CHAPTER IV.

PRODUCTION AND COMMERCE.

DETAILS concerning the different modes of cultivating and curing, and of the extent of the production and commerce in tobacco in the various countries, will best be given in the alphabetical order of the countries.

Afghanistan.—The tobacco grown at Kandahar is celebrated in all the neighbouring states for its mild and agreeable flavour, and is largely exported to Hindustan and Bokhara. Three kinds are grown, viz.: - Kandahari, Balkhi, and Mansurabadi. Of these, the last named is the most esteemed, and fetches the highest price, viz. 6 lb. for 2s.-4s. The Kandahari sells for a little less than half this price, and the Balkhi for a little more. The Mansurabadi is not much exported, being mostly consumed in the country. The cultivation is conducted with great care, and the same plants yield two crops of leaves in the year. Of these, the first, which is called sargul, is the best, the leaves having a mild and sweet flavour; it is mostly consumed by the wealthy classes, or exported. The second crop is called mundhai: the leaves have a tough and fibrous texture, and a strong acrid taste; it is usually smoked by the poor people, and is also made into snuff. The plants are raised from seed in small beds, prepared for the purpose by careful manuring with woodashes and stable-refuse mixed together. From these nurseries, the young plants are transplanted into the

fields, previously prepared for their reception, the earth being laid out in regular ridges and furrows. The plants are fixed into the sides of these little ridges, and watered by means of the intervening furrows. Often the young plants, packed in moist clay, and bound up in straw, are conveyed to distant parts of the country; but the produce of these, it is said, does not equal that of the plants reared at Kandahar. About six weeks after transplanting, that is, about May-June, the first crop is reaped, the whole plant being cut away about 6 inches from the ground, and only some 5 or 6 of the lowest leaves being left. Each plant, as cut, is laid on the ridge, and here each side is alternately exposed for a night and a day to the effects of the dew and sun, by which their green colour becomes brown. After this, they are collected in large heaps in a corner of the field, and covered over with mats, or a layer of straw, &c., and allowed to remain so for 8-10 days, during which the stems shrivel, and give up their moisture to the leaves. At the end of this time, the heaps are conveyed away into the villages, where the stalks are separated from the leaves, the latter are then dried in the shade and tightly packed in bundles about 14 inches square, and in this shape are sold by the grower. After the first crop is gathered, the ground is turned with a spade, well manured, and freely irrigated. In due course, the old stems shoot up and produce fresh leaves, and in six weeks or two months, the second crop is cut. Sometimes, though seldom, a third crop is realized, but the quality of this tobacco is very inferior, and it is only fit for making snuff.

Africa.—The tobacco-plant extends throughout Central

and East Africa, wherever the equinoctial rains fall. It is cultivated to some extent in the Bondei of Usambara, but seems to be the special product of the Handei district, whence considerable quantities are sent to Pangani for export. Usambara also exports to Zanzibar stiff, thin, round cakes, which have been pounded in wooden mortars, and neatly packed in plaintain-leaves. It is dark and well-flavoured. The Cape of Good Hope, in 1865, had 933 morgen (of 2.116 acres) under tobacco, yielding 1,632,746 lb.; in 1875, 1243 morgen afforded 3,060,241 lb. Tobacco is grown considerably in Oudtshorn and other districts of the Cape Colony, and on the warmer farms in the Transvaal, but to the greatest extent on the coast. The supply is already sufficient for local demands, and tobacco promises to become a staple of South African agricultural industry.

A recent writer on this portion of the British colonies says, "tobacco, though cultivated as an article of commerce for export, has not met with much success, as the passion for the weed has become deeply rooted in the natives of the coast and interior, so that it is cultivated by them in many parts of the province for their own consumption, and forms a regular article of sale and barter amongst themselves." The tobacco leaf is dried very carelessly by the natives, and is made up in a peculiar way, as follows:—It is first plaited, and when the plait has reached a length of 3-4 feet, it is wound up in the form of a spiral. Gradually drying in this shape, it preserves its form without any binding, and it is unwound and cut off in short pieces when required for use or sale. This mode of preparation is invariable among the Makua

o'Neill says that "were the natives instructed in some simple method of drying and pressing the leaf, the valuable product would be probably brought down by them in considerable quantities, affording, as it would do, a larger margin for profit than does the culture of oil seeds, and it might become a regular article of colonial manufacture and export."

Tobacco-growing is a very important industry in Algeria. The culture and manufacture are quite free, but the French Government buys all the best produce, for manufacture and sale by the State factory in Paris. The cultivation continues to increase, and is highly remunerative where the land is capable of irrigation. In 1876-7, the 1889 Europeans engaged in it cultivated 2471 hectares (of $2\frac{1}{2}$ acres), and produced 2,782,500 kilo. (of $2\cdot 2$ lb.); the 8021 natives cultivated 4154 hectares, which yielded 1,889,124 kilo. The year 1877-8 was less favourable, and the area decreased by 425 hectares. Still worse results were expected in 1878-9, owing to scarcity of water. The kind most grown is called chebli. The produce per hectare of fine and chebli is estimated at 6-8 quintals; the other kinds give 10-12. The exports in 1877 and 1878 respectively were as follows:-Manufactured, 121,090 kilo., and 124,117 kilo.; unmanufactured, 3,445,441 kilo. and 1,509,266 kilo. In 1879, 1087 Europeans planted 3180 hectares, and gathered 1,226,181 kilo.; 11,079 natives planted 6584 hectares, and produced 1,384,802 kilo.; the exports were 2,481,218 kilo. unmanufactured, and 146,345 kilo. manufactured.

The figures for 1883 were:—1240 European planters

cultivated 2278 hectares and produced 2,250,671 kilo., whilst 8735 native planters cultivated 6416 hectares and produced 2,977,067 kilo., the total product being 5,227,738 kilo. This does not differ to any great extent from the result of the previous year. Tobacco is capable of being produced in much greater quantity, says the British Consul, but the market is limited. The colonists themselves and the Government appear to be the only purchasers.

Australia.—In the year ending 31st March, 1879, New South Wales had 835 acres under tobacco, and the crop amounted to 7932 cwt. In the same year, Victoria cultivated 1936 acres, which yielded 15,662 cwt., valued at 43,853l. Queensland grew 36 acres of tobacco in 1879.

Austro-Hungary.—The manufacture and sale of tobacco is a Government monopoly in the Austro-Hungarian empire, and the revenue thus derived is the most lucrative item of the indirect income of the State. The only tobacco-growing provinces of Austria are Galicia and Bukowina, producing about 4 million kilo. from 2900 hectares; and South Tyrol, where 290 hectares yield almost 4 million kilo. of green tobacco. The respective approximate values of the two products are $18\frac{1}{3}$ florin (of 1s. $11\frac{1}{2}d$.) and 42 florin per 100 kilo. The chief supplies are furnished by Hungary, which was once so noted for its tobacco, but the industry is now completely crippled by the fiscal regulations. The area (in acres) under cultivation fluctuates remarkably; in 1860, it was 6791; in 1865, 68,141; in 1869, $843\frac{3}{4}$; in 1875, 26,817; in 1879, 7316. The total areas (in acres) under cultivation in the whole empire in

1876, 1877, and 1878 respectively were, 144,493, 148,126, 143,447; the yields in kilo., 46,033,163, 44,164,038, 40,978,540; and the yield (in kilo.) per joch (of 1.43 acre), 445, 426, 408. Fiume, in 1877, exported by sea 2862 cwt. of manufactured tobacco; and by land, 31,200 cwt. of leaf, and 53,712 cwt. of manufactured. In 1879, it shipped 9900 kilo. of leaf tobacco direct to England. In 1883, the tobacco harvest was 26,560 metrical centners (about equivalent to cwts.), being 1595 in advance of 1882. The total exports of raw tobacco were 55,842 metrical centners in 1883, and 74,475 in 1884. The port of Fiume shipped 613 tons of tobacco leaf in 1883, of which 189,300 kilo. value 75,720 florins, went to Gibraltar. In 1884, the shipments from Fiume were 1673 tons.

Borneo.—Tobacco is grown in small quantities by the Dyaks and people of Bruni; but they are unskilful in its manufacture, though the flavour of the product of Bruni is much esteemed by Europeans. Under skilful management, and by introducing a better kind if necessary, it might become as profitable to this island as it now is to the neighbouring ones of the Philippines, Java, &c. The Dyaks might be more readily induced to cultivate this plant, the nature of which they know, than plants which are strange to them. More recently it is announced that plantations have been commenced in British North Borneo, and samples of the leaf sent to Europe have been favourably reported on. The exports from Sarawak in 1884 were valued at 2020 dollars to foreign ports, and 34,257 dollars in coasting vessels, making a total of 36,277 dollars. In the same year, British North Borneo shipped 2113 dollars' worth; and Sandakan, 1537 dollars' worth.

Bourbon.—Efforts are being made to successfully introduce to bacco into the rotation of crops on the sugar estates, with the object of supplying the article to the French régie or Government monopoly, which buys annually upwards of 40 million francs' worth of tobacco in the islands of Cuba, Java, and other colonies. The results hitherto obtained are not unsatisfactory, and this article may shortly acquire importance among Bourbon products. The exports in 1884 were 10,185 kilo., value 61,110 fr.

Brazil.—In Brazil, tobacco is chiefly cultivated in the provinces of Bahia, Minas, Sao Paulo, and Para. The town of Purificação, in Bahia, is the centre of an important district. The cultivation is increasing, and greater care is being taken in the preparation. The common up-country method is to pick the leaves from the stalks, dry them under the hut-roofs, remove the midribs, and spread them in superposed layers, amounting to 2-8 lb., for rolling together and binding with bark strips. These rolls are bound very tightly with cord, and left for several days, when the cord is replaced by strips of jacitára, the split stem of a climbing palm (Desmoncus sp. div.), and have a stick-like form 11 inch in diameter. They are sold in masas of 4-6 feet in length, but the tobacco is not considered good till it has fermented for 5-6 months, when it is hard and black, and shaved off as required for pipes, cigarettes, and cigars, the last made with wrappers of tauari bark (Couratari guianensis). The Tapajos tobacco is considered the finest in the Amazon valley. The export of tobacco from Bahia in 1877-8 was 17,272,678 kilo., and in 1878-9, 18,149,201 kilo., almost the whole being to Germany. Santos, in 1878-9, shipped 381,310 kilo. Bahia sends

away immense numbers of cigars coastwise. Maceio exported 4336l. worth in 1876, but none in 1879.

Some interesting particulars are given in the last report of the United States Consul-General at Rio de Janeiro, as to the cultivation and manufacture of tobacco in Brazil. It appears that the cultivation began about the year 1600, in the province of Bahia, and from thence extended to all the other districts along the coast. Among the localities earliest known for their tobacco production was the lake district of Pernambuco, now the province of Alagoas, where an excellent quality was produced, which commanded very high prices. During the following century the cultivation increased so rapidly in Alagoas and Bahia, that at the commencement of the succeeding century, the average annual export had reached 2857 tons from the latter, and 285 tons from the former province. earliest export statistics available for the whole empire, are for the year 1839-40, in which the export amounted to 295,966 arrobas, the arroba being equivalent to about 32 lb.; and the value exceeded 65,000l. For the next thirteen years, the exports averaged 8,000,000 lb. annually, with a value steadily increasing. During each of the years 1853-55, the amount exported was 22,000,000 lb., of the total value each year of 200,000l. In 1879-80, the export was 50,000,000 lb., of the value 659,000l.; in 1880-81, 44,000,000 lb., of the value of 650,000l., and in 1881-82, 52,000,000 lb., of the value of 680,000l. Though the principal tobacco-producing province of the empire is Bahia, tobacco of good quality is grown in every part of Brazil, from the Amazon to the Rio Grande frontier. Some localities in the province of Amazonas have long been known for the excellent quality of their tobacco, while in the Rio market one of the brands most esteemed comes from the province of Goyaz. The local consumption of tobacco is very great, and principally in smoking. Bahia tobacco used to be largely exported in rolls, weighing 8 arrobas, or 256 lb. each; of late years, however, large quantities of the leaves in bales are exported to Hamburg. Cigar factories are established in all large cities throughout the tobacco-growing regions, which give employment to a large number of men, women, and children. The methods employed in the cultivation and preparation of the plant are very much the same as they were nearly 200 years ago. The labour employed is that of slaves, to whom are assigned special descriptions of work. In former times curing tobacco in rolls required much constant labour, the ropes composing each roll being unwound, twisted, and re-wound during a period varying from 10 to 15 days. The Brazilian tobacco is generally characterized by its strength and dark colour, particularly in Bahia. In that province the practice is to manure heavily, which occasions a very rank growth and strong flavour. In Minas Geraes the tobacco is somewhat milder, and some advance has lately been made in a few localities towards improved processes of curing. This seed may be germinated in any season of the year, but the months of June, July, and August are generally preferred for planting, because germination and transplanting are brought into or near the rainy season. Tobacco plants planted in this season are considered the best growers, and produce the largest leaves. Those, however, which are germinated in the dry season, and sustained by irrigation, grow with

greater vigour, and possess a finer aroma. The land selected for the plants is cleared, and the surface worked with the hoe, after which it is marked off into parallel rows about 3 feet apart, according to locality and the size of the mature plants. In transplanting, the young plants are set from 2 to 3 feet apart, and are manured heavily in the pits opened for them. Great care is necessary for a time to protect the shoots from the sun, and to irrigate plentifully when the transplanting occurs in a dry season. The work of cultivation and keeping down the weeds is performed entirely with the hoe, and only two or three times during the season. In gathering in the crops, planters wait until the plants are fully matured, this being determined by doubling and breaking one of the top leaves. In Bahia and other Brazilian provinces the lower leaf is often picked by itself, and in a few days the next, and so on as long as the plant will develop the lower leaves into what is classed first quality. These leaves are hung up two and two, under cover and across poles, 24 hours after picking and sweating. When it is intended to twist the leaves into ropes, they are left hanging about 2 days, when they are taken down, carefully freed from the heavy parts of the midrib, doubled in halves, and laid away for the rope twister. This operation requires considerable dexterity, and is generally entrusted to the best slave on the plantation. The operation requires a rude windlass, which is slowly turned in winding the rope, which is twisted by hand. A boy is usually employed entirely to hand leaves to the twister. These ropes are unwound and re-wound once or twice a day, for a period of 10-15 days, according to the weather, and are twisted a little harder each time. In curing, the tobacco grows darker and darker, until it becomes jet black. The juices exuding from the rolls are carefully caught and preserved. until the last winding, when, mixed with lard, syrup, and various aromatic herbs, they are used to pass the rope through, previous to the final winding. The last step is to cut the cured ropes in certain lengths, and to re-wind them upon light wooden sticks, about 2 feet in length, the winding being very compact and regular. The rolls are then covered with leather or strong canvas, when they are ready for market. Formerly, these rolls were made to weigh 8 arrobas, or 256 lb., though rolls of 3 arrobas were made for the home markets. At the present day the weights vary according to the locality. The large exportation of tobacco in leaf has considerably changed the character of tobacco-growing in Bahia, the process of curing and packing the leaf being simpler than the old process of manufacturing roles. Tobacco-growing is heavily protected and taxed in Brazil, nearly all the provinces imposing separate protective taxes, in addition to those imposed by the Government. Besides these, the municipalities are permitted to levy taxes on the article. The present export tax on tobacco, in Brazil, amounts to as much as 18 per cent.

The local market quotations are thus given :-

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8. d. s. d.
Patentes .. .. 6808-8170 real (=12 2-14 7) per 10 kilo. (= 22 lb.)
Santo Amaro, assorted .. .. . 3 7- 5 8 , , ,
Alagrinhas .. .. 2791-5106 .. .. (5 0- 8 2) , , ,
São Felix .. .. 3745-4425 .. (6 8- 7 10½) , , ,
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The Bahia export in 1883-4 was 15,644,010 kilo., value 400,246l.

Canary Islands.—With the declining importance of cochineal, tobacco-growing is gaining ground, and the quality of the article has been much improved, while factories for drying and preparing the leaf have been established in various localities. The exports for the year 1883-4 were:—27 lb., value 8l., to France; 2268 cwt., value 9809l., to Spain; 1753 lb., value 375l., to Germany; and 939 lb., value 189l., to West Coast of Africa.

China.—The chief tobacco-growing provinces of China are Chihli, Hopih, Hoonan, Szechuen, and Shingking. The use of tobacco is wide-spread and common, and considerable local trade is carried on in it. The exports from Amoy were 2573 piculs (of 1331 lb.), value 13,561l., in 1877; and 3994½ piculs, value 17,936l., in 1878. Wenchow exported $27\frac{3}{4}$ piculs of leaf in 1878, and $321\frac{1}{3}$ in 1879. The exports and re-exports from Hankow in 1878 were $65,070\frac{3}{4}$ piculs of leaf, and $46,241\frac{3}{4}$ of prepared. In 1879, Hankow exported and re-exported 63,180 piculs prepared, value 311,754l., and 58,094 of leaf, value 118,534l. There is an immense supply from the provinces, and the leaf is fine in colour, texture, and fragrance, but though sent to America and England for cigar-making, the trade has not been remunerative. It is now used in cigarettes and various cut mixtures as "Turkish," but when better known, will be smoked on its own merits. Canton exported $1730\frac{3}{4}$ piculs in 1877, $1742\frac{3}{4}$ in 1878, and 2397 in 1879. The exports of leaf from Ningpo were 407 piculs in 1874, 571 in 1875, 211 in 1876, 530 in 1877, 378 in 1878, and 165 in 1879. Kiungchow exported 4494 piculs of leaf in 1878; and 85½ piculs, value 1361., in 1879. Kiukiang

exported $28,120\frac{1}{2}$ piculs of leaf, value 35,678l., in 1878; and 14,659 of leaf, and 802 of stalk, in 1879.

Chinkiang imported 13,328 piculs of leaf, and 1914 of prepared, in 1879. Macao receives tobacco from the Hokshan district, and prepares it for exportation to Java, the Straits, and California, the annual export being about 10,000 piculs. The Newchwang imports of prepared native tobacco were 8052 piculs in 1877, 8354 in 1878, and 6630 in 1879. Shanghai, in 1879, imported 58,460 piculs of native leaf, 79,081½ of prepared, and 1187½ of stalk; and exported and re-exported 31,541 of leaf, and 29,6721 of prepared. Taiwan imported 30174 piculs of prepared native in 1879. Tientsin exported 1047 piculs native tobacco in 1878, and 693½ in 1879. Tobacco is grown in the hilly districts near Wuhu; the leaves are gathered in October, and sun-dried on wicker-work frames. The exports in 1879 were 5971 piculs of leaf, and 742 of prepared.

Cochin-China.—The culture of tobacco is extending in Cochin-China, and it is even said that a considerable quantity is exported to China, but it improves little in quality. The area reported to be under tobacco cultivation in 1878 (including coffee) was 2361 acres.

Costa Rica.—The free cultivation of tobacco was stopped in January 1884, and its free sale only permitted till December 31, 1885.

Ecuador.—The tobacco crop of Ecuador for 1879 was not so large as usual, owing to an unfavourable season. Esmeraldas, the most northerly port, and whence nearly all the tobacco shipments are made, despatched about 3000 quintals in 1879. Guayaquil exported 150 quintals in

1877, none in 1878, and 10 in 1879. In 1883, the exports from Guayaquil were 1374 quintals, value 5496l.; in 1884, only 96 quintals, 192l.

Fiji.—The Fiji Islands are well adapted to tobacco culture. The natives produce a good deal, which nearly approaches the American leaf. With careful curing, it would find a market in England. The native product is rolled, which prevents its being made into cigars. Samples of leaf-tobacco in hands, raised from foreign seeds, exhibited very unequal qualities, and a tendency to revert to American forms, the Havana returning to the Virginian type. Cut up for smoking, they were deficient in flavour, but were considered satisfactory as a first experiment.

France.—The area occupied by tobacco in France in 1873 was 14,858 hectares (of $2\frac{1}{2}$ acres), yielding at the rate of 12 quintals (of $220\frac{1}{2}$ lb.). The amount of land authorized to grow tobacco in Pas de Calais in 1879 was 2100 acres, and the quantity furnished to the Government was 3,659,636 lb., the prices (per kilo.) paid by the Government being 1 fr. 45c. for 1sts, 1 fr. 12c. for 2nds, 88c. for 3rds, and 10–66c. for other inferior qualities. The number of plants grown per acre is about 17,000. The department Nord affords rather more than Pas de Calais.

By the Imperial decrees of December 29th, 1810, and January 12th, 1811, it was ordained that the purchase of tobacco in leaf and the fabrication and sale, whether wholesale or retail, of manufactures of tobacco, should be exclusively confined to the Administration of Indirect Taxes (Régie des Droits Unis) in all the departments of

France. At present the Régie has in operation 16 large manufactories, 27 "magasins de culture," and 4 "magasins de transit." It employs over 19,000 workpeople, of whom about 80 per cent. are women and girls. The usual daily earnings are, for men, from 2s. 7d. to 3s. 11d., and for women, from 1s. 2d. to 2s. 4d. For faithful or exemplary services, the workpeople receive annually rewards, varying in amounts from 15s. to 20l. Mr. Scidmore, the United States Consular Agent in Paris, gives the following description of the manner in which the operations of the Régie are carried on. At the beginning of each year the Minister of Finance designates the number of hectares upon which, and the departments within which, the cultivation of tobacco may be undertaken during the following season. The last ministerial decree upon this subject confines the privilege to the departments of the Alpes Maritimes, Bouches du Rhône, Dordogne, Gironde, Ille-et-Vilaine, Landes, Lot-et-Garonne, Meurthe-et-Moselle, Nord, Pas de Calais, Puy de Dôme, Hautes-Pyrénées, Haute-Saöne, Savoie, Haute Savoie, and Var. In the month of October or November, an agent of the Régie proceeds to the communes among which the prefects have apportioned the allotments, and receives the declaration of every proprietor desiring to profit by the authorization. A Commission, composed of the prefect, of the director of indirect taxes, a superior agent of cultivation, a member of the council general, and of a member of the council of the arrondissement, not being planters, then examine the declarations, and admit, reduce, or reject them. After a planter is accorded permission to cultivate, he is subjected to close official