

than 700,000 dollars per annum. The attention of the landed proprietors is already turned to the subject, but much time must elapse before any change can be effected; and as the French have, in the mean time, possession of the market, it is probable that they will find it to be their interest to keep it so well, and so cheaply supplied, that the project of growing wines for home consumption will be abandoned, before the attempt has been seriously made.

CHILE, OR CAPSICUM.

Whole estates are devoted, on the Table-land, to the cultivation of this most powerful stimulant, and few are more productive, as it constitutes one of the necessaries of life with the Indian, and Mestizo, population, and is used in very large quantities at the tables of the Creoles of all ranks. Its pungency is so great, that, amongst the uninitiated, it produces absolute excoriation; but the palate becomes accustomed to it by degrees, and habit renders it indispensable. It is used by the lower classes as a seasoning to the insipid tortilla, and the two together furnish a meal, which they would not exchange for an allowance of meat, and wheaten bread.

In addition to the vegetable productions already enumerated, Mexico possesses the potatoe, which is found in great abundance on every part of the Table-land; the yam, which is confined to Tierra caliente; Tomates, (Tomatl,) with every variety of garden

plants and vegetables; apples, peaches and pears, and most European fruits; together with pines, guavas, chirimoyas, oranges and lemons, pistachio-nuts, melons, and all the usual productions of the tropics. It likewise has the

MAGUEY—(*Metl—Agave Americana.*)

A species of Ananas, or Aloe, from which is drawn the favourite beverage of the lower classes in the central part of the Table-land, a spirituous liquor called Octli, or Pulque.

It is in the States of La Pueblá, Mēxícō, Guāñá-juatō, and a small portion of Valladōlid, that the principal plantations of Māguēy are found; the most celebrated are those in the vicinity of Chōlūlā, and in the Llanos de Āpām, between the towns of Hūāmāntlā, Tlāscālā, Āpām, and the Capital: the valley of Tōlūcā is likewise famous for its Pūlquē; which is drawn from the extensive Maguey grounds in the vicinity of Lērmā: but in general, although the plant is found wild in every part of Mexico, no attempt to extract Pulque from it, is made, except in the districts which are within reach of the two great towns of La Pueblá, and Mexico; where, amongst the lower classes of the inhabitants, the consumption is enormous. Before the Revolution, the revenue derived from a very small municipal duty exacted on the Pulque, at the gates of these towns, averaged 600,000 dollars, and amounted, in 1793, to 817,739 dollars, about 170,000*l.* sterling.

Pūlquē is so little known in Europe, that some account of the process, by which it is made, may be acceptable.

The Maguey, or Aloe, from which it is extracted, differs but little, (if at all) in appearance, from those which abound in the South of Spain, and which are known, though of a much smaller size, in England. Its growth is slow, but when arrived at maturity, its leaves are usually from five to eight feet in length, although some considerably exceed these dimensions.

In the plantations, the plants are arranged in lines, with an interval of three yards between each. If the soil be good, they require no attention on the part of the proprietor until the period of flowering arrives, at which time the plant first commences to be productive. This period is very uncertain; ten years, however, may be taken as a fair average, for, in a plantation of one thousand Aloes, it is calculated that one hundred are in flower every year. The Indians, acquainted with the plant, know, by certain signs, almost the very hour at which the stem, or central shoot, which is destined to produce the flower, is about to appear, and they anticipate it, by making a deep incision, and extracting the whole heart, or central portion of the stem, (*el cōrazōn*,) as a surgeon would take an arm out of the socket, leaving nothing but the thick outside rind, which forms a natural basin, or well, about two feet in depth, and one-and-a-half in

diameter. Into this the sap, which Nature intended for the support of the gigantic central shoot, is continually oozing, in such quantities, that it is found necessary to remove it twice, and even three times in the day. In order to facilitate this operation, the leaves on one side are cut away, so as to admit of a free approach: an Indian then inserts a long gourd, (called *ācōjōtē*,) the thinner end of which is terminated by a horn, while, at the opposite extremity, a small square hole is left, to which he applies his lips, and extracts the sap by suction. This sap, before it ferments, is called *Aguamiel*, (honey-water,) and merits the appellation, as it has a very sweet taste, and none of that disagreeable smell, which is afterwards so offensive. From the plant, a small portion of it is transferred to a building prepared for the purpose, where it is allowed to ferment for ten or fifteen days, when it becomes what is termed *Mādrē Pūlquē*, (the mother of Pulque,) which is distributed, in very small quantities, amongst the different skins, or troughs, intended for the daily reception of the *Āguāmiel*. Upon this it acts as a sort of leaven; fermentation is excited instantly, and in twenty-four hours it becomes Pulque in the very best state for drinking: the quantity drawn off each day is replaced by a fresh supply of *Aguamiel*, so that the process may continue during the whole year without interruption, and is limited only by the extent of the plantation. A good Maguey yields from eight to fifteen *quartillos*, (pints,) of

Āguāmiel in a day, the value of which may be taken at about a real, (sixpence); and this supply of sap continues during two, and often three months. The plant, therefore, when about to flower, is worth ten dollars to the farmer; although, in the transfer of an estate, the Magueyes de corte, (ready for cutting,) are seldom valued, one with another, at more than five. But, in this estimate, an allowance is made for the failure of some, which is unavoidable, as the operation of extracting the cōrāzōn, if performed either too soon, or too late, is equally unsuccessful, and destroys the plant altogether. The cultivation of the Maguey, where a market is at hand, has many advantages, as it is a plant, which, though it succeeds best in a good soil, is not easily affected either by heat or cold, and requires little or no water. It is propagated, too, with great facility; for, although the mother-plant withers away as soon as the sap is exhausted, it is replaced by a multitude of suckers, which spring from the old root, and grow well when transplanted. There is only one drawback, the time that must elapse before a new plantation can be rendered at all productive, and the uncertainty with regard to the time of flowering, which varies from eight to eighteen years. But the Maguey grounds, when once established, are of great value, many producing a revenue of ten and twelve thousand dollars per annum.

The natives ascribe to Pulque as many good qualities as whiskey is said to possess in Scotland.

They call it stomachic, a great promoter of digestion and sleep, and an excellent remedy in many diseases. It requires a knowledge of all these good qualities to reconcile the stranger to that smell of sour milk, or slightly tainted meat, by which the young Pulque drinker is usually disgusted; but if this can be surmounted, Pulque will be found both a refreshing, and a wholesome beverage; for its intoxicating qualities are very slight, and as it is drunk always in a state of fermentation, it possesses, even in the hottest weather, an agreeable coolness. It is found, too, where water is not to be obtained; and even the most fastidious, when travelling under a vertical sun, are then forced to admit its merits.

It is only to be met with in perfection near the places where it is grown, as it is conveyed to the great towns in skins, on asses: a tedious process, in the course of which the smell increases, while the freshness of the liquor is lost.

A strong sort of brandy, called Mēxīcāl, or aguar-diente de Maguey, is likewise prepared from the aloe, of which there is a great consumption in the country. Nor is the utility of the plant confined to this; the Aztecs prepared from its leaves the paper on which their hieroglyphics were written, pieces of which, of various thickness, may be found at the present day; and the more fibrous parts supply the country with pita, a strong thread, or twine, which is made up into ropes, and used not only in the mines, but on the Western coast, as cordage for

vessels. It is not so pliable as hemp, and is more liable to be affected by the weather; but it is extremely tough, and durable, and consequently of very general utility. The annexed plate contains an Aloe in full produce, with the leaves cut, the central cup displayed, and the skin, gourd, and scraper, used in extracting the sap.

COLONIAL PRODUCE.

I come now to those productions, which are termed in Europe "Colonial produce," as being, usually, the growth of Colonies founded by the nations of the Old World in the warmer regions of the New, and supplying the parent States with those articles of luxury, or necessity, which the climate of Europe is not calculated to produce.

In Mexico they comprehend sugar, coffee, tobacco, indigo, chocolate, and cotton, besides vanilla and cochineal, of which Nature seems to have given to New Spain the almost exclusive possession. I shall begin with sugar, as being the only article of general consumption in Europe, the exportation of which, before the Revolution, was carried to any extent.

SUGAR.

Humboldt has endeavoured to fix the maximum of height at which the cane in Mexico may be cultivated; and to his scientific disquisitions I must refer such of my readers as are inclined to view



vessels. It is not so pliable as hemp, and is more liable to be affected by the weather; but it is extremely tough, and durable, and consequently of very general utility. The annexed plate contains an Aloe in full produce, with the leaves cut, the central cup displayed, and the skin, grana, and scraper, used in extracting the sap.

ESSENTIAL PRODUCE.

Amongst the productions, which are termed in Europe "Colonial produce," as being, usually, the growth of Colonies founded by the nations of the Old World in the warmer regions of the New; and supplying the parent States with those articles of luxury, or necessity, which the climate of Europe is not calculated to produce.

In Mexico they cultivate sugar, coffee, tobacco, indigo, chocolate, and cotton, besides vanilla and cardamom, of which Nature seems to have given to New Spain the almost exclusive possession. I shall begin with sugar, as being the only article of general consumption in Europe, the exportation of which, before the Revolution, was carried to any extent.

SUGAR.

Humboldt has endeavoured to fix the maximum of height at which the cane in Mexico may be cultivated; and to his scientific disquisitions I must refer such of my readers as are inclined to view



AGAVE MEXICANA.

this part of the subject with interest. It is my own belief, that no general theory can be established; for, as I have stated in the first section, a thousand local causes, totally independent of elevation, may, and do, produce the degree of heat required to bring the cane to perfection. It is admitted, however, that the juice is more, or less, abundant, and rich in saccharine matter, in proportion to the height at which it is grown; and that the produce of a plantation in a valley on the Table-land, would not be equal, either in quality, or quantity, to that of a plantation of similar extent upon the coast.

Elevation has, therefore, some peculiar effects upon vegetation, even where external appearances are the same; but to what extent, and in what way its influence is exercised, it remains for future naturalists to determine. In general, it is thought that the sugar-cane requires a mean temperature of 19 or 20 degrees of the centigrade thermometer, (68 or 69 of Fahrenheit). Mexico possesses upon her Eastern and Western line of coast, a vast extent of country in which this temperature may be found; but as exportation was only permitted, before 1810, through the port of Veracruz, while the great body of consumers was concentrated on the Table-land, but little attention was paid to those situations, which were not within reach of one of these markets.

It is to the constancy of the demand in the Interior, that we must attribute the choice of the valleys

of Cuernāvaca and Cuautla Amilpas, (within twenty leagues of the Capital,) as the seat of the principal sugar plantations of the country; and the fact, that these plantations have maintained themselves during the whole of the revolutionary war, while those of Orizava and Cordova, on the slope of the Cordillera, which depended more upon the foreign market, fell into decay, as soon as the progress of the Insurgents put an end to all freedom of communication with the coast.

In the course of time, the increasing intercourse with foreign countries will, probably, create a change in this respect, and render the value of a sugar estate upon the coast at least equal to that of one in the interior. The number of vessels that now return in ballast from Veracruz insures a ready market, and although the rate of wages upon the coast is higher, the superior fertility of the soil will more than compensate this disadvantage.

Humboldt gives 2800 kilogrammes, or 224 Arrobas (of 25lbs) of raw sugar, as the produce of a hectare of the best land in the province of Veracruz, in situations favourable to irrigation.

That of Cuba does not exceed 1400 kilogrammes; so that the balance is as two to one in favour of Veracruz.

The immense amount of the capitals which have been withdrawn from the country since 1822, and the distrust which a recollection of the Revolution

still inspires, render any very speedy extension of the cultivation of the sugar-cane improbable.

Enough is hardly grown, at present, for the home consumption of the country, which is enormous. In 1802 it was estimated at 1,400,000 Arrobas, (35,000,000 of pounds;) the value of which, at the market price of two dollars and a half per Arroba, was 3,500,000 dollars, or nearly 700,000% sterling. In addition to this, in the years 1802, 1803, and 1804, sugar to the amount of nearly one million and a half of dollars was exported, and although the exportations afterwards diminished, the quantity raised up to 1810 was not supposed to have materially decreased.*

At the present day, the amount of the total produce is not exactly known, but it must be considerably less than that of the best years before the Revolution, as the sugar estates are confined almost entirely to the valleys of Cuautla and Cuernāvaca.

* Extract from "Balanza General del Comercio de Veracruz:

	Value of Sugar Exported.
1802	1,454,240
1803	1,495,056
1804	1,097,505
1809	482,492
1810	269,383
1813	19,412
From 1814	
to 1820	