

day a fresh one is made, two inches above the first, and so continued during the "raccolta," or gathering, which, in favorable seasons, lasts about six weeks.

When the incision is first made, the manna flows in a watery, limpid state, but gradually thickens as it is exposed to the air and the heat of the sun, which at this season is intense.

This is deemed the best and finest quality, and called "manna in tears." After it is collected, and the leaf removed to a fresh incision above, the sap continuing to flow down the bark of the tree is concentrated thereon, and forms a second quality, which is afterwards carefully detached with a knife. This is distinguished in commerce as "manna in flakes," the quantity of which is by far the most considerable part of the collection.

A third and inferior quality is collected, called "manna in sorts," composed of the refuse, or broken collections from the two preceding, that which has accidentally run upon the ground, or been damaged by rain, and that which flows at the end of the season, when the heat of the sun is insufficient to concentrate it. The quantity and quality of this article depend upon a hot and dry season. As the operation is necessarily exposed to the weather, a rainy or damp season will greatly diminish the quantity of the crop, and often entirely ruin its quality, since, once wet, it cannot be dried by any artificial means. The first two qualities are usually shipped to England and the United States; the latter, and inferior, to the Adriatic markets, and those of the Mediterranean. Other countries are provided with this drug from Naples, which draws its supplies from the southern coast of Calabria. In the plantation which I saw the trees were ten feet apart, but appeared too close for healthy growth.

#### CAROB TREE, OR CERATONIA SILIQUA.

The carob was noticed in my report on Cephalonia, as being one of the finest ornamental trees. Its fruit is somewhat like that of the honey locust, or *Gleditschia*, and its pod full of a sweet, rich pulp, covering a nutritious bean. It is eaten here, as at Cephalonia, both by men and cattle. A preserve is made of the juice, boiled with sugar, and spirits are also distilled from it. Most of the produce goes to Naples. It is rarely cultivated in large quantities, and the fruit is mostly collected from natural trees. A few specimens on a place will often be found grafted with a superior variety. Its native habitat seems about Syracuse, where it is found in considerable quantities.

#### PISTACHIO NUTS, OR TEREBINTHUS INDICA.

The pistachio tree springs up in rich soils, in the central districts, and also in the volcanic humus, in the region of Mount Etna. Grafted at six years old, it comes into bearing at twelve, and produces a fair crop about once in three years, until a very advanced age. A male scion, grafted upon one female in an orchard, is sufficient to fecundate the whole. The nut, gathered in September, is exposed to the sun until perfectly dry, as the least degree of moisture causes it to rot.

#### ALOE.

This conspicuous plant, equally useful and ornamental, abounds in all parts of Sicily, but is found in the greatest perfection in the southern and central districts. Planted in favorable soils, it attains the height of eighteen to twenty feet, and flowers in seven or eight years, after which it immediately dies away, leaving suckers behind to continue the succession.

It serves for impenetrable fences, the stems for rafters of huts, and the leaf for domestic manufactures. The leaf, steeped in water until perfectly tender, crushed between cylinders, soaked for some days in a stream, then beaten and combed out, yields a thread which is used for various purposes.

#### CORK WOOD.

Cork oaks of stunted growth are found in the woods of Sciana. The outer bark, unfit for bungs and stoppers, is used chiefly for fishing tackle; the inner, equally valuable with common oak bark, is used in tanneries, to protect which branch of industry, the exportation of cork wood, except as dunnage, is strictly prohibited.

#### GUADO.

This dye plant is sown in autumn, and gathered in May. The leaves, ground at the mills and kneaded with the juice, are worked into balls, which, when dried in the sun, are used in giving linen a light-blue color.

#### FIGS.

These are of poor quality, not so well suited for exportation as those of the Levant. No alkaline solution is used in their preparation; they are slit, and dried on strings, mostly about Messina and Calabria.

#### TOBACCO.

This plant is produced in gardens around most of the principal towns. The best soil for its cultivation is a good, rich loam, and the best situation a slope with a southerly exposure. Sown in the winter, it soon comes up, and gradually advances until the crop requires to be thinned. The sprouts transplanted are set about twenty inches apart, in ground well watered and manured. The blossoms are nipped off, and the shoots cut away as soon as they appear, to enable the young leaf to expand and ripen. The maturity of the leaf, which is in summer, is denoted by a change in its color, and the appearance of pustules on its surface. The plant is then plucked up, and the leaf stripped and dried, preparatory to its sale to the dealer for manufacture. The quantity of seed sown is about a gallon per acre; the quantity of leaf gathered about thirteen thousand pounds. Tobacco

was once worth to the government thirty or forty thousand dollars revenue; they increased the duty, and none was imported.

## COTTON.

The soil of the Sicilian plains is eminently adapted for its growth. The seed is obtained from Malta, sown in spring, gathered in August, September, and even as late as December. The plant is not liable to blight, but is sometimes injured by the sirocco.

The sea-island cotton seed has been distributed in several districts; some has entirely failed. In one place a little cotton was produced, but the trial was scarcely such as to warrant a decision upon its adaptation to the climate and soil.

## CASTOR OIL.

This plant grows wild in many parts, and is much cultivated in the vicinity of large towns for the oil which is extracted from the nut. It is prepared by almost every chemist, for home consumption, to the exclusion of castor oil from the East and West Indies. Were the process properly conducted, the extraction of the oil might become an important branch of Sicilian industry.

## LIQUORICE.

The roots of the liquorice plants, which grow wild, are converted into paste by washing, steeping, boiling, and evaporation. The first quality is that of Taormina; that of Catania and Patti is too often adulterated with the juice of the cactus and carob.

## OPIUM.

This is nearly equal to the Turkish; has been made by a Sicilian chemist from the wild poppy, which abounds in the island.

## LUPINS.

White lupins are raised for fattening cattle, and also as manure for vineyards, being plowed in when a foot high.

## SEEDS.

Anise, canary, cotton, flax, hemp, and mustard are the chief. The first three are largely exported; the last three are mostly consumed in the island.

Wheat is of two kinds, soft and hard, the soft used chiefly for household bread, the hard for macaroni. The seed sown in October and November, at the rate of half a bushel to an acre, yields, in June and July, about eight for one. The average weight of a bushel is about sixty pounds. This grain has been much neglected for the want of

sufficient hardness in the English mill-stones; but since cast-iron and French burrs have been introduced, the wheat here can be made into flour equal to that of the best soft grain. The best macaroni wheat is called *Giustalisa*, and the next best *Realforte*. At the magazines these were priced to me at \$1 50 per bushel. The annual crop of wheat is computed at 16,000,000 bushels.

Oats are raised in small quantities in the southern districts; the return of seed is ten to one.

Barley is found unfit for malting, and is chiefly used as provender for horses.

Indian corn is but little cultivated. A particular species, called *Cinquantino*, ripens in fifty days.

Rice is principally grown in low marshy districts about the plains of Catania, where the lands may be irrigated by the waters of the *Giarretta*. The quantity is inconsiderable, and hardly sufficient for home consumption. The grain, small and ordinary in quality, may be classed as little better than Egyptian. It must be sown in a deep soil, and kept constantly under water. It produces about six hundred weight per acre of clear rice. This is thrown into a mill, the lower stone of which is lined with cork. The cultivation of this grain is considered an unhealthy occupation. The dry rice of Porto Rico is not cultivated in Sicily. Sown on two occasions, it came up quickly, but owing to inattention was allowed to perish.

Flax is grown abundantly in all parts of the island. The best soil for it is a rich garden-ground. The land requires from three to six plowings, according to the nature of the preceding crops, and good and plentiful dressings with stable manure, or the sweepings of sheep-folds. The sowing generally takes place in November, but occasionally in March, when two salmas, or sixteen bushels of linseed are allowed to one salm, or about five acres of ground. The harvest is usually in May and June, when, in favorable seasons, from thirty to forty bushels of linseed are gathered, together with ten cantars, or about sixteen hundred weight of flax. The plant being drawn up by the roots, the seed is beaten out and sifted previous to shipment. The stalk is steeped in running water for seven or eight days, at the end of which time it is taken out and dried. The crisp bark is broken and removed by a peculiar instrument. The fibre is combed and prepared for spinning with a view to future manufacture. Flax, which in England is supposed to impoverish the ground, is in Sicily thought to have a beneficial effect.

Hemp is much cultivated on the eastern coast, in rich damp soils, or in ground well irrigated. The land is plowed four or five times before the sowing, which takes place, near the coast, in March, but in the mountains in April, when three and a half bushels are sown on an acre of land. The ground requires to be well watered every four or five days from running streams or from reservoirs. The plant, which is delicate, and liable to be cut by the frosts, comes to perfection in July and August. A good crop will yield from seven hundred to a thousand pounds of seed, and from six to ten hundred weight of fiber, per acre. The seed is beaten out, and the fiber prepared for spinning in the same manner as flax. The plant, when taken out of the water in a putrid

state, creates a severe malaria, to escape the effects of which, the persons employed are recommended to sleep among horses and mules. The cultivation of hemp and rice is prohibited within two miles of any human habitation, unless mountains or rivers intervene.

#### CREAM OF TARTAR.

This salt has of late years been manufactured largely near Messina from the fæces in settlings of new wine. The tartrate of potash, though containing a large quantity of tartaric acid, is too much charged with extraneous and earthy matter, deposited in the fermentation of the must, to allow it to crystalize by rest, on which account it was formerly made up into large balls, dried in the sun, and then burnt in heaps. The tartaric acid destroyed, nothing remained but the potash, which was sold to soap-makers, hatters, and others. This wasteful practice is at length exploded, and at present from fifteen to twenty per cent. of cream of tartar is obtained from the fæces of wine of good quality, while the base, or potash, is employed as heretofore.

#### SULPHUR.

This mineral is found in most parts of the island; but it is within the area of an irregular diamond, of which Sciacca, Mount Hybla, Alicama, and Terranova are the relative points, that the richest beds are situated. The mines lying within twenty or thirty miles of the coast are at present in full operation. Of those further inward, some are not worked, on account of the high rate of carriage, while others are worked only in discharge of contracted obligations. Generally covered by a bed of calcareous concretion, sulphur is found combined with other matters, its separation from which is effected by burning in kilns, made of gypsum and stone, each containing about sixty hundred weight of mineral. The liquified sulphur escapes through a hole in the front, and runs into a wooden trough, where it is left to grow solid.

#### CANTHARIDES, OR SPANISH FLIES.

These insects come over from Egypt, and alighting in the olive trees in the months of May and June, are collected by the peasantry and prepared for exportation. They are similar to our curculio, and are caught about Bronte, by jarring the tree over a blanket.

#### SALT.

The excavation of rock salt, most of which goes to the Danubian pastures, amounts to about one hundred and fifty thousand tons per annum. Evaporating salt is carried on at Trapani and Agosta. At the former place, fifteen hundred and sixty-two tons are annually made.

#### BEEES.

These insects are kept in great quantities in the southeastern districts. Some farmers have from two to three thousand large hives; these are carried, by night, up into the mountains, in summer, and in winter brought to the plains, in both which regions the bees find abundant flowers. Two or three crops of honey and wax are obtained in the course of the year, generally in May and August. The honey of Mount Hybla, near Catania, clear and well-flavored with orange flowers, maintains its ancient reputation.

Owing to the great consumption of wax in churches, the proceeds of bee-hives form a valuable item in husbandry.

#### DAIRY.

Butter is only made around Messina, Palermo, and in the country of Modria, from the milk of cows and goats. Curds and cheese are made throughout the island, from the milk of cows, sheep, and goats combined.

#### LIVE STOCK.

*Horses.*—Those used in riding are in general small, but good; those for draft, wretched and worthless. Their usual fodder is, in the spring, green barley; in summer, a kind of dog grass; in winter, barley, oats, straw, beans, and bran.

The Butera stud, in Sicily, is that of the estate of Radali, held by the Prince of Butera, at Melangianni, near Terranova and Licata. Founded in 1825, at which period the thorough-bred horses and blood mares were imported from England, it increased by degrees, till now it consists of one hundred and six animals. It is placed under the superintendence of an experienced trainer.

Mules are small and feeble, with the exception of the Modua breed, which are tall, strong, and active, and chiefly used for riding and litters. The mules are much employed in land culture and in carrying burdens.

Asses are also inferior, except the Pantelleri breed, which is tall and well made.

Oxen are of two breeds, the red, or Tunis, and the black, or native. The red, which is much used in farming, is large and well proportioned; one species is remarkable for its length of horns, which are often two and a half feet; these are not so strong as those whose horns are more moderate. The black is never put to the plow. In the summer the cattle graze upon the mountains, where they find abundant grass; in the winter they descend to the plains, where they browse on the dwarf palm, the bird weed, and the stubble of corn fields. Unprovided with sheds, they have no other shelter from the weather than the branches of trees, an exposure always prejudicial and often fatal. A cow which is a good milker will yield from four to six quarts per day. Barren cows are usually put to the plow.

*Sheep.*—The native breeds, white, brown, and black, are small and scraggy, producing a coarse wool, at the rate of from two to three pounds per animal, used for domestic manufacture. The ewes, which are milked regularly, give about half a pint per day. The carcass of a two year old weighs about thirty pounds. The merino breed has been introduced on the Butera estate, which boasts of two flocks of unmixed and crossed, of four and fourteen hundred, respectively.

Goats are numerous; their long and fine hair is woven into cloth and sacking.

Swine compose a gaunt, black breed, remarkable for nothing but the length and stiffness of their dorsal bristles. A one year old hog weighs, if fed on acorns, one hundred and twenty pounds; a two year old, one hundred and eighty pounds.

#### LAMB AND KID SKINS.

After the month of March the kid and the white and spotted lamb skins are steeped in sea-water, to preserve them from the worms, and to clear them from all fleshy substances. In this state of preparation, which costs about five dollars per thousand, they may be safely shipped, in all seasons of the year, to perform the longest voyages. The black lamb skins are prepared for the German market, at about ten dollars per thousand.

#### SOIL.

With the exception of the chain of Monte Peloso, or Nestuvo, which runs in a southwest direction from Cape Peloso, and its dependent granitic plains, all the soils of Sicily may be classed under the several varieties of the calcareous. There are, of course, exceptions, but these are so diminutive in comparative extent as not to admit of their being called any more than mere patches. When the soil is deep, which is not unfrequently the case, and this to an extent seldom seen in other countries, it is, for the most part, a rich and fertile loam; where it is shallow, it has the appearance of being sandy and sterile, without being so in reality, as it contains a very great variety of marine exuvia in its composition, derived from the neighboring conchiferous limestone, which yields sufficient humus to enable it to produce the most luxuriant crops, notwithstanding its arid and unpromising appearance.

#### MANURES.

The usual fertilizing materials are stable manure, and, where it is to be had, that of sheep and goats. Lime, so useful an agent in stiff and clayey soils, which abound in Sicily, as well as in light and sandy ones, also common in certain districts, is totally neglected, to the consequent loss of humidity, which it would absorb from the atmosphere, and the prevalence of vermin, which it would check and destroy. Bones, formerly used for manure, but now employed in chemistry, are become too expensive for the farmer, and are therefore left to be exported, in

large quantities, to France and Genoa. Lupins, as before observed, are in frequent use for manure; their thick, succulent tops, covered by the plow, form a highly fertilizing mass of vegetable matter.

#### IMPLEMENTS.

The rudest is the plow, which Simond properly describes as an implement which seems to have gained nothing since the days of Tuptolemus. It consists of a shaft, eleven feet long, to which the oxen are fastened by an awkward collar, while the other end is mortised obliquely into another piece of timber, five feet long, with one end sharp, scratching the ground, and the other held by the plowman, who, on account of its shortness, bends almost double while at work. The end in the ground is often, but not always, shod with iron, but it has neither colter nor mold-board. This instrument scarcely penetrates the earth, and is kept straight with great difficulty.

The next is the hoe, which varies in construction in different provinces, according to the nature of the ground. In the vicinity of Palermo, where the soil is not deep, and the heavier soils of the Valle Mazzara prevail, the hoe is broad and shallow; whereas that in use near Messina and the Val Demone, where the soil is light and sandy, is narrow and long, often two feet and more, and sloped in upon the handle. This unwieldy instrument, often containing from eight to ten pounds of iron, is used by the peasants.

The sickle and three-pronged wooden fork offer nothing remarkable.

#### RENTS.

The usual rent of land for corn, &c., is about one dollar and seventy-five cents per acre, taking the average throughout the island. Leases run for three years, sometimes with the privilege of three more, and occasionally for nine years, but never a longer time. For orange and lemon orchards the rents are higher, and vary widely, according to age and quality. Their standing crop, however, is often sold by the landlord, by estimation, at so much per thousand on the tree, or per thousand gathered by the purchaser, counted on the premises, and often by the heap. When the crop is sold thus, it is at the risk of the purchaser from the day of the contract, and one third of the amount is always paid in advance. The expense of the gathering in all cases devolves on the purchaser.

#### LABOR.

The laborer by the day receives one tari (eight cents) in money, and in food four and a half pounds of coarse bread, one quart of wine, and one measure of oil for his herb soup. His earnings amount to about twenty cents per day. In some places he is paid entirely in money, in which case he receives about twenty cents per day the year round. In harvest, his wages are generally doubled, and his food given without limitation. The hours of labor from April to harvest are divided

in two portions, from 4, a. m., till noon, allowing one hour for breakfast, and from 3, p. m., till sunset. The three hours at noon are for dinner and sleep, a plan which must be attended with the best results, and which we have often vainly endeavored to introduce among our own laborers during the hot season. From harvest to April the hours are from sunrise to sunset, with one hour for dinner and half an hour for breakfast. The price of bread does not vary so much as elsewhere in Europe, and with us being about two cents a pound.

#### GENERAL CULTURE

With a population of two millions three hundred and fifty thousand, Sicily has an area of more than six and a half millions of acres, of which 4,000,000 are cultivated with wheat, 1,700,000 are left for grazing, 200,000 are left in woodland, 420,000 are cultivated with grapes, 150,000 are cultivated with olives, 40,000 are cultivated with oranges and lemons, and 30,000 are cultivated with sumac.

The remainder is in other crops and waste lands. The whole is divided into seven hundred thousand properties, the yearly value of each being about twenty dollars. The soil is adapted to all the finest vegetables. Peas are on our table here in February, and I see continually the very finest broccoli and cauliflower. Of the former, there are varieties for each winter month from November to April. Of the latter, a moderate specimen measured more than a foot in diameter. These were under field culture, and not the pet nurslings of a gentleman's gardener, which are often still larger with us; you see everywhere donkey after donkey loaded with them. Lettuce is used for horses, and also the twitch grass, which with us is so formidable an enemy to hoed crops. Walnuts, or Madeira nuts, which with us will scarcely bear in twenty years, produce fruit here in from four to six years. The soil and climate of Sicily are all that could be desired, the working classes seem industrious, and nothing is wanting but enterprise among the men of wealth, and a *laissez faire* practice on the part of the government. The Sicilians of the higher class rarely visit their estates in the country, except for a few weeks, in spring and autumn, when they carry with them all the fashionable follies of the city, and rarely take an interest in agriculture. Notwithstanding the hot weather, by which the country is nearly burnt up in the summer, the peasantry cultivate the land thoroughly, and gather in the crops.

The Neapolitan government is far from being paternal; it is thoroughly repressive of all development. It seems apprehensive lest any of its people should attain wealth, and instead of encouraging an industry which would add to its own revenues, it imposes a burden upon anything becoming too profitable. Large quantities of wheat were at one time grown, and Sicily bade fair to be a great producer of that grain; government then forbade its exportation. They began the extensive production of macaroni; government forbade its exportation. They produce largely of sumac. Government has forbidden the export of trees, and may next forbid the export of the ground article. Their policy can scarcely be thus to keep it in their own hands, as the plant exists elsewhere. Some enterprising men desired to construct a rail-

road; the stock was all taken, and they were about to commence the work, when government threw obstacles in the way, and the enterprise was abandoned. There is also a tax upon each tree planted, to be paid annually, and not remitted if the tree dies. Whether this is imposed by the government, or by the church, to which two thirds of the island belongs, I could not satisfactorily ascertain; but, however it may be, the result of this wretched policy is that the lessees take no interest in improving the land, and content themselves with a bare subsistence.

One thing is certain, there is no country whatever of its extent that can compare with Sicily in climate, soil, and variety of its products. Were it in the hands of our people, and allowed to develop under our free institutions, its exports would become of unexampled value, and its whole surface would be like a garden.

#### MADDER.

At Naples we found in the cultivation of madder more peculiarity than we had anticipated, and could readily account for our own failure in its culture on Long Island, some fifteen years ago, when we had no guide beyond the meager information contained in books. It will be borne in mind that the madder root is two feet long, about the size of a large pipe stem, and thus very liable to break in digging from a heavy adhesive clay. The soil should, therefore, be light and very rich, with as much fertilizing matter applied as it will hold. It should be dug or plowed three feet deep, and then laid out in beds or spaces six feet wide, having a vacancy of two feet between them. In these spaces the seed is planted like beet seed, in rows nine inches apart, and covered three inches deep. The quantity of seed required for an acre is one hundred and twenty pounds. The planting is done in March, and the same clearing is required through the season that beets receive. The following November or December, the earth from the two feet vacancies between them is taken out and placed upon the beds, covering them two inches, and sometimes more, as a protection against the cold. In August of the following, or second year, and sometimes of the third year, the roots are dug with a spade two feet long, dried in the sun to one fifth of their green weight, and exported in that condition. They were formerly always ground here, but the adulteration was so great that foreign merchants now prefer to grind it themselves. The average produce of that dug in the second year, or of eighteen months growth, is one ton per acre; that of thirty months growth is one and a half tons per acre. Its value is from one hundred and thirty dollars to one hundred and fifty dollars per ton, and doubtless more in the United States. The quantity grown in the vicinity of Naples is large, but probably not equal to that grown near Avignon.

As a general rule, the quality of all agricultural products is better the further north they are grown, so long as the growth or fruit is not injured by the cold. Thus, the orange is finer in Florida than in Havana, while in Savannah again, it is inferior, as the wood is injured by the above-mentioned cause. Apples, pears, potatoes, wheat, and corn are finer in the northern and western States than in the southern; and although exceptions may exist, this will be found commonly true.

Madder could, doubtless, be most profitably grown with us in the light, rich soils of the south. Whether it can be profitably grown at the north, and its superior quality compensate for the greater trouble, may only be ascertained by actual experiment and a knowledge of the effect upon it of northern winters.

## SILK.

We visited the estate of Mr. Strickland, near Naples. This gentleman is much interested in silk culture. He is just finishing a stone cocoonery, one hundred and twenty by thirty feet, and thirty feet high, which is heated by earthen stoves, and will hold the worms from twelve ounces of eggs. He is very particular to throw out all the defective eggs, and consequently no disease has yet appeared among his worms, while it is abundant elsewhere in Naples, and all through Tuscany and Lombardy. The arrangements of his new cocoonery are complete. The frames are made of cane and brown paper, and covered with nets. Upon these nets the leaves are placed, and while the worms are feeding they are lifted off, and the frames cleaned. Mustard is cultivated to give bosquets for the worms to spin upon, the branches being hung above them, and the seed paying the cost of cultivation.

His mulberry trees are planted fifteen feet apart, grafted, and cut down every year, leaving two new branches, each with six eyes. They generally vegetate about the twentieth of March, although a variety called *Filippino* is two weeks earlier. Those known, however, as *Bolognese* and *Majatica* are most generally used. The leaves are ready two weeks after vegetation, and the hatching of the eggs is deferred till they are certain of the right food. The use of substitutes, as in Sicily, might produce disease. The quantity of leaves consumed is about twenty-four hundred pounds to an ounce of eggs, or one hundred and fifty pounds of cocoons. The trees being kept down to the height of seven feet, children can pick the leaves; but this operation is not allowed till the tree has been grafted ten years, when it will produce fifty pounds.

The best worms, and those from which the finest silk is obtained, are called *Pestellini* and *Valdarnesi*, while a coarser kind is made by the *Bolognese*. The hatching is generally about the end of April, but depends somewhat upon the season and the state of the leaf. The cocoons are sold alive at forty cents a pound, and some are always reserved for eggs, which sell for four ducats, or three dollars and twenty cents per ounce. Five hundred pounds of cocoons will produce two hundred ounces of eggs.

The production of silk has been larger in the provinces, but limited in Naples to domestic cultivation among the peasants, who had suffered severely from inferior eggs until Mr. Strickland came, and, by his clean mode and uniform success, induced them to imitate his practice and buy the eggs from him. Whoever may desire a supply, should order not later than the fifteenth of May, as Mr. Strickland only reserves from his sales of cocoons sufficient to meet actual demands. A better source cannot be found, as he is an educated, intelligent man, and an attentive manager, taking great pride in keeping his worms free from the disease which has ravaged Tuscany and Lombardy.

## LUPINS.

Mr. Strickland cultivates lupins and plows them in for manure. He thinks them indigestible and unfit for horses, although often cut by others for that purpose when a foot high.

## BARLEY.

Two or three crops of barley are grown successively for fodder.

## CLOVER.

The Italian clover, in his opinion, deepens the soil.

## CASTOR OIL.

Castor oil is grown and manufactured to some extent, but requires much irrigation.

## APPLES.

The best apples here are *Limoncelli* and *Melagelata*.

## GRAPES.

A grape called *Wafrancola* is spoken highly of, with a strawberry flavor and coarse leaf, not subject to mildew.

## FIGS.

They have a mode of ripening figs ten days earlier by touching the blossom end with sweet oil.

## TREES AND PLANTS.

In the botanic garden are *Magnolia soulangiana*, *Pyrus japonica*, and Camellias, in the open ground, all in bloom early in March, with some fine specimens of rare trees, such as *Laurus camphora*, fifty feet; *Araucaria excelsa*, thirty feet; and *Araucaria brasiliensis*, twelve feet; a large tree of *Taxodium mucronatum*, and a fine plant of *Chamærops humilis*. The place appears well kept, under the direction of M. Tenore, but will not compare in richness with the botanic garden at Palermo. There were two trees in the garden of Baron Rothschild which, to a lover of arboreal beauty, would almost be worth a trip from Rome to Naples. They were *Araucaria excelsa*; and those who have admired the small specimens in green-houses can imagine, in some degree, how superb are these, forty feet high, straight as an arrow, full, rich, and feathery, and clothed with a shade of incomparable green.