all suffered particularly in this manner, later occupiers never having been able to rival the Moors in overcoming the sterility of nature, as in Aragon, or in taking advantage of its fertility, as in Andalusia and the Tierra de Barros. The implements in general use are of the rudest description. The plough is merely a pointed stick shod with iron, crossed by another stick which serves as a share, scratching the ground to the depth of a few inches. But the regular import now of agricultural implements (chiefly from England and France) betokens an improvement in this respect. In general there has been considerable improvement in the condition of agriculture since the introduction of railways, and in every province there is a royal commissioner entrusted with the duty of supervising and encouraging this branch of industry. Among other institutions for the promotion of agriculture the royal central school at Aranjuez, to which is attached a model farm, is of special importance.

The provinces in which agriculture is most advanced are those of Valencia and Catalonia, in both of which the river valleys are thickly seamed with irrigation canals and the hill-slopes carefully terraced for cultivation. In neither province is the soil naturally fertile, and nothing but the untiring industry of the inhabitants, favoured in the one case by the rivers which traverse the province from the tableland of New Castile and the numerous small streams (*nacimientos*) that issue from the base of the limestone mountains of which the province is largely composed, and in the other case by the numerous torrents from the Pyrenees, has converted them into two of the most productive regions in Spain. In the Basque Provinces and in Galicia the cultivable area is quite as fully utilized, but in these the difficulties that have to be contended with are not so great. The least productive tracts, apart from Aragon and Estremadura, are situated in the south and east of New Castile, in Murcia, and in Lower Andalusia—the marshes or *marismas* of the lower Guadalquivir and the *arenas gordas* between that river and the Rio Tinto. By far the greater part of the tableland, however, is anything but fertile, the principal exceptions being the Tierra de Campos, said to be the chief corn-growing district in Spain, occupying the greater part of Palencia in the north-west of Old Castile, and the Tierra de Barros, in the portion of Badajoz lying to the south of the Guadiana in Estremadura, another district noted for its corn.

Except in Leon and the provinces bordering on the Bay of Biscay and the Atlantic irrigation is almost everywhere necessary for cultivation, at least in the case of certain crops. Almost all kinds of vegetables and garden-fruits, oranges, rice, hemp, and other products are generally grown solely or mainly on irrigated land, whereas most kinds of grain, vines, and olives are cultivated chiefly on dry soil. The water used for irrigation is sometimes derived from springs and rivers in mountain valleys, whence it is conveyed by long canals (*acequias*) along the mountain sides and sometimes by lofty aqueducts to the fields on which it is to be used. Sometimes the water of entire rivers or vast artificial reservoirs (*pántanos*) is used in feeding a dense network of canals distributed over plains many square miles in extent. Such plains in Valencia and Murcia are known by the Spanish name of *huertas* (gardens), in Andalusia by the Arabic name of *vegas*, which has the same meaning. Many of the old irrigation works,—such, for example, as those of the plain of Tarragona,—date from the time of the Romans, and many others from the Moorish period, while new ones are still being laid out at the present day. Where no running water is available for irrigation, water is often obtained from wells by means of waterwheels (*norias*) of simple construction. In most cases such wheels merely have earthenware pitchers attached to their circumference by means of wisps of esparto, and are turned by a horse harnessed to a long arm fitted to a revolving shaft. In recent years many artesian wells have been sunk for irrigation. According to Higgin (see Bibliography), the total area of irrigated land in Spain amounts to 4439 square miles. The effect of irrigation is shown by the fact that the irrigated portion of Murcia has a population of 1681 to the square mile as against 101 for the whole province, and Orihuela a population of 767 to the square mile as against 194 for the whole province of Alicante to which it belongs.

Cereals constitute the principal object of cultivation, and among these wheat ranks first, the next in importance being barley, the chief fodder of horses and mules. Both of these grains are cultivated in all parts—on the plains as well as among the mountains, but chiefly on the more level parts of the two Castiles and Leon, and on the plains of the basin of the Guadalquivir. Oats and rye are cultivated only in the higher parts of the mountains, the former as a substitute for barley in feeding horses and mules, the latter as a breadstuff. Maize also is cultivated in all the provinces; nevertheless the total extent of its cultivation is limited, since, being a summer crop, it requires irrigation except in the Atlantic provinces, and other products generally yield a more profitable return where irrigation is pursued. Rice is cultivated on a large scale only in Valencia. Among cereals of less importance are buckwheat (in the mountainous regions of the north), millets, including both the common millet (*Panicum miliaceum*) and the so-called Indian millet (*Sorghum vulgare*, the *jodri* of India, the *durrah* of Africa), and even (in La Mancha) guinea-corn (*Penicillaria spicata*). As to the quantity of cereals produced in the country we are without official information, and the estimates of the average annual production of cereals of all kinds are very discrepant, varying from 250 to 430 million bushels. The average production of wheat alone has been estimated[1] at 177 million bushels, and the average produce of that crop per acre at 11·13 bushels (that of England being about 29 bushels). If these figures can be taken as approximately correct, it follows that the average acreage under wheat in Spain is nearly 16 million acres, or between five and six times the average in Great Britain, which has less than half the area of Spain. The produce per acre just indicated places Spain among those countries of Europe in which the return is least, which is probably fully accounted for by the backward state of cultivation generally and in particular by the small expenditure on manure. As a rule, in fact, the straw left on the ground is the only manure which the land receives.

The cereal and especially the wheat production of the country regularly furnishes a considerable export. During the five years 1879–83 the value of the export of cereals and pod-fruits of all kinds was nearly 3 per cent. of the total value of the exports; but this export is balanced by a large import, especially of wheat flour. In bad years, indeed, the value of the import under this head greatly exceeds that of the export.

In the production of pod-fruits and kitchen vegetables Spain is ahead of all other countries in Europe. The chick pea forms part of the daily food of all classes of the inhabitants; and among other pod-fruits largely cultivated are various kinds of beans and pease, lentils (*Ervum lens*), Spanish lentils (*Lathyrus sativus*) and other species of *Lathyrus*, lupines, &c. The principal fodder-crops are lucerne (*Medicago sativa*) and esparcette (a variety of sainfoin). Clover, particularly crimson clover (*Trifolium incarnatum*), is grown in the northern provinces. Among vegetables garlic and onions take the chief place, and form an indispensable part of the diet of all Spaniards; besides these, tomatoes and Spanish pepper are the principal garden crops. It is upon such crops that the Spanish peasant in general bestows his chief care.

Wine

As regards the quantity of the product wine comes next after cereals among the objects of cultivation in Spain. Here again we are dependent only upon vague estimates of the average amount produced, but usually the average annual Spanish production of wine is estimated at between 440 and 500 million gallons, an estimate which places Spain third (next after France and Italy) among the wine-producing countries of Europe. So far as quantity is concerned the principal wine-producing districts are in the north-east, but the only wines of Spain which have a world-wide reputation are those of the south, and more particularly those which take the name of "sherry," from the town of Jerez, in the neighbourhood of which they are grown. The total area under the vine is estimated at about 3,480,000 acres (or about 2·8 per cent. of the entire surface), and of this total about 772,700 acres belong to the Catalonian provinces, chiefly Barcelona. The provinces which produce most wine are Barcelona, Saragossa, Cadiz, and Malaga, the annual amount of the production being in the order in which the provinces are mentioned.

The official tables distinguish the wines exported from Spain as common wines, sherry and similar wines, and other full-bodied wines (*vino generoso*). The returns of recent years, as will be seen from Table III. given below, show that of late an enormous increase has taken place in this export both as regards quantity and value, this increase being chiefly due to the extension of the export of the commoner wines to France by way of Barcelona.

	Average of Five Years 1874–78.		Average of Five Years 1879–83.		1884.	
	Thousands of Gallons exported.	Value in thousands of Pounds.	Thousands of Gallons exported.	Value in thousands of Pounds.	Thousands of Gallons exported.	Value in thousands of Pounds.
Common wine	40,524	2,547	133,562	7,748	135,432	8,865
Sherry and similar wines	6,446	2,466	5,874	2,137	5,368	1,465
Other full-bodied wines	2,244	470	3,388	879	2,420	493
Total	49,214	5,483	142,824	10,764	143,220	10,823

There is also a large export of grapes and raisins, especially from the southern provinces (Malaga and Almeria). The average quantity of the two together exported in each of the five years

[1] In an article by M. P. A. Delboy in the *Journal of the Statistical Society* for March 1884, translated from the *Journal de la Société de Statistique de Paris*, September 1883.

1879–83 was about 50 millions of kilogrammes (110 million lb), the average value about £1,560,000. The vines whose fruit is intended for table use as grapes or raisins are trained on espaliers or on trees, especially the nettle-tree (*Celtis australis*).

Among fruit-trees the first place belongs to the olive, which is estimated to cover about 3 per cent. of the surface, and accordingly about an equal area to that occupied by the vine. Its range in Spain embraces the whole of the southern half of the tableland, the greater part of the Ebro valley, and a small strip on the west coast of Galicia. Along the base of the Sierra Morena from Andujar to the vicinity of Cordova there run regular forests of olives, embracing hundreds of square miles. The annual production of oil is estimated at 55 millions of gallons, and might be greatly increased in quantity and improved in quality if more attention were bestowed upon the cultivation of the trees and the preparation of the oil. Oranges, excluded from the plateau by the severity of the winter cold, are grown in great quantity on the plains of Andalusia and all round the Mediterranean coast; and figs, almonds, pomegranates, carobs, and other southern fruits are also grown abundantly in all the warmer parts, the first two even in central Spain and the more sheltered parts of the northern maritime provinces. In these last, however, the prevailing fruit-trees are those of central Europe, and above all the apple, which is very extensively cultivated in Asturias, the Basque Provinces, and Navarre. The date-palm is very general in the south-eastern half of the kingdom, but is cultivated for its fruit only in the province of Alicante, in which lies the celebrated date-grove of Elche. In the southern provinces flourish also various subtropical exotics, such as the banana, the West Indian cherimoya, and the prickly pear or Indian fig (*Opuntia vulgaris*), the last frequently grown as a hedge-plant, as in other Mediterranean countries, and extending even to the southern part of the tableland. It is specially abundant on the Balearic Islands. The agave or American aloe is cultivated in a similar manner throughout Andalusia. Cotton is now cultivated only here and there in the south; but, on the other hand, sugar-cane, the cultivation of which was introduced by the Arabs in the 12th century or later, and was of great importance in the kingdom of Granada at the time of the expulsion of the Moors at the close of the 15th century, but has since undergone great vicissitudes, first in consequence of the introduction of the cane into America, and afterwards because of the great development of beet-sugar in central Europe, is now becoming every year more and more of a staple in the provinces of Granada, Malaga, and Almeria. The annual production on the Spanish mainland is estimated at about 75,000,000 lb. Such prosperity as this branch of agriculture at present enjoys is largely due to the protection which it receives at the hands of the Spanish Government. A duty imposed on all imported sugars in 1876, while inflicting a severe blow on the Spanish colony of Cuba, has had the desired effect of stimulating the native production, but according to the law at present in force (passed on June 30, 1882) the amount of this duty, as far as regards the produce of the Spanish colonies, is being gradually reduced, and the duty will be entirely abolished on July 1, 1892.

Sugar.

Among the vegetable products not yet mentioned the most important are the mulberry, grown in almost all provinces, but principally in those bordering on the Mediterranean, and above all in Valencia, the chief seat of the Spanish silk production and manufacture; hemp and flax, grown chiefly in Galicia and other northern provinces; among dye-plants, madder, saffron, woad (*Isatis tinctoria*), and wild woad or dyer's weed (*Reseda luteola*); ground-nuts (*Arachis hypogæa*), grown for their oil, for the preparation of which the nuts are exported in considerable quantity to France; liquorice, cummin, colocynth, &c.

The rearing of animals has likewise been receiving in recent years increased attention at the hands of both Government and people, though here also we are without recent official statistics to show the consequent advance. The middle of the present century appears to have been the time when this industry was at its lowest point, and the following table (IV.) shows the increase in numbers that has taken place at certain subsequent dates for which official returns or estimates are obtainable:—

Live-stock.

	1858.	Enumeration Sept. 24, 1865.	Estimate 1878.
Horses	298,722	672,559	700,000
Mules	499,172	1,001,878	1,200,000
Asses	496,516	1,290,814	1,300,000
Cattle	1,557,033	2,904,598	3,000,000
Sheep	16,443,950	22,054,967	23,000,000
Goats	3,034,701	4,429,576	4,500,000
Swine	1,272,978	4,264,817	4,500,000
Camels	...	3,104	...

In 1865 horses were reared chiefly in the provinces of Seville, Coruña, and Cadiz, mules in Toledo, Cuenca, Teruel, Saragossa, and Badajoz, asses in Badajoz, Toledo, Murcia, Seville, and Granada, cattle in Oviedo, Coruña, Leon, and Pontevedra, sheep in Badajoz, Leon, Teruel, Soria, and Saragossa, goats in Caceres and Badajoz, camels mainly on the Canary Islands, the total number on the Spanish mainland at the date of the enumeration being less than a hundred. Badajoz was the richest of the provinces in live-stock of all kinds, containing about one-fourteenth of the total number of domestic animals in the kingdom.

The only animals belonging to Spain still noted for their excellence are mules and asses, which are recognized as the best to be found anywhere. The quality of the horses has been greatly improved, however, since the establishment of Government studs more than forty years ago. Besides the cattle reared throughout the kingdom for field-labour and (in the northern provinces) for regular dairy farming, bulls for the great national pastime of bull-fighting are specially reared in many parts of the country, particularly in the forests of Navarre, the mountains separating the two Castiles, the Sierra Morena, and the Serrania de Ronda in Granada, and also in separate enclosures on the islands of the Guadalquivir. Spanish sheep, which in former times enjoyed so high a reputation and formed so important a part of the national wealth, are far from having the same relative importance at the present day, though sheep-rearing also is sharing in the general rise of agricultural and other industries. The most famous breeds of Spanish sheep are the merinos or migrating sheep, which once brought immense revenues to the state as well as to the large proprietors to whom they mostly belonged. These sheep, which are distinguished by their long slim legs and still more by their long wool, are pastured in different districts in summer and winter. Their winter quarters are in the lower parts of Leon and Estremadura, La Mancha, and the lowlands of Andalusia, their summer quarters the more mountainous districts to the east and north (Plasencia in the province of Caceres, Avila, Segovia, Cuenca, Valencia), which are not so much affected by the summer droughts of the Peninsula. The mode of the migration and the routes to be followed are prescribed by law. Each herd consists of about 10,000 individuals, under the command of a *mayoral*, and is divided into sections containing about 1000 each, each section under the charge of an overseer (*capataz*), who is assisted by a number of shepherds (*pastores*) attended by dogs. The shepherds, rudely clad in a sleeveless sheepskin jacket, the wool outside, and leather breeches, and loosely wrapped in a woollen mantle or blanket, are one of the most striking and characteristic objects in a Spanish landscape, especially on the tableland. The migration to the summer quarters takes place at the beginning of April, the return at the end of September. At one time the owners of merino herds enjoyed the right of pasturing their herds during their migrations on a strip of ground about 100 yards in breadth bordering the routes along which the migrations took place, a strip which had accordingly to be left uncultivated; but this right (the *mesta*, as it was called) was abolished in 1836 as prejudicial to cultivation. Since that date the migrating sheep have been compelled to keep the roads. The average quantity of wool exported in the five years 1879–83 was about 9,000,000 lb. Even in the best of the years (1883–84) the total export of Spanish wool to all countries was only about one-thirtieth of the total average import of that commodity into the United Kingdom during the corresponding period.

Bees are reared chiefly on the cistus heaths and the districts abounding in *tomillares* (see p. 297). The rearing of the silkworm on the mulberry trees of the Mediterranean provinces has already been referred to; the total annual production of raw silk in Valencia is estimated at 1,500,000 lb, in Murcia at 500,000 lb, and in Catalonia at 200,000 lb. The rearing of the cochineal-insect, which was introduced into southern Spain in 1820, is being carried on with more and more success, especially round Malaga, Velez-Malaga, and Motril.

Fisheries.—The catching of tunnies, sardines, anchovies, and salmon on the coasts employs large numbers of fishermen, and the salting, smoking, and packing of the first three give employment to many others. Spanish fishermen likewise dive for coral on the coasts of Andalusia and the north of Africa. The fishermen of Catalonia and Valencia have the greatest reputation for their skill. The centre of the principal tunny fisheries of Spain is a small rocky islet called Cristina about three leagues from the mouth of the Guadiana. The fishing lasts from May to August, that of sardines from August to the end of January. The average value of the export of fish in 1879–83 was nearly £120,000.

Fisheries.

Minerals.—The mineral resources of Spain are vast and varied, but are as yet far from being adequately turned to account. No European country produces so great a variety of minerals in large amount, and in the production of copper ore, lead ore, and quicksilver Spain heads the list. In the production of salt and silver it is excelled only by Austria-Hungary, and, as regards silver, not always even by it. The following table (V.) gives particulars regarding the production of some of the principal minerals in the years named:—

	1863.	1883.					
	Thousands of Metric Tons[1] produced.	Thousands of Metric Tons produced.	Value in thousands of Pounds at the Mine.	Persons employed.			Number of productive Mines.
				Men.	Women.	Children.	
Iron ore	223	4,526	506·1	12,157	472	2,550	766
Lead ore	270	280	1,405·2	14,874	110	2,538	871
Argentiferous lead ore	40	25	157·5	3,578	72	192	92
Silver ore	...	23	88·3	539	2	14	16
Copper ore	246	2,455	1,094·5	9,716	684	1,265	38
Mercury	169	23	209·1	2,921	1	309	12
Zinc	481	54	56·4	1,572	111	297	97
Common salt	...	20[2]	17·4	371	94	108	53
Coal	...	1,944	463·6	7,235	680	1,365	465

Of the minerals mentioned in the preceding table it will be seen that iron and copper ores are those which show the greatest advance as compared with 1863. The production of these two ores advanced with rapid strides during the ten years 1874–1883. In the former year the production of both stood at about 500,000 tons. The iron ore is chiefly obtained in Vizcaya and Murcia, the former yielding by far the greatest quantity (in 1883 four-fifths of the total production of Spain), but the latter yielding the best quality (average value of Murcian iron in 1883, 5 pesetas = 4s. per ton at the mine, as against 2·25 pesetas, or 1s. 6½d., the average for the Vizcayan ore). All except a small fraction of the copper ore is obtained from the province of Huelva, in which lie the well-known mines of Rio Tinto. The lead ore is obtained chiefly in Murcia and Jaen. The famous mines of Linares belong to the latter province. Argentiferous lead is chiefly produced in Almeria, which also produces most of the silver ore of other kinds except argentiferous copper ore, which is entirely obtained from Ciudad Real. The still more celebrated cinnabar (mercury) mines of Almaden, the richest in the world till the discovery of the Californian mines of New Almaden, belong to Ciudad Real, and this province, together with that of Oviedo, furnishes the whole of the Spanish production of this mineral. Spanish salt is partly marine, partly derived from brine-springs and partly from rock-salt, of which last there is an entire mountain at Cardona in Barcelona. Coal is chiefly obtained in Oviedo, Palencia, and Cordova. The production is quite insignificant compared with the extent of the coal-bearing beds, which are estimated to cover an area of about 3500 square miles, of which nearly a third belongs to Oviedo, between one-eighth and one-seventh to Burgos and Soria, and about one-tenth to Teruel and Cordova. Among the less important Spanish minerals are manganese (chiefly in Ciudad Real), antimony, gold, cobalt, sodic sulphate, sulphate of barium (barytes), phosphorite (a valuable manure, a variety of apatite found in Caceres), alum, sulphur, kaolin, lignite, asphalt, besides a variety of building and ornamental stones.

The total number of mines (including springs for the production of mineral waters) in operation in Spain in 1883 was 2620, and the total number of labourers employed in them in that year was 57,626. The working of the mines is carried on under state supervision. For this purpose the whole kingdom, including the Balearic and Canary Islands, is divided into three sections, and each of these into four districts. Each section is under the charge of an inspector-general of the first class, and each of the districts under an inspector of the second class. By the law of July 6, 1859, a large number of important mines, including all the salt-works and rock-salt mines, were reserved as state property, but financial necessities have compelled the Government to surrender one mine after another, so that at present the state possesses only the cinnabar mines and some salt-works. Many of the mines have been granted to foreign (principally English) companies.

Of the metallic ores produced in Spain, those of lead and mercury are the only ones which are chiefly reduced in the country. Though the working of iron is an industry of old standing in Spain, and a primitive kind of forge takes its name from Catalonia (see IRON), the total production of iron, refined and unrefined, in Spain in 1883 was only 200,000 tons, and by far the greater part of the Spanish ore is exported, as will be seen by comparing Tables V. and VI. The production of iron in Spain is, however, rapidly and steadily increasing, the total amount in the first year of the decade ending in 1883 having been less than 60,000 tons. During the same decade the amount of copper produced in the kingdom increased from about 5000 to 32,000 tons. The amount of steel produced in the kingdom is quite insignificant (little more than 400 tons in 1883). The following table (VI.) gives particulars regarding the export of the chief mineral products of Spain in 1883:—

[1] A metric ton = 1000 kilogrammes = 2205 lbs., or 35 lbs. less than a ton avoirdupois.

[2] Exclusive of 100,000 tons produced in the state salt works of Torrevieja (Alicante).

Minerals.	To United Kingdom.	To France.	Total export to all Countries.
	Metric Tons.	Metric Tons.	Metric Tons.
Iron ore	2,895,000	511,000	4,226,000[3]
Argentiferous galena	2,400	2,000	13,000
Lead ore	...	1,400	2,500
Copper ore	555,000	...	565,000
Zinc ores—			
Calamine	...	20,000	30,000[4]
Blende	...	...	15,000[4]
Antimony ore	70	...	70
Manganese	3,300	...	4,500
Phosphorite	1,000	...	56,000[5]
Iron	...	13,000	30,000
Argentiferous lead	31,000	20,000	51,000
Non-argentiferous lead (unwrought)	51,000	25,000	77,000
	Oz.	Oz.	Oz.
Gold	243	522	765
Silver	190,595	549,090	739,686
	Lbs.	Lbs.	Lbs.
Mercury	910,037	23,924	1,129,932[6]
Wrought-iron and steel	7,440	68,708	186,610
Lead in tubes and other forms	...	...	546,425[7]
Copper, brass, and bronze in plates, tubes, and other forms	171,403	187,844	385,551

Manufactures.—At the census of 1877 only about 3 per cent. of the classified population was returned as engaged in manufacturing industries. The principal manufacture is that of cotton, and the following table, which shows the position of Spain relatively to the other countries of Europe with reference to this branch of manufacturing industry, will also serve to some extent as an index of the rank belonging to Spain in mechanical industries generally:—

Manufactures.

TABLE VII.—*Average Import of Raw Cotton for Home Consumption in the Principal Countries of Europe during* 1879–1883.

	Millions of lb.		Millions of lb.
United Kingdom	1460·8	Spain	100·3
Germany	336·9	Holland	94·8
France	309·6	Belgium	54·7
Russia	242·6	Switzerland	53·8
Austria-Hungary	176·6	Sweden	21·6
Italy	116·0		

The average import per head of population during the same period was as follows:—United Kingdom, 41·7 lb; Holland, 23·6; Switzerland, 18·7; Belgium, 9·9; France, 8·2; Germany, 8·2; Spain, 6·0; Austria-Hungary, 4·6; Sweden, 4·6; Italy, 4·0; Russia, 2·9. It thus appears that Spain occupies the seventh place in the consumption of raw cotton, both in absolute amount and relatively to population. In the five years 1874–78 the average import of raw cotton into Spain was 79,690,000 lb, so that the increase of the average in the succeeding period of five years amounted to 25·8 per cent. Nevertheless the products of this branch of industry in the country do not yet suffice to meet the wants of the population. There is every year a considerable import of cotton manufactures, while the export of this commodity is too trifling to be included in the list of chief exports. The maritime provinces, being those most favourably situated for the import of coal, and, where necessary, of raw material, are the chief seats of Spanish manufactures, and the cotton industry is principally centred in Catalonia and, above all, in Barcelona and the surrounding district. This region is indeed the only distinctively manufacturing portion of Spain, and in it also the manufactures of linen and woollen goods and of lace are mainly carried on. Flax-spinning and the manufacture of linen goods are pursued to a considerable extent in Galicia and Asturias. The silk industry, which is likewise of high importance, but inadequate to meet the home demand for silk fabrics, is chiefly centred in Valencia, next to which come Murcia and Seville. Metal industries are chiefly carried on in the Basque Provinces, where various articles in iron and copper are made. A royal factory for the making of artillery and other weapons of war exists at La Trubia, in Asturias. Toledo is still noted, as it has been from the earliest times, for the excellence of its sword-blades. The manufacture of leather, another Spanish industry of old renown, is still extensively carried on in Catalonia and elsewhere, but the making of *cordwain* has long ceased to be a specialty of Cordova, from which it takes its name. Boots and shoes and other articles in leather form the only considerable export of manufactured goods. Gloves are made in great quantity in Madrid, shoes in the Balearic Islands. The paper industry is very flourishing, especially in Catalonia and Valencia. Esparto is twisted into cords and ropes, and plaited into a variety of other articles, in Murcia and Alicante and elsewhere. The refining of cane-sugar is largely carried on in Barcelona, Malaga, Almeria, and Granada, and

[3] Of this total 478,000 tons were exported to Holland, 142,000 to Belgium, and 199,000 to the United States.

[4] All the blende and one-third of the calamine were exported to Belgium.

[5] Chiefly to Portugal.

[6] Of this total 158,760 lbs. were exported to Belgium.

[7] Chiefly to Cuba.

the making of olive oil and brandy is general. So also is the making of charcoal, which in most parts of Spain takes the place of coal for all ordinary heating purposes, and even in some cases in mechanical industries. The large furnaces for the distillation of mercury at Almaden were at one time, if they are not still, heated solely with charcoal obtained from the *Cistus ladaniferus*. Among manufacturing industries of less importance are the making of porcelain (at the royal factory of Moncloa, near Madrid), glass and earthenware, soap, chocolate, and cork-stoppers. The manufacture of tobacco, which is a royal monopoly, is carried on at seven factories—at Seville, Madrid, Santander, Gijon, Coruña, Valencia, and Alicante, —that of Seville being the largest.

Foreign Commerce.—Possessing such varied resources as it does, and being peculiarly favourably situated for commerce, Spain might be expected to take a leading place among the trading communities of Europe. This it did at one time hold, when the treasure acquired by the discovery of America and the conquest of Mexico and Peru was squandered in the purchase of various commodities from England, the Netherlands, and other countries. This period of outward prosperity, however, was also that in which the seeds of decline were planted. The expulsion of the Moors from Granada was contemporaneous with the discovery of the New World. Hundreds of thousands of Moors were driven out from the country on subsequent occasions, and in the act Spain lost the best of her agriculturists and handicraftsmen. For the stay-at-home industry by which the resources of the land could be developed as they had been by the Moors the Spaniards of that day had no taste. Excited by the hope of rapidly-acquired wealth and the love of adventure, the more enterprising spirits embarked upon a career of discovery, and agriculture and manufacturing industry fell into contempt. The mercantile supremacy of the country was thus short-lived. Political causes supervened to hasten the country's decline, and it is only within recent times, since the introduction of railways, that the commerce of the country has begun to revive. The average value of the imports and exports combined during the period of ten years from 1875 to 1884 was equal to rather less than £2 per head,[1] as against about £18 per head during the same period in the United Kingdom; but even this state of matters shows a considerable advance compared with 1859, when the total value of the exports and imports was equal to only about £1, 12s. per head. The following table (VIII.) gives total value in round numbers of imports and exports, with percentages from and to Great Britain and France, at various dates from 1849 (the year after the opening of the first railway in Spain) to 1884:—

Years.	Value of Imports.	P. c. from Britain.	P. c. from France.	Value of Exports.	P. c. to Britain.	P. c. to France.
1849	£6,360,000	...	...	£5,240,000	...	...
1860	14,833,000	25	25	10,982,000	29	22
1865	16,262,000	26	24	12,864,000	29	27
1870	20,877,000	34	29	15,982,000	39	16
1875	22,819,000	34	26	18,081,000	34	16
1880	26,482,000	18	28	25,999,000	32	35
1881	26,023,000	21	23	26,836,000	33	38
1882	33,667,000	21	27	30,615,000	31	41
1883	32,[illegible],000	21	26	28,779,000	28	42
1884	31,156,000	21	25	24,768,000	27	43

On the average of the five years 1879–83 the principal exports, in the order of their importance, were wine, metals and mineral ores, fruit, oil, and cork,—wine being by far the most valuable; the principal imports, in the order of their importance, raw cotton, brandy and spirits, sugar, machinery, tobacco, coal and coke, timber, cod-fish, iron (wrought and unwrought), hides and skins, chemical products, cocoa, cotton manufactures, and mineral oils. The large imports of cod-fish (from Norway and British North America) are due to the large consumption of fish, especially during Lent; the great demand for mineral oil as a source of light is a consequence of the dearness of coal. It is interesting to note the high place which cocoa takes among the imports. The average import of that commodity is nearly double that of coffee, and that of tea is quite insignificant (in 1884 only 155,777 lbs.).

The foreign commerce of Spain is chiefly carried on with the United Kingdom, France, Cuba, and the United States. In the ten years 1873–82 France, the United Kingdom, and the United States together (in the order named) furnished on an average rather more than 67 per cent. of the imports, and the United Kingdom, France, and Cuba (also in the order named) received on an average during the same period 75 per cent. of the exports. Next to the three countries mentioned, those which had the largest share in the import trade during the same period were Cuba, Portugal, and the Argentine Confederation, and in the export trade Portugal, the United States, and the Argentine Confederation. From the United Kingdom Spain received in 1884 chiefly coal and coke, iron and articles in iron (articles in wrought-iron and steel, however, in rather greater amount from Belgium), locomotives (also from Belgium), jute and jute yarn, hemp and flax yarn, sulphur (for use in the vineyards), and alkaline carbonates; from France, chiefly wool and woollen goods, silk and silk goods, and wheat flour; from the United States, petroleum, raw cotton, and tobacco (also from the Philippine Islands); from Cuba chiefly sugar and fine woods; from the Argentine Confederation chiefly untanned hides and skins and animal fats. Wheat was received chiefly from Russia, and spirits from Germany, which also supplied a large proportion of the sugar consumed in the country.

Of the principal export of Spain—wine—by far the greater proportion goes to France. In 1884 that country received four-fifths of the common wine, and the quantity is rapidly increasing. The wine classed as full-bodied also went chiefly to France, but that entered under the head of sherry and similar wines was imported chiefly by the United Kingdom. The destination of the minerals is shown above (Table VI.). Oranges were sent mainly to the United Kingdom, France, the United States, and Germany; raisins chiefly to the United States and the United Kingdom; olive oil chiefly to Cuba, Denmark, and France, but in considerable quantity also to other countries; esparto grass almost entirely to England; cork and wool chiefly to Portugal and France; cattle chiefly to Portugal and England; raw silk mainly to France; and wheat flour and chickpease chiefly to the Spanish West Indies.

The foreign trade of the country is of course carried on mainly by sea. In 1884 more than 80 per cent. both of the imports and exports were transmarine, and of the land commerce by far the largest proportion is with or through France. The smallness of the trade with Portugal, which on an average furnished less than 1½ per cent. of the imports and received less than 5½ per cent. of the exports during 1873–82, is partly due no doubt to the similarity of the chief products of the two countries, but also to the defectiveness of the communications between the two countries, a circumstance largely accounted for by the physical conditions already alluded to. The introduction of railways has as yet only partially served to bring the countries into more intimate relations. On the first of January 1885 not a single line connected with the general system of Spanish railways entered Portugal north of the Tagus, though Lisbon was connected by rail both with Madrid by way of Caceres and with Valencia by way of Ciudad Real and Albacete. At the date mentioned, however, a railway intended to connect Salamanca with the mouth of the Mondego was in course of construction, and a branch from the Portuguese coast-line in the north was in process of being connected with the Spanish railway to Coruña, and by way of Leon with other northern seaports.

The foreign commerce of Spain is greatly hampered by the number and amount of the custom duties, which are imposed on all the principal articles both of export and import. On imports the duties vary from 6 to 28·33 per cent. of the value of the commodities, the highest duties being upon cotton yarn, sugar, and cocoa (to protect home or colonial industries). For protective reasons high import duties are levied also on iron manufactures, woollen manufactures, live animals, coffee, and wine. Export duties are levied mostly in proportion to quantity. In the case of sherry it amounts to 200 pesetas (£8) per hectolitre (22 gallons); full-bodied wines pay 112 pesetas per hectolitre, and ordinary wines 33 pesetas per hectolitre. In the case of "the most favoured" nations slight reductions are made in the amount of the duties, and under a treaty which came into operation on the 15th of August 1886 Great Britain enjoys the benefit of the most favoured nation treatment in consideration of a reduction in the import duties levied at British ports on Spanish wines.

Shipping and Navigation.—Relatively to the extent of its coast-line and the number and excellence of its seaports (of which there are sixty on the Mediterranean coast, fifty-six on the Atlantic), the amount of shipping belonging to Spain is small. In 1884 the total register tonnage was 524,000 tons, not much more than that of Sweden at the same date, and only about half that of Italy. The number of vessels was 1803, including 301 steamers. Nearly half the transmarine imports (reckoned by value) and 58 per cent. of the transmarine exports were carried under a foreign flag. The following table (IX.) gives further particulars as to the shipping of 1884:—

t	Metric Tons (in Thousands) of Cargo.		Percentage of Total.	
	Discharged.	Loaded.	Imports.	Exports.
National	623	766	22·6	13·0
British	1394	3866	50·5	65·7
Dutch	11	54	0·3	0·9
French	174	668	6·3	11·3
German	76	123	2·7	2·1
Greek	41	2	1·5	...
Italian	131	165	4·7	2·8
Norwegian	121	67	4·3	1·1
Russian	60	27	2·1	0·4
Swedish	57	39	2·1	0·7
Total (under all flags)	2760	5880		

[1] An increase of the population since 1877 at the rate of ·45 per cent. per annum allowed for in making the calculation.

The following table (X.) gives the number, &c., of ships entered and cleared with cargo at Spanish ports in 1884:—

Entered from	Under the Spanish Flag.			Under Foreign Flags.		
	No. of Vessels.	Capacity in Tons.	Metric Tons Discharged.	No. of Vessels.	Capacity in Tons.	Metric Tons Discharged.
Algeria	653	74,122	17,883	140	69,360	4,937
Belgium	...	...	...	288	191,122	54,387
Cuba	186	199,744	37,522	11	29,121	498
France	1,974	711,241	140,055	1,058	452,970	169,631
Norway	17	3,551	2,635	261	81,796	35,850
Philippine Islands	97	194,278	19,256	...	...	...
United Kingdom	1,120	712,363	240,368	1,721	960,135	1,256,285
Total from all countries	5,652	2,376,861	623,156	5,470	2,694,876	2,137,222

Cleared for	Under the Spanish Flag.			Under Foreign Flags.		
	No. of Vessels.	Capacity in Tons.	Metric Tons Loaded.	No. of Vessels.	Capacity in Tons.	Metric Tons Loaded.
Algeria	536	76,585	13,476	36	49,128	621
Belgium	86	60,548	17,893	145	110,538	119,105
Cuba	439	612,238	97,533	7	14,854	171
France	2,347	1,126,607	226,713	1,858	936,247	695,468
Norway	...	...	...	73	28,524	24,167
Philippine Islands	94	213,245	8,849	...	...	...
United Kingdom	907	638,318	200,576	3,790	2,968,857	3,132,671
Total for all countries	5,266	3,500,207	766,303	7,814	5,638,259	5,114,082

The total number of vessels entered with cargo under the national and foreign flags in 1884 was thus 11,122, and the total quantity of cargo discharged by them at Spanish ports 2,760,378 metric tons, the total number of vessels cleared with cargo 13,110, and the total quantity of cargo taken on board by them at Spanish ports 5,880,385 metric tons. Of the total number of vessels entered with cargo 6768 were steamers, which discharged 2,052,937 tons of cargo, and 4354 were sailing vessels, which discharged 707,441 tons of cargo. Of the number of vessels cleared with cargo 9506 were steamers, which took on board at Spanish ports 5,300,366 metric tons of cargo, and 3604 were sailing vessels, which took on board 580,019 metric tons of cargo.

Roads. *Communication.*—The communications in Spain have been greatly improved since the beginning of the present century. In 1808 there were little more than 500 miles of carriage roads, but now there are over 28,000. At the end of 1882 14,600 miles were state roads, all well built and well maintained, and 3027 miles of state roads were in course of construction. The aggregate length of the provincial roads then completed was 2714 miles, and that of the communal roads 10,760 miles. In the mountainous districts, where there are only narrow paths, frequently rather steep, it is still not uncommon to meet long trains of mules.

Railways. Railways have made great advance since the middle of the century. The oldest line is that from Barcelona to Mataro, 17½ miles, which was opened on the 28th of October 1848. Of late years railway construction has been going on pretty rapidly. In 1880 the number of miles open for traffic was 4645, and in the four succeeding years it was 4800, 4867, 5118, and 5386. All the Spanish railways belong to private companies, but most of them have obtained subventions from the Government, to which most of the Spanish railways will revert at the end of a term of ninety-nine years. In granting a concession for a new railway the regular practice is to give it to whatever company offers to construct it with the lowest subvention. The total amount of the subventions for railway construction up to the end of 1884 was £25,676,690. For strategical reasons the Spanish gauge was made different from that of France.

The postal and telegraphic systems have been placed on the same footing as in other civilized countries. The total number of letters, post-cards, and samples (including official and international letters, &c.) that passed through the post office in 1882–83 was 111 millions. The length of state telegraphic lines on January 1, 1883 was 10,664 miles, and of wires 25,989 miles. The number of messages in 1883 was 3,020,000, nearly 80,000 being transit messages and 654,000 from or to foreign countries.

Army and Navy.—Military (or naval) service is obligatory on all Spaniards, but in certain cases recruits are allowed to buy themselves off. According to the law of January 8, 1882, the period of service for all arms is twelve years, of which three years must be passed with the colours, three years in the active reserve, and six years in the second reserve. The minister of war is empowered, however, on financial grounds to transfer troops serving with the colours to the active reserve before the period of three years' service has been fulfilled. Liability to service begins with the first day of the calendar year in which the twentieth year is completed. Persons holding a civil appointment or pursuing any handicraft independently are allowed to buy themselves off for 1500 pesetas (£60), and brothers are allowed to take each others' place in service, or to exchange the numbers that have fallen to them by lot in the raising of the recruits for the year. For carrying out the law Spain is divided into fourteen military districts, the boundaries of which do not at all coincide with those of provinces.

The actual strength of the regular army is fixed at about 94,000 men for the kingdom (including the Balearic and Canary Islands), but this number may be brought up to 400,000 in time of war. The strength of the regular army in Cuba is about 22,500 men, in Porto Rico about 3200, and on the Philippine Islands about 8200. The active army is divided into 140 battalions, besides the same number of depôt and reserve battalions; 24 cavalry regiments, and the same number of depôt squadrons and reserve cavalry regiments; 9 regiments of field artillery, and 3 of mounted artillery, besides 6 reserve regiments of artillery, and 10 battalions of engineers. There are also 13 battalions of fortress artillery.

The following statement shows the strength of the navy in 1885:—*First Class*—4 ironclad frigates (55 guns), 4 screw frigates (97 guns), 6 cruisers (48 guns); *Second Class*—5 frigates (104 guns), 3 cruisers, 12 corvettes and troopships (39 guns); *Third Class*—1 ironclad monitor (3 guns), 1 floating battery, 79 gunboats, transports, &c. (124 guns).

There were at the same time building one ironclad of the first class, five cruisers of the second class, besides torpedo boats, tugs, and other vessels. For the defence of the colonies, and more particularly those of the West Indies, there are thirty-five screw gunboats, all of the same size (about 5 feet draught), and each carrying a 100-pounder pivot-gun at the bow.

The navy is manned by conscription in the maritime districts. In 1885 the number of seamen was about 14,000, that of marines about 7000.

Religion. *Religion.*—Roman Catholicism is the established religion, and the church and clergy are maintained by the state. The immense majority of the people (in 1877 16,603,959 out of a total of 16,634,345) are professed adherents of this faith, so that, so far as numbers go, Spain is still the most "Catholic" country in the world, as it has long been styled. According to Willkomm, however, religious indifferentism is now very general, not only among the educated but also among the lower classes; and of the bigotry and fanaticism which in former times led to the destruction of hundreds of thousands of victims at the hands of the Inquisition the only traces at the present day are to be found, says the same authority, in the provinces of Aragon, Navarre, and Estremadura, where the clergy still exercise a considerable influence over the lower orders. By the constitution of 1876 non-Catholics are permitted to exercise their own forms of worship, but they must do so in private and without making any public announcement of their services. At the census of 1877 the total number of Protestants was 6654, a number below that of those entered as rationalists (9645). There are nine archbishoprics (Toledo, Madrid, Burgos, Granada, Santiago, Saragossa, Seville, Tarragona, Valencia, and Valladolid) and forty-five bishoprics. The archbishop of Toledo is primate.

Education. *Education.*—By the law of July 17, 1857, primary education was declared compulsory on all children of school age (originally fixed at six to nine) and made free to the poor, but the results of the census of 1877, though showing an advance in elementary education as compared with previous years, makes it clear that this law is far from being efficiently carried out. At that date the total number who could both read and write was 4,071,823, equal to 24·48 per cent. of the population, as against 19·97 per cent. in 1860. The provinces in which the percentage of those able to read and write was greatest were Alava, Burgos, Pontevedra, Madrid, Santander; those in which it was least were the Canary Islands, Granada, Malaga, Almeria, Alicante, Castellon.

There are ten universities—those of Madrid (founded in 1836 to replace the long-celebrated university of Alcala), Barcelona, Granada, Salamanca, Seville, Valencia, Santiago, Saragossa, Valladolid, and Oviedo; that of Madrid is now the most celebrated and the best attended, while that of Salamanca, so renowned in the Middle Ages, is now in least repute.

Political Administration.—Spain is an hereditary monarchy, the constitution of which rests on the fundamental law of June 30, 1876. The sovereign becomes of age on completing his or her sixteenth year. The sovereign is grand-master of the eight Spanish orders of knighthood, the principal of which is that of the Golden Fleece (Toison de Oro), founded in 1431 by Philip of Burgundy. The chain of this order surrounds the royal arms, in which are included, besides the arms of Castile, Leon, Granada, and the lilies of the royal house of Bourbon, the arms of Austria, Sicily, Savoy, Brabant, and others. The national colours are red and yellow. The flag is divided into three horizontal stripes—two red stripes, with a yellow one between bearing the royal arms.

The legislative authority is exercised by the sovereign in conjunction with the *cortes*, a body composed of two houses—a senate