

Prepared for the Scientific American
Coffee.

Coffee is the seed of the *Coffea Arabica* of Linnæus, an evergreen shrub cultivated in Arabia, Persia, the East and West Indies, Isle of Bourbon, and several parts of America.—Coffee is very seldom used as a medicine, but chiefly as an article of diet, and also as an agreeable and stimulating beverage. Coffee when roasted and infused in boiling water for a short time, care being taken to prevent as much as possible the escape of the aroma or volatile particles, and drunk in the usual way stimulates the system. It is, however, a singular peculiarity of coffee, that if used in its raw state either in the form of powder or infusion, it produces febrifuge effects. In this way it has been used with success in cases of asthma, and for the cure of intermittent fever. When roasted it becomes a powerful stimulant, and possessing a large proportion of nitrogen, it exerts considerable influence on the organs of digestion. A strong infusion of coffee, taken without milk or sugar, has been employed with great advantage in arresting obstinate attacks of bilious vomiting. Its peculiar effects of increasing the energy of the brain and nervous system, and preventing the disposition to sleep, rendering it the favorite beverage of literary persons, are well known; and perhaps it is owing to this peculiarity that it possesses the power of acting as an antidote to narcotic vegetable poison.

The use of coffee was strongly opposed in the East, and for some time the sale of it suppressed. It was introduced into France upwards of 200 years ago, and was brought from the Levant to London in 1652, by a Turkey merchant of the name of Edwards, who established his Greek servant in a house in St. Michael's Alley, Cornhill, to prepare and sell this palatable potation. Its introduction into England met with strong opposition. Notwithstanding this, coffee continued to be consumed, and the coffee houses to increase which were frequented by wits, idlers and politicians to drink coffee and discuss the various subjects of public excitement.

An infusion of coffee properly prepared, stimulates to increased action, the brain, nervous system, heart and arteries of a healthy man, and in certain states of impaired digestion, imparts a beneficial influence to the digestive organs. Alcohol in the different forms of spirits, wines and ale, porter and beer, is often taken with a view of producing similar effects. Alcohol contains no nitrogen, the material of muscular strength, and therefore can impart no strength to the human system.

The use of coffee as a substitute for alcoholic beverages has been of great service to society in a moral and physical point of view.

There are several varieties of coffee, but the Mocha is considered the best; it ought to be of a greenish light olive hue, the berries at a middling size, clean and plump. Much, however, depends on the roasting of the coffee and preparing it for use; the process of roasting is generally carried too far, and much of the empyretic oil on which its virtue depends driven off.

It is customary for grocers who grind coffee for their retail customers to add to it about one fourth and sometimes more, of corn or of peas. These are not deleterious ingredients, but a very salutary addition, particularly to inferior coffee. It is not, however, the object of the grocer to improve the coffee, but to enable him to sell it at a lower price. Soft water is the best for the infusion of either tea or coffee, when this cannot be had, the addition of a little carbonate of soda will counteract the ferruginous or calcareous ingredients usually found in hard water.

Chicory.

Chicory is now grown extensively, says a late English paper, in the neighborhood of York, and in some parts of the north and east ridings of Yorkshire. Chicory is mixed with coffee, and sold often in England for coffee.—It is a very inferior article, but not deleterious. It may, for aught we know, be used in this country. To prevent imposition, get your coffee whole and grind it yourself. The deception can only be practised when the coffee is ground for you.

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Knitting.

This is an art that is far more modern than that of weaving. Plain weaving, is just the intersecting or crossing a number of horizontal threads by others, each succeeding crossing thread passing over one horizontal thread, (warp) and under the other across the web.—Knitting on the other hand, makes a web with one thread alone, it answering for both warp and weft and the whole apparatus for this purpose carried about in a lady's pocket. Knitting is just the formation of a number of loops or first a row of loops and then every succeeding row drawn through a former row.—Four wires are generally used for this purpose, but it can also be done with one, of a hook shape, to draw one loop through another. Guernsey frocks and mittens are made in this way. Knitting is said to have been invented in Scotland about the year 1500. If this is true it has soon spread nearly over the wide world. It is related that a Scottish gentleman had a servant who was famous for her fine knitting. At one time she knit a pair of hose of the most variegated and beautiful colors and of such fine texture that that each pair could be drawn through a gold ring. The gentleman, who was a loyal subject, (like some of our friends here who have made Victoria presents) determined to show his loyalty to George the Fourth, by sending him one of the pairs of hose. It is also related that the girl who made them, danced a hole in the heel of one of them at a ball the night before it was sent away and darned it so perfect that it was presented to the king, who was graciously pleased with the present and often wore them afterwards, not without a sly wink from Jenny, as often as she heard them speak about the King's hose. In New England hand knitting is industriously practised by our tidy farmers' daughters, in fact in all our rural districts, it is an essential quality of a good housewife, and should be, so should spinning and hand loom weaving. Knitting is done extensively by machinery at Cohoes, a thriving manufacturing village on the lower Falls of the Mohawk, near Troy, N. Y.

Steam Boat Explosion.

The Cincinnati papers of the 31st, relate the fearful explosion of the Steamer A. E. Johnson, on her first trip from that City to Wheeling, Va. A Mr. Williams saved the life of himself and lady by remarkable presence of mind.

Mr. Williams and lady were sitting in the ladies' cabin. A horrible crash aroused them. Mr. W. feeling the steam penetrating through the state-room, seized his wife who had sprung up, and enveloping both her and himself in the bed clothes, saved themselves from being scalded by the steam and hot-water, which soon wet every thing around. Looking out in a few minutes, he found that one of the boilers had been blown aft, directly through the boat, tearing away the doors of both cabins, and carrying off the front of the state-room on the side opposite to them. Front of the wheel-houses the gentlemen's cabin was all blown away or fallen down. Mr. W. and lady got on the guard, beside their state-room, which, fortunately, was on the side toward the shore, close to which the boat lay, and by the assistance of the captain, got safe to land. They were the last that left the wreck through which the fire was then rapidly spreading.

Notwithstanding the reported statement of the dying engineer, it seems to be the general opinion that the horrible accident occurred from a want of water in the boilers, which in turn was occasioned by an imperfection in the pumps.

She had three boilers, and it is thought the flues of all collapsed. One is supposed to have gone down through the hull, and occasioned the rapid sinking which took place; another passed aft, as already mentioned, tearing every thing before it, and landing in a cornfield some 300 yards below, while the third broke into two pieces, one of which was found in a bank close by, and the other in a cornfield some 250 yards above.

A great number of lives have been lost. Careful and experienced engineers should alone be entrusted with the care of all the engines.

Early Printers.

Early printers were men of profound erudition and the printing office was then in the strict sense of the word, a "temple of learning." In the first days of the art of printing, its professors very often wrote, or edited the works which they gave to the world—and these, it will be remembered, were for the most part composed in the learned languages. Among the most celebrated of these early printers is the family of Stephens, who, for more than a century, astonished the world by their vast erudition, as well as by their magnificent specimens of typography which issued from their press. This press, says Hallam, might be called the central point of illumination to all Europe." In the year 1558, Henry Stephens, the star of the family, published more editions of ancient authors than would have been sufficient to make the reputation of another author." His "Thesaurus of the Greek remains to this day is the great lexicon of this language.

Robert Stephens, the third in succession, is distinguished for his very beautiful edition of the Greek Testament, which forms the basis of the one now in use. An idea may be formed of his extensive erudition, as well as of the learning of the times, from the following accounts of his biographers—"He received only such compositors into his printing office as were conversant with the Greek and Latin languages. His workmen, in and about the office were obliged to speak Latin. His wife and daughter understood this language thoroughly, and assisted him in carrying his directions into effect: so that throughout his whole house and printing establishment, from the bureau of business to the kitchen, nothing was heard but the Latin tongue. He usually employed the proof readers, all from foreign countries, who spoke the various languages which they corrected. The zeal of this early and learned printer for study, for the maintaining the honor and dignity of the press, and for the public good in general, is worthy of the highest commendation—and his character in this respect is worthy of imitation by all the members of the craft.

"The glory of the house of the Stephens was shared by five successive generations," first in Paris, afterwards at Geneva, in Switzerland.

Diamonds Converted into Charcoal.

Before the last meeting of the British Association Prof. Faraday exhibited some diamonds, which he had received from M. Dumas, that had by the action of intense heat been converted into coke. In one case, the heat of the flame of oxide of carbon and oxygen had been used—in another, the oxyhydrogen flame—and in the third, the galvanic arc of flame, from a Bunsen battery of 100 pairs. In the last case the diamond was perfectly converted into a piece of coke—and in the others, the fusion and carbonaceous formation were evident. Specimens in which the character of graphite was taken by the diamond, were also shown. The electrical characters of the diamonds were stated also to be changed—the diamond being an insulator, while coke is a conductor.

The diamond was ignited by a powerful lens, in a platina capsule by Sir Humphrey Davy in 1812. It burned with a steady brilliant light. By combustion, diamonds produce nothing but pure carbonic acid gas.

The True Use to be made of Learning and Genius.

Hath God given you genius and learning? it was not that you might amuse or deck yourself with it, and kindle a blaze which should only serve to attract and dazzle the eyes of men. It was intended to be the means of leading both them and yourself to the Father of lights. And it will be your duty, according to the peculiar turn of that genius and capacity either to endeavor to improve or adorn human life, or, by a more direct application of it to Divine subjects, to plead the cause of religion to defend its truths, to enforce and recommend its practice, to deter men from courses which would be dishonorable to God and fatal to themselves, and to try the utmost efforts of all the solemnity and tenderness with which you can clothe your addresses, to lead them into the paths of virtue and happiness.—*Dodridge.*

Facts About Digestion.

Wheat is the most nutritious of all substances except oil; containing ninety-five parts of nutriment to five of waste matter. Dry peas, nuts and barley, are nearly as nutritious as wheat—Garden vegetables stand lowest on the list, inasmuch as they contain when fresh a large portion of water. The quantity of waste matter is more than eight-tenths of the whole. Only one-fortieth of a cucumber is capable of being converted into nutriment. The nutritious parts of the different meats vary from one-fifth to one-eighth of the whole. Veal is the most nutritious; then fowls, then beef, last pork. The most nutritious fruits are plums grapes, apricots, cherries, peaches, gooseberries, apples, strawberries, and melons.

Of all the articles of food, boiled rice is digested in the shortest time—an hour. As it also contains eight-tenths of nutritious matter, it is a valuable substance of diet. Tripe and pig's feet are digested almost as rapidly. Apples if sweet and ripe are next in order.—Venison is digested almost as soon as apples. Roasted potatoes are digested in half the time required by the same vegetables boiled, which occupy three hours and a half—more than beef or mutton. Bread occupies three hours and a quarter. Stewed oysters and boiled eggs are digested in three hours and a half—an hour more than is required by the same articles raw. Turkey and goose are converted in two hours and a half—an hour and a half sooner than chicken.

Roasted veal, pork and salted beef occupy five hours and a half—the longest of all articles of food.

Foreign Items.

Cultivation of Cotton in Algeria.

The French Minister of Commerce lately sent specimens of Cotton grown in Algeria to the principal manufacturing towns, with a view to ascertain its quality. The chamber of Commerce at St. Quentin has reported favorably of the specimens received; the Chamber of Commerce at Lille also speaks in the highest terms of the Algerian Cotton, and promises that Cotton from the African colony will find a regular and profitable market in that district. In consequence of these reports it is said the French Government is likely to adopt measures for promoting the growth of Cotton in Algeria upon an extensive scale.

Cultivation of Cotton in India.

Advices were received by the Manchester Commercial Association yesterday morning from the East India Company, that the honorable court of Directors had directed 45 bales of cotton, grown from New Orleans seed, the produce of their farm at Coimbatore, and imported per Olinda from Cochin, to be forwarded to Manchester for sale. They are consigned to Mr. Hugh Fleming, the secretary of the association, and we understand that in a few days samples will be on view at the rooms of the Commercial Association—This cotton is stated to be of a very good quality.—*Manchester Guardian.*

The Duke of Wellington.

No man so little beloved was ever so well obeyed; and there is not a man in England, of either party citizen or soldier, who would not rather die than see him disgraced. His firmness, his moderation, his probity, place him more opposite to Napoleon than when he stood in the field of Waterloo. These are his lofty lines of Torres Vedras, which no enemy dares assail throughout their whole extent.

Chloriform has been tried at Paris, with signal success, in operations on cancer and abscess in the female breast. The patients were not in the least sensible of the operations whilst they were in progress, and woke from them as calmly as from sleep.

It is an important fact that the Moravian settlement of Sarepta, on the river Volga, has again, for the second time, escaped the visitation of the cholera, whilst the disease has prevailed all around it. This is supposed to be the result of the well known temperance and cleanliness of the Moravians, who rival the Society of Friends in both these qualities.

A steamer has been built in London for the express purpose of carrying the despatches of the Times between the French and English coasts.