

## OLIVE CULTIVATION.

OF the various food products, or vegetable liquids, perhaps those most extensively shown at the Paris Exhibition are wine and oil. These two seem to follow the progress of civilization and settlement, whenever the climate is suitable. Olive oil is shown in a very large number of the foreign sections, and the wide and extensive progress it has made over the world is exemplified now by one French exhibitor, who exhibits samples from the following widely-separated districts: the Gold Coast of Africa, Melbourne and Adelaide, Chili, Guatemala, Guayaquil, Mexico, Venezuela, La Plata, New Orleans, Philadelphia and New York, Canada, India, Cochin China, Reunion, Mauritius, Japan, Polynesia, Havana, Guadaloupe, Martinique, Trinidad, Hayti, the Black Sea coast, the Levant, Spain, Portugal, and France.

But these are not all the seats of production, and are merely cited to show how widespread is the culture of the olive at the present day.

Taking the French official catalogue, and turning to the alimentary products, "class 69, oils and fatty substances," there will be found over six hundred exhibitors of olive oil specially named, besides numerous collective exhibits, and many others also are included under the general term "comestible" or edible oils. There is much substitution, however, carried on in this respect at the present day by the sale to the public of refined cotton-seed oil, sesame, and other oils, in place of olive oil. The number of exhibitors of olive oil under each country as given by Mr. P. L. Simmons in the *Journal of the Society of Arts*, are as follows: Portugal, 448; Algeria, 128; Italy, 8; France, 12; Spain, 5; California, 4; Japan, 1; total, 606. There are two or three exhibitors also from Tunis, and in the French section there is a collective exhibit of edible oils made by sixty-seven producers and dealers from Salon, Bouches du Rhone.

The various uses of the olive for its fruit and its oil are well known. In ancient Greece the tree received all the honors, and had almost a sacred character. This was in consequence of its being the chief production of the country, and its produce the main source of public food.

From olden times the people of the Mediterranean coasts have made the olive their principal culture, and it is there the oil industry chiefly centres, — in Spain, Portugal, Italy, Greece, and France, on the northern coast; and Morocco, Algeria, and Tunis, on the southern shores.

The olive has been cultivated in those regions from time immemorial, as the bounteous gift of heaven and the emblem of peace and plenty. Olive oil takes there the place of butter. Spain has about 3,000,000 acres under olives, Italy 2,250,000, and France about 330,000, of which 15,000 acres are in the district of Nice. Olive oil in the country of Nice forms now four-fifths of the agricultural produce.

The varieties of the olive are very numerous. The naturalist Risso, in 1826, described forty distinct varieties, and these have since been increased to forty-five.

In the countries where it is indigenous, the olive tree attains gigantic proportions. It reaches, occasionally, sixty feet high, with a circumference of trunk of twelve feet, and these trees are supposed to have attained the age of one thousand years. Certain varieties grow more rapidly than others, and some differ from each other in the nature of the wood, the foliage, and the quality of the fruit. There are large olives and small olives, pointed, oval, round, and curved fruit, and of all colors, ranging from white to black, and from green to red. The flavor of the fruit is mild, sharp, or bitter. Hence, according to the variety, there is obtained sweet oil, light colored, and of exquisite flavor, up to dark green, thick, and of a bitter taste, strong and very unpleasant to the palate. Hence it follows that olive oil can be obtained pure, and also quite unfit for food purposes, only suitable for greasing machines and making soap. The green unripe olives, after remaining in a solution of salt for some time, to remove the bitter taste, are preserved in vinegar, with spices, in bottles or small barrels. Those of Tuscany and Lucca are considered the best, on account of their light-green color and strong flesh. In all parts of southern Europe they are in this form a daily food.

The ripe olives are gathered in the fall, when they are as large as common plums; their color is dark green, and the soft kernel has changed into a hard stone, which contains a savory almond. The flesh is spongy, and its little cells are filled with the mild oil, which pours out at the least pressure.

There is a fine collection of preserved olives shown by Hernanos & Company, of Barcelona. The finest oil is the so-called virgin oil, to obtain which the freshly gathered olives are put into little heaps, and by their own weight the oil is pressed out, and is caught in some vessel. It is clear like water, has a delicate nut-like taste, with little or no odor. When the fruits cease to give the oil by themselves, they are pressed with small milkstones. The oil gained by this process is also clear, and of a pleasant taste.

After this treatment the olives are still rich in oil, and the fruits are put in sacks; boiling water is poured over them, and they are pressed once more. The oil gained by this process is yellowish green, and has a sharp taste and an unpleasant smell, because it contains some mucilaginous matters.

At Marseilles, the great seat of the vegetable oil trade, the olive oils are classed into manufacturing oils for burning, for greasing machinery in factories, and for soap-making; refined oil; oil from the pulp or husks; and table or edible oil. The latter is divided into superfine, fine, half-fine, and ordinary. The table oil is refined by allowing it to run through layers of thin sheets of wadding into tin perforated boxes; the wadding absorbs all the thick particles, and leaves the oil perfectly clear and tasteless.

In the Spanish section, Signor José Gonzalo Priete, who has steam works at Lora del Rio, Seville, makes a display of an imitation olive tree silvered, from the branches of which are suspended six glass globes, filled with the different qualities of pure olive oil.

The Tuscans were the first who exported olive oil largely, and thus it has obtained the name of Florence oil. It would be a curious fact to ascertain the number of olive trees which exist in the different countries bordering on the Mediterranean, — Tunis has over four millions, Algeria three millions, Nice one million, Syria several millions, while the number in Spain, Portugal, Italy, Greece, Morocco, and Turkey is unknown.

The Union of Proprietors of Nice is a limited society, with a capital of about a hundred thousand dollars, which, by its statistics, binds itself to deal only in pure olive oil. It has about twenty-six plantations and presses in different parts of the district. The company makes a fine display of olive oil.

It may be stated, in conclusion, that the olive crop is a very variable and uncertain one; one that yields a profit does not perhaps occur for six or eight years.

## HEALTH MATTERS.

## Report of the Paris Commission on Consumption.

THE permanent commission, appointed last year by the Congress for the Study of Tuberculosis, has just presented its report, through M. Villemin, chairman. This report embodies certain instructions to the public, which the commission deems of sufficient importance for general adoption. *The Boston Medical and Surgical Journal* summarizes this report, a comparison of which with that issued in New York, and previously referred to, is of interest.

Tuberculosis is, of all diseases, that which has the most victims, especially in the cities. More than one-fourth of the mortality of Paris during the year 1884 was from tuberculosis in some of its forms. Tuberculosis is a parasitic, virulent, contagious, transmissible disease, caused by Koch's bacillus. The microbe penetrates the organism by food, by air of respiration, and through the skin and mucous membranes by abrasions, excoriations, and divers ulcerations. Certain diseases, as measles, chronic bronchitis, pneumonia; certain constitutional states due to diabetes, alcoholism, syphilis, predispose to tuberculosis.

The cause of tuberculosis being known, there is but little difficulty in preventing its dissemination and propagation, if proper prophylactic means are taken. The parasite of tuberculosis may infect the milk, muscles, and blood of animals which serve for the food of man. Raw meat, underdone meat, blood, may contain the living germ of tuberculosis, and should be interdicted. For the same reasons, milk should be boiled before being ingested. By