

Scientific.

COFFEE.

Its Nature, Consumption, and Uses.

The coffee plant is a native of Yemen, in Arabia; the time of its introduction into Europe is unknown; it is mentioned in a work, published in 1573, by a German physician named L. Rauwolf. The Turks have coffee houses, in which they meet to sip their brown liquid, and chat together like Englishmen in their ale houses. Coffee houses are common in Germany, and were at one time more common in England than at the present moment. The first coffee house opened in London was by a merchant of Turkey named Edwards; this was in 1652. Coffee was in public use before that time in France.

When coffee was first introduced into Britain, it met with the most furious opposition from old and young, grave and gay, men and women fair. In 1674, the women of England petitioned Parliament against allowing the use of coffee, in which petition it was stated "that men, by its use, become like the desert of Arabia; and that if its use was persisted in, the offspring of mighty Anglo Saxon ancestors would dwindle into a succession of apes and pigmies; and on a domestic message, a husband would stop on the way to drink a couple of cups of coffee." Here we see the fair sex were jealous for the honor of good old English ale; and the question is, Were they not right? Coffee, however, had, and still has, its advocates. It has been stated by them that wherever it has been introduced, drunkenness has become less frequent, and the people more sober. We have no statistics to prove or disprove this statement, but it may justly be assumed to be true.

In the reign of Charles II. coffee houses were shut up in London by proclamation, in which it was stated, "the retailing of coffee nourished sedition, spread lies, scandalized great men, and might be considered a common nuisance." This arbitrary act occasioned violent discontent, and permission was given to open the coffee houses again, but the landlords were forbid to keep seditious papers on their premises. The coffee houses had become political club houses.

Four different kinds of coffee are used—Mocha, which is the best, comes down the Persian Gulf from Arabia; its berries are of a middling size, clean and plump, and of greenish light olive hue; it sells dearer than any other. The next best is Java, which is grown on the island of that name, and it is cultivated by the Dutch. The other two kinds are Brazilian and West India coffee, which are very similar. A field of coffee in full bloom is a sight worth going to Jamaica to see.

The quality and effects of coffee differ according to the manner in which it is roasted. It must be roasted with great care, and not over-done.—The Turks roast it in an iron spoon, and roast it just before they are going to use it. This is the best plan, as coffee loses its flavor if exposed after being roasted. The reason of this is evident; the roasting brings out the essential oil to the surface. This is volatile, and is the fine aromatic quality of the bean; it therefore soon evaporates when exposed to the atmosphere. To roast coffee aright, it should be done by an invention patented a few years ago in England. It consists in using a copper drum silvered inside, into which are placed the beans, and the drum made to revolve above the fire until the beans are done. It is best not to over-roast them.

The peculiar principle of coffee is the caffeine, which was discovered by Robiquet in 1821; it is a very active principle, and affects the urinary organs. Water saturated with coffee, was first used by Grindal, in the Russian hospital of Dorpat, in the treatment of intermittent fever; it was also given as a powder, raw. In eighty cases, not one resisted its effects. Homœopathic practitioners also use it with success.

As an article of diet, and as a beverage, coffee has become quite a favorite, if we may judge from the quantity consumed. No less than 154,985,896 pounds were imported into the United States in 1850; the value of this was \$11,215,096. No country in the world consumes so much coffee, in proportion to its inhabitants, as ours. Thus, last year, the average amount of coffee consumed by each man, woman, and child, was over seven pounds. The consumption of coffee has greatly increased in England, and it does not appear that the fears of the old English matrons, about their sons becoming monkeys by its use, are yet realized.

Coffee is now very generally used by all Europeans, as well as the old Turks, and in almost all American families, for a breakfast beverage. Its effects upon the human system may be peculiar, but general use has not yet developed anything extraordinary produced by it, except it may be the healthy appearance and rugged strength of some French miners, who use it in large quantities.—This fact was brought before the Academy of Sciences in Paris, last year. In some armies and navies, coffee has been wisely substituted for grog. It would be well if this were the case in every single instance. In cold weather, coffee is an agreeable and safe stimulant. It was noticed that those French soldiers who had saved some coffee and sugar during the terrible retreat from Moscow, stood the cold much better than those who had none.—Coffee affects the nerves of some people in a most singular manner, by making them tremble and feverish. No person so affected should use it. As a general thing, for almost every person, we believe it is a healthy and pleasant beverage. In England, all the coffee is adulterated with yellow dock root, ground up along with the beans. The law allows of this adulteration, and yet, for all this, the coffee there sells for about double the price it does in the United States.

Every family should buy their own beans, and roast and grind them, for much of our ground coffee is also adulterated with roasted corn and peas. These adulterations are not the least unhealthy; but there is no earthly use of anybody paying for corn instead of coffee; and if anybody wishes to adulterate their own coffee, why, they can do it to suit themselves.

When we reflect upon the great quantity of coffee now consumed by us every year, how that the consumption has increased from a little over four millions of pounds in 1790, to over one hundred and fifty-four millions of pounds in 1850, we cannot shut our eyes to the seeming necessity of growing coffee for ourselves.

Our Southern States can surely raise good coffee. They beat the world for cotton and rice, both of which was introduced from foreign countries; and coffee, we think, can be as successfully cultivated as these have been.—*Scientific American.*

CORK.

Many persons see corks used daily without knowing from whence come those useful materials. Corks are cut from large slabs of the cork tree, a species of oak, which grows wild in the southern countries of Europe. The tree is stripped of its bark at about sixteen years old; but before stripping it off, the tree is not cut down as in the case of the oak. It is taken while the tree is growing, and the operation may be repeated every eight or nine years; the quality of the bark continuing each time to improve as the age of the tree increases. When the bark is taken off, it is singed in the flames of a strong fire, and after being soaked for a considerable time in water, it is placed under heavy weights in order to render it straight. Its extreme lightness, the ease with which it can be compressed, and its elasticity, are properties so peculiar to this substance, that no efficient substitute for it has been discovered. The valuable properties of cork were known to the Greeks and Romans, who employed it for all the purposes for which it is used at present, with the exception of stopples. The ancients mostly used cement for stopping the mouths of bottles or vessels. The Egyptians are said to have made coffins of cork, which being spread on the inside with resinous substance, preserved dead bodies from decay. In modern times cork was not generally used for stopples to bottles till about the seventeenth century, cement being used until then for that purpose.

The Farm.

(From the New England Farmer.)
Wire Fence.

MR. EDITOR:—In the *New England Farmer* for April 3d, there is an account of the proceedings of the eleventh agricultural meeting at the State House, Tuesday evening, March 30th, at which Hon. J. E. Gray presided; the subject for discussion being the "Subdivision of Lands and Fencing."

The President, in the course of his remarks, after expressing his preference for stone walls as being the cheapest and most effectual fence, alluded to Wickersham's iron fence, which could be put up for \$1.25 a rod, and also to a good wire fence which could be put up for less than 75 cts per rod.

Now as every farmer has not the materials on his farm, or within a convenient distance to build stone walls, resort must be had to other modes of fencing; where a temporary fence is to be built, the Virginia fence is frequently preferred; but as a permanent fence the cedar post and rail fence is generally used.

My object at this time is to learn where these wire fences can be obtained, and whether it would pay to purchase a wire fence costing from 75 cts. to \$1.25 per rod, in preference to purchasing posts at 17 cts. each, and rails at \$7.00 per hundred.

Perhaps you, Mr. Editor, or some of your numerous correspondents, can give the desired information, which will be thankfully received.

If the wire fence could supersede the zig-zag fence, or even the post and rail fence, a great improvement would be made in the appearance of our fields and pastures; nothing is wanting to accomplish this, but to convince people that the wire fence is the cheapest and most durable fence.

April 19, 1852.

REMARKS.—Wickersham's wire fence may be obtained of Messrs. Ruggles, Nourse, Mason & Co., at Quincy Hall, Boston. We have no doubt about the economy of using wire fences wherever stones are scarce and posts are seventeen or even twelve cents each, and rails are seven dollars per hundred. We have wire fence which has answered all the purposes desired for a fence for two years, herding cattle in a pasture on one side of it, while on the other there was a heavy growth of clover. The cattle put their heads through the wires and fed the clover down as far as they could reach, but never broke a wire. But it would be better to place wires so thick at the bottom as to prevent their reaching through. The wire used was, we think, No. 5, at six and a half cents a pound. Only two posts are necessary for any distance, if the ground is tolerably level; one at each end. Set a stout post, so deep and strong that you are sure of its remaining firm when you straiten up the wires. Bore the holes for the wires, pass the end of the bottom wire through, and wind round a piece of dry hard wood; then carry it to the post at the other end. Now comes what has always been found the difficult part of making wire fence—that is, straightening the wires. But nothing is more simple and easy, when we know how. The hole is bored in the post and the wire passed through some two feet. Take a round piece of hard wood five or six inches in diameter, and eighteen inches long, bore a hole near each end and one in the middle; pass the end of the wire through the middle hole, place the stick or roller against the post and turn the roller by means of iron pins in the holes in the end of the roller. You will soon find a power that will stretch or break anything short of a common-sized mountain. When you get the degree of tension desired, drive in a plug of hard, dry wood, by the side of the wire, unwind from the roller and fasten the end of the wire around the post or a spike driven into it. Put up the remaining wires in the same manner; then (your stake holes being previously dug two to three feet deep) set your stakes twelve feet apart, saw in their sides half an inch and rest the wires in the saw marks, fastening them with a nail. With good chesnut or cedar posts and stakes, and all well put up and painted, we have no doubt such a fence will last twenty-five years without much repair. It is handsome, cheap and durable, and may be made for less than fifty cents a rod.

We first used a horse and pulleys to straighten the wire, but soon studied out the plan of the roller, which we found to work to perfection.

Dissolving Bones in Ashes.

We give a plain, simple rule, suited to any farmer who is disposed to save and use one of the best fertilizers within his reach which is now almost universally wasted.

Procure a stout earthen jar, of about thirty gallons capacity, and a demi-john of sulphuric acid, commonly called oil of vitrol. Now gather, or save all the bones with n your reach, until you have 100 pounds, which will dissolve easier the finer they are broken. Put these in the jar and moisten them with water for a day or two. Now dilute fifty pounds of acid with two or three times its bulk of water and pour one-third of it upon the bones. Stir them frequently, and on the morrow add another third of the acid and water. Stir them well, and if not dissolved sufficiently on

the next day, add the remainder of the liquid. As soon as the bones are reduced, mix charcoal dust, dry peat, saw dust, loamy earth, or if for immediate use, ashes or lime may be used as a dryer, until the whole is in the form of powder, convenient for sowing by hand or drilling machine. You may apply this at the rate of three to ten bushels of the bones to the acre, sown broadcast and lightly plowed or harrowed in, so that the earth will absorb the gaseous portions of the gelatine of the bones, which is of great value, independent of the phosphate of lime; a substance greatly needed upon all the cultivated fields and pastures of all the old States of the Union.

Instead of a jar, for dissolving the bones, you may use a tub, or an iron kettle, but they will soon be destroyed by the action of the acid. Upon a large scale, the best way is to have a tight stone floor, upon which, build a ring of moistened clay or loam, as is often done in slacking lime or mixing mortar. Within this place put the bones, and wet with the acid as before directed, and when ready for mixing with earth, rake in the ring and stir all up together, adding as much substance as may be necessary, or you may dilute the dissolved bones until you can spread the whole as liquid manure, which is an admirable plan for all grass lands. The purchase of the acid is not a loss, being itself a valuable fertilizer. Bones may also be dissolved by boiling in strong ley and then mixed with dryers, and sown; or put in the compost heap with plenty of peat earth, they will cause to ferment and become exceedingly valuable. Bones are now almost universally wasted by every farmer, because he does not know how to prepare them so as to avail himself of their great value. Let him follow this short, simple direction, and it will be worth more than we charge for a thousand copies of the paper, in which we are constantly giving him such valuable information.—*The Plow.*

ENRICHING GARDENS AND LAWNS.—The daily and weekly waste of chamber slops, if sprinkled over the ground of small gardens would be all the enriching material required to produce good crops from year to year. Grass lawns if sprinkled with wash water and urine weekly would never require to be covered, as many now do, with a thick coat of manure, unsightly to the eye, and disagreeable to the feet when a pleasant day arrives when one wishes to look over one's shrubs and trees. Lawns so sprinkled would also be always fresh and green. Fruit has also been greatly benefited by moderate doses during their growing season. At this present time, you may pour on without fear, for the frost and rains previous to the opening of spring will so distribute it that no ill effects can arise from an over supply.—*Farmer's Monthly Visitor.*

SORE NECKS IN OXEN.—This is caused by using yokes that do not fit the neck, or by working the oxen in wet weather. It can be prevented by using good yokes and applying oil or lard to the neck in stormy weather.

REMEDY.—Use ointment made of tallow and bees-wax; or make a strong wash of white oak bark, and apply it night and morning.—*Ex. Paper.*

GRASS UNDER TREES.—By sowing nitrate of soda in small quantities in showery weather, under trees, a most beautiful verdure will be obtained. I have used it under beech trees in my grounds and the grass always looks green. Having succeeded so well on a small scale, I have now sown nitrate of soda among the long grass in the plantations, which cattle could never eat. I now find that the herbage is preferred to the other parts of the field.

COUGH IN HORSES.—We have been informed by E. Wood, Esq., of this town, that the boughs of cedar have been used as a remedy for cough in horses, with complete success. They should be cut fine, and mixed with the grain given to the horse.—*Maine Farmer.*

PEAS may be got in as early as the soil will admit of working. For early green peas, it is scarcely possible to sow too early, after the frost is out. The ground should be rich, well pulverized, and assisted by an application of ashes, lime, and other matters, calculated to ensure early germination and rapid growth.

Ingratitude is unpardonable, and dries up the fountain of all goodness.