

PART I.

General History of the Cane Sugar Industry.



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CHAPTER I.

General Survey of the History of the Cane Sugar Industry from the Beginning till the Introduction of the "Continental System."

 I_N all probability the sugar cane originally came from India, more especially from the banks of the Ganges. We cannot be absolutely certain of this, as at the present day sugar cane in its wild state is not found anywhere.

The probability, however, of its originating from India is very strong, as only the ancient literature of that country mentions sugar cane, while we know for certain that it was conveyed to other countries by travellers and sailors.

According to Hindu mythology, sugar cane was created by the famous hermit Vishva Mitra to serve as heavenly food in the temporary paradise which was organized by him for the sake of Raja Trishanku. This prince had expressed his wish to be translated to heaven during his lifetime, but Indra, the monarch of the celestial regions, had refused to admit him. In order to meet his wish, Vishva Mitra prepared a temporary paradise for him, but when a reconciliation between the two rajas was brought about, the paradise was demolished and all its luxuries destroyed except a few, including sugar cane which was spread all over the land of mortals as a permanent memorial of Vishva Mitra's miraculous deeds.

We find sugar cane mentioned in the Atharva Veda, one of the latter



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portions of the sacred books of the Hindus, from which we quote the following:

- "Paritwâ paritantu néxunâgâmawidwisé Yathâ mâm kaminyaso yathâ man nâpagâ
- "I have crowned thee with a shooting sugar cane, so that thou shalt not be averse to me."

The fellow-travellers of Alexander the Great, and afterwards writers who made use of their notes, tell us of a reed growing in India which produced honey without the aid of bees.

We also find sugar cane repeatedly mentioned as a tribute to the Emperor of China from the Indian border provinces, which also accounts for sugar cane having spread as far as the East.

Although sugar cane was known in ancient times, we do not come across any regular statement of sugar being made from cane at any period previous to 300—600 A.D. It is a fact that Greek and Roman authors, such as Strabo, Dioscorides, Pliny, and others, refer to a kind of honey made from cane which grows in India, and some substance, "saccharon," which, also in the East, is obtained from cane; but on closer examination it does not appear to have been sugar, being in some cases manna, and in others "tabaschir," a gelatinous silica which sometimes forms in the joints of some species of bamboo.

The first kind of sugar mentioned was simply concentrated cane juice, called "gur" in India and known under the name of "gud" in Sanskrit, which (although we cannot be certain of it) points to the fact of "gur" having been known in India even in prehistoric times.

We do know that in A.D. 627, at the time of the Conquest of Dastagerd in Persia, sugar was among the spoils taken by the Byzantines, and also that, according to the Pen-tsao-kang-mu, a famous encyclopedia written in 1552 by Si-Shi-Tjin, the Emperor Tai Tsung (627—650) sent people to Behar, in India, in order to learn he art of sugar manufacture.

From that time the art of making sugar out of cane spread rapidly, being considerably aided by the vast trade renaissance of the seventh, eighth, and ninth centuries.

It was not restricted merely to evaporating the juice to dryness, but the Arabs and Egyptians soon learnt how to purify raw sugar by re-crystallization, and to make a great variety of sweetmeats out of the purified sugar.

Marco Polo, who visited China during 1270-1295, and other western travellers after him, mention a great many sugar factories in South China where sugar could be freely bought at low prices.

Although the Chinese had soon learned how to prepare a light-coloured kind of sugar by draining off the raw molasses, the proper art of refining seems to have been brought to China by people from Cairo subsequent to Marco Polo's time



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The Mohammedan writers, who refer to the sugar industry in India, mention a great many kinds that, about the end of the thirteenth century, were prepared from the evaporated cane juice by re-dissolving, clarifying it with milk, and then either concentrating it to solid matter, or crystallizing it into candy.

Further, we find that sugar cane was taken to Sicily by the Arabs in 703, and Sicilian sugar conveyed to Africa in 900. Sanutus writes in 1300 that sugar cane was produced not only in the dominions belonging to the Sultan, but also in the Christian countries of Cyprus, Rhodes, and Sicily.

The Crusaders found extensive sugar cane plantations in Tripoli, Mesopotamia, Palestine, Syria, Antioch, etc.

As early as 755, sugar cane was taken to Spain by Abdurrahman, and it was especially on the south coast of Andalusia that it was cultivated, so that as far back as the year 1150 Spain could boast of a flourishing sugar industry, commanding an area of no less than 75,000 acres.

The Arabs and Chinese introduced sugar cane not only to the above-mentioned countries, but also to the coast of the Mediterranean and the Indian Ocean, consequently to Tunis, Morocco, Gambia, Madagascar, Siam, Sunda Islands, the Philippines, Formosa, and Japan, and it flourished wherever it was cultivated.

In all the countries mentioned, however, any regular sugar industry was out of the question; the cane was cultivated simply for the purpose of supplying local wants, while before 1400, with the exception of China, a proper sugar industry was carried on only in the countries round the Mediterranean.

The Crusaders looked upon sugar cane cultivation as a profitable venture, and therefore interested themselves in it, making Tyre an important centre of the sugar trade. Both the administration of King Baldwin's dominions and the different knighthoods founded extensive sugar cane plantations in Palestine, in Antioch, in Syria, and in Cyprus, and greatly improved the sugar industry in those parts.

Egypt continued producing large quantities of very good sugar, which met with a ready demand in all the markets round the Mediterranean. In Sicily the sugar industry, which was in a flourishing state during the Norman Conquest, gradually dwindled to such an extent that the Emperor Frederic II thought it expedient to send to Tyre for two capable sugar manufacturers in order to revise the almost forgotten art of sugar manufacture.

This sugar industry soon developed, a result partly due to the influence of the instructors, and partly to the fact that the government began henceforward to patronize agriculture. Discord and war, however, soon had a disastrous influence on the political affairs of the island, and about 1400 A.D. the sugar industry was entirely abandoned. But after the restoration of order under King Alfonso (1410—1418) prosperity returned, so that even in



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1418 much sugar was being exported from Palermo. a great many sugar cane plantations and mills being found in 1450 in Sicily.

At the same time a sugar industry flourished in Spain, and was also taken up in the south of France, where many of its inhabitants had acquired a thorough knowledge of cane cultivation and sugar manufacture, through constantly coming into contact with their Spanish neighbours and through their participation in the Crusades.

Consequently, all the countries round the Mediterranean were cane sugar producing countries in the thirteenth and fourteenth centuries: Spain, France, Calabria, Sicily, Cyprus, Rhodes, Asia Minor, Egypt, Tripoli, Tunis, Morocco all taking part, more or less, in the sugar industry. The sugar that was not needed for their own consumption was chiefly exported viâ the Italian ports of Venice, Pisa, and Genoa. The Crusaders who, when in the Far East, had become accustomed to sugar, wished to continue its use after their return home, and thus developed a brisk trade between the Italian towns and Northern Europe, both by land and by sea.

The sugar was sold in the form of loaves, square blocks, or powder. The small loaves were wrapped up in palm leaves, two at a time, with one base lying against the other, sewn up in cloth, and marked with the seller's trade mark.

Sometimes the loaves were packed in barrels, and the open spaces filled in with dried cane leaves. Another way of packing was to knock the top off the sugar-loaf and to put the truncated cones, thirty-six of them together into a chest in two layers, while the open spaces, which were left, were filled in with the broken-off tops. Finally, the chest was wrapped up in cloth and the vendor's trade mark affixed.

Only the inferior kind of sugar was packed up in chests like this; it went by the name of cassonade, which means simply "packed in wooden boxes." Later on, however, the name was also given to any inferior grade of sugar, so that in course of time it has become the general term for inferior sugar.

Then there was sugar powder, which was obtained from inferior sugar loaves crumpled to powder, and this also was sent away in chests and barrels. Finally, there was sugar candy in a variety of tints between clear white and brown.

The sugar industry in the countries round the Mediterranean flourished up to the end of the fifteenth and the beginning of the sixteenth centuries. Syria lost much of its importance as a sugar trade centre when, after the fall of Acre in 1291, the Crusaders had to give up their conquests in Asia Minor; but Tyre and Beirut, Antioch and the Jordan Valley all continued producing large quantities of sugar, while Damascus and Tripoli became sugar refining centres. Cyprus, still tributary to Venice, extended its industry considerably, and every year sent large supplies to the mother-town; while Egypt, too, still produced considerable quantities of sugar.



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All this prosperity, however, suddenly and unexpectedly came to an end. In 1453 Constantinople was taken by the Turks, in 1461 Trebizonde followed, and soon after the other commercial towns of Asia Minor and all Genoa's colonies on the Black Sea were also conquered, so that the trade relations between Europe and Asia Minor were no longer what was previously the case. Moreover, the entire industry was much restricted during the Turkish sovereignty, and the manufacture of sugar soon declined. In 1517 the Turks attacked and conquered Cairo, and made Egypt a Turkish province, which step had an equally fatal effect on the sugar industry there.

In 1532 Rhodes, and finally in 1571 Cyprus, were taken from the Venetians and added to the Turkish dominions; by this time, however, the sugar cultivation in these islands had already lost much of its importance, while the industry of Sicily had quite dwindled away, so that within one hundred years the once flourishing sugar industry of the Mediterranean was condemned to extinction.

As early as 1419 the Portuguese had taken the sugar cane to Madeira, where it grew up luxuriantly and developed so quickly that the island soon produced unheard-of quantities of sugar, which were taken to Italy by Portuguese seafarers. In 1444 the Azores were captured and colonized by the Portuguese; between 1456 and 1462 the Cape Verde Isles followed; San Thomé, Principe, and Annobon in the Gulf of Guinea were acquired in 1496, while in the same year the Spanish colonized the Canary Islands, and assisted in the establishment of sugar cultivation. Favoured by the mild and moist climate of these islands, the cane grew luxuriantly, and was produced at so little cost, with the help of African negro slaves, that the price of sugar fell considerably, and both Cyprus and Sicily were obliged to abandon competition, so that in 1570 the sugar industry of these Mediterranean islands ceased to exist

When the Portuguese West African colonies began to flourish, Bartholomew Diaz sailed round the Cape of Good Hope, and in 1490 Vasco de Gama reached Calicut by the unbroken sea route, the result of which was that Venice lost its ascendancy as a trade centre, and the Portuguese distributed Indian goods as well as those coming from their own colonies, consequently opening up new routes for the world's trade.

Still greater changes in the history of cane sugar were brought about by the discovery of America, and the colonization of that vast territory—first by the Spanish and the Portuguese, and later by the Dutch, the English, and the French. In consequence of the colonization of Brazil, the Antilles and Guiana, the production of sugar increased so rapidly that the latter, which up to now had been a very costly article, only to be indulged in as a medicine or as a luxury by the very rich, became in quite a short time an article of common consumption.

Although previously the annual production of the principal sugar centres



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was only some thousands of hundredweights, it was now possible to state the production in thousands of tons.

The enormous progress in production was caused not only by the great abundance of fertile land in a favoured climate, but also by the cheap labour in the form of negro slaves obtained from the countries on the Gulf of Guinea.

Throughout the history of the cane sugar industry in tropical countries the labour problem has influenced the whole production. When plenty of labour is to be had, and soil and climate allow of sugar cultivation, cane sugar production can flourish, while a decline immediately sets in when in any way labour becomes scarce.

We shall repeatedly come across instances of this fact in the second part of this volume, when dealing with the industry in the different countries of production, and this influence is so great that at the present time a few islands would suffice to produce all the sugar needed for the world's consumption if the lack of the necessary cheap labour did not limit their power of production.

For this very reason Christopher Columbus's first attempt, made on his second journey in 1493, to introduce sugar cane cultivation in San Domingo resulted in loss for the time being. When, however, the Portuguese and the Spanish, in imitation of what they had done in their own colonies on the West Coast of Africa, took negro slaves from the Gulf of Guinea to America, the industry was placed on a firmer footing, and spread to an unprecedented extent. The aborigines of most islands disappeared soon after the conquest by foreigners, and for the greater part were replaced by negro slaves from Africa, who established their race in all the West Indian islands and the adjoining parts of the Continent of America.

Up to the first half of the fifteenth century hardly any slavery existed in Christian countries; it only occurred in Mohammedan lands.

Even in 1442 Henry the Navigator sent Moors, who were taken prisoners, back to their own country, but later on, when it appeared to what account they might be put, he began to deal differently with them. In the year 1481 the Portuguese built three fortresses in Africa, namely, on the Gold Coast, on an island in the Gulf of Guinea, and at Loango, and from these sent slaves to the American possessions. In 1502 negro slaves were used in the mines by the Spanish in Hispaniola (now San Domingo), and Charles the Fifth granted the Genoese the privilege of importing every year as many as 4,000 into Cuba, Jamaica, and Porto Rico. But, quite independent of this monopoly, the import of slaves greatly increased, and even in 1772 it amounted to 74,000, supplied by the following nationalities:—

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38,000 by the British.
20,000 ,, ,, French.
4,000 ,, ,, Dutch.
2,000 ,, ,, Danes.
10,000 ,, ,, Portuguese.
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They hailed from Gambia, Sierra Leone, Las Palmas, the Gold Coast, Whydah, Lagos, Benin, Boma, New Calabria, Cameroons, Loango and Benguela, that is from the entire West African Coast, and were distributed all over the American and West Indian countries, so that a mixed population of Americans, Africans and Europeans sprang up.

In Brazil, which in 1500 was discovered by Pinzon and by Cabral, sugar cane was imported from Madeira, and in a very short time the sugar industry there attained to considerable importance. In 1590 there were thirty-six mills in Bahia, and sixty-six in Pernambuco, which numbers continued increasing, so that in 1600 the export from Brazil amounted to 60,000 chests of sugar, each containing 500 lbs. At that time Brazil belonged to Spain, which in 1580 had annexed Portugal and the Portuguese colonies. Because of the truce with Spain the Dutch, who more than once had coveted the rich Portuguese colony, were compelled to suspend their plans of conquest till hostilities When in 1621 the armistice had come to an end, the West were resumed. Indian Company, which was just founded, made up its mind to conquer Brazil, in which attempt it succeeded in 1629, when Pernambuco was taken, and consequently the whole of Brazil fell to the Dutch. It was at this time that a great many sugar mills and plantations were destroyed, but the governor, Joan Maurits, succeeded in resuscitating the sugar industry to the extent that during the years 1636—1643 a total of 159,148 chests, each containing 500 lbs. of white sugar, 49,903 chests of muscovado, and 218,220 chests of brown sugar were exported. In the year 1640 Portugal regained its independence, and although a treaty guaranteed the possession of Brazil by the Dutch, the Portuguese, helped by the English, instigated a rebellion which ended in the Dutch being expelled in 1654, whereupon in 1661 Brazil was acknowledged a Portuguese possession under an indemnity of eight million guilders, paid to the Dutch West Indian Company.

In 1665 the Portuguese government committed a serious mistake in banishing the 20,000 Dutchmen who then lived in Brazil; and it was a two-fold error, because, in the first place, a great number of quiet and industrious citizens were driven away, and, secondly, because the latter settled in the neighbouring Caribbean Islands, where they introduced the sugar industry, and consequently became in the long run formidable rivals of Brazil.

Meanwhile, it was impossible for Portugal to regain her former importance, and a great many measures taken by her only tended to favour the Portuguese without at all developing the resources of their country. Moreover, gold mines were discovered in 1725 in the province of Minas Geraes, which caused the regular trade in field and factory to decline, as many labourers found work at the gold mines instead. The sugar factories could not stand these successive blows, and a great many of them were deserted, with the result that the sugar exportation fell rapidly.

After some time it recovered more or less, especially when, at the end of the eighteenth century, a new cane, Otaheite (now known as Bourbon), was



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introduced, which contained much more sugar. Still, Brazil has never since attained its former importance in the sugar world.

In the year 1625 the island of St. Christopher (now St. Kitts) was occupied by both the English and the French, and planted with sugar cane. Further, the French conquered Guadaloupe and Martinique in 1635, and the English took Barbados in 1627, and Jamaica in 1656. Sugar cane cultivation was introduced in all these islands, but the people there did not know how to prepare good and durable sugar, till in 1655 the Dutch manufacturers, who had been driven away from Brazil, came to settle there and put their knowledge and experience, gained in Brazil, into practice.

After the French had successively occupied and deserted San Domingo, France took permanent possession of this island in 1697, and it is from this time that the flourishing state of the sugar industry there dates; for a century it was one of the first among the cane sugar exporting West Indian islands. On the whole the French colonies flourished more than the English, which was partly owing to their more rational way of working, and partly to the more liberal French trade policies. Because of the cruel way, however, in which the French treated their negro slaves a rebellion broke out in 1791, in which, within a very short time, almost the entire white population was massacred or expelled, and sugar plantations and mills were destroyed and burnt, so that San Domingo lost its ascendency, and has ever since been of little importance in the sugar world.

After the fall of this sphere of activity, the other countries became more prominent, especially Jamaica, which made the most of her opportunity, and succeeded in doubling her yearly output in some twenty or thirty years, so that at the end of the eighteenth century this island was first among the sugar producing West Indian islands.

San Domingo's fall was also an incitement to Cuba to extend her sugar cultivation.

Owing to her subjection to Spain, Cuba's sugar industry had to submit to all sorts of restricting stipulations until 1772, after which date, however, they ceased; and henceforward the manufacture and export of sugar gradually increased in quantity, and after 1791 expanded at such a rate that even in 1802 it amounted to 40,800 tons.

The Dutch colonies, St. Eustatius and Curacao, and the Danish islands, St. Croix, St. John, and San Thomé, also profited by this general prosperity; and, especially during the American War of Independence, became increasingly important, not so much through producing sugar as through being good trade centres for the smuggling of sugar in those stirring times.

In the meantime the sugar industry had also got a firm hold in the other countries on the continent of South America, with the exception of Brazil. In 1634 French people who were engaged in sugar cultivation settled in Cayenne, and in 1640 in Surinam. This cultivation did not amount to much for the first hundred years, even after the conquest of



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Surinam, Demerara, Essequibo, and Berbice by the Dutch, owing to the scarcity of labourers; consequently, the importation of slaves on a large scale was thought necessary for developing the sugar production in these parts.

This want of labour was gradually supplied, and when the hostilities with the French, who had continually disturbed the peace of the colony, had come to an end, the manufacture of sugar began to flourish, and in the year 1750 Surinam produced the maximum quantity of 12,300 tons of sugar, a quantity never again realized in the eighteenth century. Essequibo, Berbice, and Demerara also supplied some sugar, but disturbances prevailed, while lack of capital and lack of enterprise, together with careless financial management, prevented any sound development of the industry. Through continuous wars the colonies fell to the French, then again to the English, then reverted to the Dutch; but in the end, with the exception of Surinam, they remained English possessions.

Finally, sugar was grown in Peru, Argentina, Chile, Mexico, Louisiana; also in Trinidad, which was taken by the English in 1792, but at the time of which we speak this was of little consequence for the world's trade, as all the sugar produced was used for local consumption.

According to Reesse, in his book on "De Suikerhandel van Amsterdam," page 225, the exportation of American colonies and countries during the last years of the eighteenth century amounted to the following quantities (expressed in Amsterdam pounds and tons):—

	Am	sterdam Poun	Tons	
French Colonies (1788)		188,350,000		93,045
English ,, (1781—1785	s)			
yearly average		157,953,000		78,029
Danish Colonies (1768)		41,600,000		20,550
Cuba (1790)		28,325,800		13,993
Brazil (1796)		69,384,000		34,276
Dutch Colonies (1785)		18,000,000		8,892

Owing to the large supplies of sugar from the Antilles and Brazil, the sugar industry in Madeira, the Cape Verde Isles and Canary Isles had been outrivalled, and sugar from these islands gradually disappeared from the sugar markets. This was also the case with the sugar industry in the Islands of the Gulf of Guinea, which previously in their turn, shortly after the commencement of the great voyages of discovery by the Portuguese and Spaniards in the fifteenth century, had destroyed the sugar industry of the countries lying on the Mediterranean.

Sugar cane was also introduced by the French to the Isle de France (now Mauritius) and Bourbon (now Réunion), and at about the end of the eighteenth century people began to export sugar to Europe from this part of the world.

Finally, Eastern Asia should not be omitted from the list of important