

Scientific.

Artificial Agate.

There are now made in Albany beautiful door knobs of common clay and some other mixtures. Mr. Pepper, of Albany, we believe, is the inventor, and it is not an imitation of agate merely, but is as real agate as that formed in nature's own laboratory. From this, by a process of remelting and careful but expeditious moulding and baking, in ovens similar in appearance to those used in cracker bakeries, Mr. Pepper manufactures door knobs and other articles of household ornament of rare durability and beauty. These door knobs are of the highest polish, and are blended with a variety of colors, and are strong and beautiful. Set in silver or bronze, the knobs are sold at a rate which already commands the market. It is perhaps not generally known that the common clay fused in a crucible runs like water, and makes a beautiful stone. The door knobs in the Albany Argillo Works are fused and then put into the annealing oven. After the knobs come out of this, they have no appearance of agate until they are ground and polished, which is done by cast iron grindstones, on which a stream of wet sand continually flows. The method of grinding is not ingenious, all being done by hand. It is not possible to conceive to what perfection the manufacture of glass and earthenware may be brought, and to what purposes the article may yet be applied. The balance spring of a chronometer is now made of glass, as a substitute for steel, and possesses a greater degree of elasticity and a greater power of resisting the alternations of heat and cold. One of these chronometers with a glass balance spring has been exposed to competition with nine other chronometers on a long voyage, and the result was in favor of the glass spring one.

Precocious Talent.

The effects of study vary according to the age at which it is commenced; long continued application kill the youthful energies. I have seen children full of spirit attacked by this literary mania beyond their years and I have foreseen with grief the lot that awaited them; they commenced by being prodigies, and they ended by being stupid.

The season of youth is consecrated to the exercise of the body, which strengthens it, and not to study, which debilitates and prevents its growth. Nature can never successfully carry on two rapid developments at the same time. When the growth of intellect is too prompt, faculties are too early developed, and mental application is permitted in proportion to this development; the body receives no part of it, because the nerves cease to contribute to its energies; the victim becomes exhausted, and eventually dies of some insidious malady. The parents and guardians who require and encourage this forced application, treat their pupils as gardeners do their plants, who, in trying to produce the first rarities of the season, sacrifice some plants to force others to put forth fruit and flowers which are always of a shorter duration, and are inferior in every respect to those which come to their maturity at a proper season.—*Tissot*.

Mind and Body.

Dr. James Johnson, in his "Essay on Indigestion," has the following excellent remarks on the influence which the condition of the body has on the mind and heart:

"Many a happy and lucky thought has sprung from an empty stomach! Many an important undertaking has been ruined by a bit of undigested pickle; many a well-laid scheme has failed in execution from a drop of green bile; many a terrible and merciless edict has gone forth in consequence of an irritated gastric nerve! The character of men's minds has often suffered from temporary derangements of the body; and thus, health may make the same man a hero in the field, whom dyspepsia may render imbecile in the cabinet."

"The author of this essay has himself been so enervated by a fit of what is called indigestion, as to be utterly incapable of breaking the seal of a letter for twenty-four hours; though, to all appearance, in good health at the time. Equally astonishing and unaccountable is the degree of timidity, terror, incapacity, or whatever other magic spell it is, which annihilates, for a time, the whole energy of the mind, and renders the victim of dyspepsia afraid of his own shadow, or of things more unsubstantial, if possible, than shadows. Again he says, 'It is under the influence

of such paroxysms as these, I am thoroughly convinced, that nine tenths of those melancholy instances of suicide, which shock the ears of the public, take place."

We have no doubt of it. We have seen men of the strongest minds—strongest, we mean, but for their disease—as utterly overcome by a paroxysm of indigestion as Dr. Johnson says he has been; and we have seen them on the very brink, too, of self-destruction. How little do mankind know of the reciprocal influences of mind and matter!

The late Timothy Flint is said to have been in a remarkable degree the unhappy subject of indigestion. He was a giant at his pen for a time; till the fit came over him, when he was as imbecile, we are told, as a child; nay, as unconscious, almost, for a few days, as the hibernating animals are in mid-winter. In truth, not a few of those who are called geniuses, in respect of intellect, are of this same cast of character; and this is one reason why we are always disposed to doubt the correctness of their deductions and reasonings, and still more, of their speculations. Why, in fact, is it that Festus is not the only person who has thought that much learning makes people mad; i. e., deranged? If it is true that a sound mind can only be had in a sound body, and if it is also a truth that most bodies of literary men are unsound, then there must of course be very few sound minds among our gifted literary men. Will we, ought we to trust implicitly the opinions of such men? Or if we receive them, whether in regard to science, politics, morals or religion, should it not be with much allowance for their bodily infirmities, and with very great caution?

Preservation of Books and Manuscripts.

It is not perhaps so generally known as it deserves to be, that a few drops of any kind of perfumed oil will secure books and MSS. from the deteriorating effects of mould and damp. The species of leather so extensively used by book-binders owes its power of withstanding the effects of these destructive agents to the tar of the birch tree (*Betula alba*). The art of preserving books—written on papyrus and parchment—by means of perfumed oils, was known to the ancients. The Romans made use, for this purpose, of the oil of cedar; hence, undoubtedly, the expression of Horace, "*Digna Cedra*,"—meaning any work deserving of being anointed with this oil. It is frequently the case that valuable collections of books are greatly damaged by the effects of damp, and MSS. to which great importance attaches, are often wholly spoiled. The hint may be worthy of attention.

The Farm.

ORIGIN OF VARIOUS PLANTS.

Every farmer ought to be so far acquainted with the history of all ordinary plants and trees, as to know their nature, country, and condition. Such knowledge, besides being on every account proper and desirable, will sometimes explain phenomena in their habits that would otherwise appear anomalous and inexplicable.

Wheat was brought from the central table-land of Thibet, where its original yet exists as a grass with small, mealy seeds.

Rye exists wild in Siberia.

Barley exists wild in the mountains of Himalaya.

Oats, wild in Northern Africa.

Maize, Indian Corn, was brought from America.

Rice, from South Africa, whence it was taken to India, and from thence to Europe and America.

The garden Bean, from the East Indies.

The Horse Bean, from the Caspian Sea.

Buckwheat, originally came from Siberia and Tartary.

Rape seed and Cabbage grow wild in Sicily and Naples.

The Poppy, from the East.

The Sunflower, from Peru.

Flax, or Linseed, is, in Southern Europe, a weed in the ordinary grain crops.

The Radish, from China.

The Garden Cress, out of Egypt and the East.

Hemp is a native of Persia and the East Indies.

The Nettle, which sometimes furnishes fibres for spinning, is a native of Europe.

Of Dye Plants, the Madder comes from the East.

Dyers weed grows in Southern Germany. Safflower, from Egypt.

Dyers Knotgrass, from China.

Hops come to perfection as a wild plant in Germany.

Mustard and Carryway Seed, the same.

Anise, from Egypt and the Grecian Archipelago.

Koriander grows wild near the Mediterranean.

Saffron, from the Levant.

The Onion, out of Egypt.

Horseradish, from South Europe.

Tobacco is a native of Virginia, Tobago, and California. Another species has also been found wild in Asia.

Fuller's Teazel grows wild in Southern Europe.

The Grasses are mostly native plants, and so are the Clovers, except Lucerne, which is a native of Sicily.

The Gourd is probably an Eastern plant.

The Potato is a well-known native of Peru and Mexico.

Turnip and Mangold Wurzel come from the shores of the Mediterranean.

Monalibi and White Turnips are natives of Germany.

The Carrot is supposed by some to have been brought from Asia, but others maintain it to be a native of the same place as the White Turnip.

Amongst other kitchen garden plants, the Spinach is attributed to Arabia.

The Cucumber, from the East Indies.

The Melon, from Kalmuck.

Parsley grows in Sardinia.

Celery, in Germany.

Of Fruit Trees and Shrubs, the Currant and Gooseberry came from Southern Europe.

Medlar Pear and Apple are likewise European plants; but the Seckle, the best of pears, is traced to near Philadelphia, as its original locality so far as known.

The Cherry, Plum, and Almond came from Asia Minor.

The Walnut and Peach, from the same country.

The Citron, from Media.

The Quince, from the Island of Crete.

The Chestnut, from Italy.

Of Forest Trees, the majority are native plants of England, except the Pine and Horse Chestnut, the former of which was brought from America, and the latter from Thibet. But the greatest variety of Oaks, and other fine timber trees, are natives of North and South America.

The Hurtleberry is a native of Asia, Europe, and America.

The Cranberry, of Europe and America.

TILLING MUCH GROUND WITHOUT MUCH PROFIT.

If an American travels through Wales or England, and observes the manner in which the people of those countries cultivate their soil, and the vast amount of produce which they get from the comparatively small parcel of ground, he must be at once convinced that, as a general thing, the American farmer ploughs too much ground for his own advantage. A small farm well cultivated, is four-fold more profitable than a large one tilled in the "skinning manner," that is, ploughing four inches deep, taking off every thing the soil will produce, and returning nothing in exchange for that of which you have robbed the land. Now, I know many so-called farmers who have adopted the "skinning manner" of farming for a series of years; and I would ask, What has been the result of their mode of agriculture? The question is easily answered. We can sum up the result in a few words thus:—Their soil becomes impoverished; it refuses to yield to the farmer, who so abuses it, the amount of produce necessary to make it profitable. Those substances which give life and fertility to soil have been drawn from it, and is not in a fit condition to plough, sow or anything else. The disappointed farmer complains much and often, because he has not derived more benefit from his land. Now every one must or should know, that the soil is not in fault in such instances, for not affording the necessities of life in abundance. The man who has exhausted it of the constituents of fertility is the one who should receive the blame, for he has taken from it those substances which go to make crops. He has tilled too much ground, and has not returned to it sufficient fertilizing matter to render it suitable for cropping purposes.

We do not use grass and clover seed enough; we should be more liberal in the use of these seeds, and take as much pains in sowing them as we would in sowing wheat or barley. It is entirely wrong to sow a twenty acre field five times in succession with oats or barley, and not feed that field either with grass seed or manure. It would be much better for the farmer, and much more profitable to the soil, to cut such a field into three parcels. One-third of it might be made to produce more than the whole field under the ordinary management.—*The Plough, Loom, and Anvil*.

Poultry and Eggs.

I do a small business in raising and putting up garden-seeds, and last fall, a year ago, as I was clearing out some red-pepper seeds in my back yard, I threw the shucks and chaff promiscuously about. I soon observed the hens picking them up and swallowing them with great avidity. They soon commenced laying eggs, though they had laid none for a month before. I fed them regularly, two or three times a week, since then, with red-pepper, and they have never yet stopped laying, summer or winter, spring or fall, except while they were hatching their chickens; and I am confident, from more than a year's experience, that by this method, hens may be made to lay the year round.—*Dollar Newspaper*.

To Preserve Gooseberries.

The best way of preserving gooseberries is with jelly. They should be fully grown but green. Take six quarts of gooseberries, and select three quarts of the largest and finest to preserve whole, reserving the others for the jelly. Put the whole ones into a pan and with sufficient water to cover them, simmer them slowly till they begin to be tender; but do not keep them on the fire till they are likely to burst. Take them out carefully with a perforated skimmer to drain the warm water from them, and lay them directly in a pan of cold water. Put those that you intend for the jelly in a stew-pan, allowing to each quart of gooseberries half a pint of water. Boil them fast till they go all to pieces, and stir and mash them with a spoon. Then put them into a jelly-bag that has been dipped in hot water and squeeze through it all the juice. Measure the juice, and to each pint allow a pound and a half of loaf-sugar. Break up the sugar, and put it into a preserving kettle; pour the juice over it, and let it stand to melt, stirring it frequently. When it has all dissolved, set it over the fire, put the gooseberries into it and let them boil twenty minutes, or till they are quite clear, and till the jelly is thick and congeals in the spoon when you hold it in the air. If the gooseberries seem likely to break, take them out carefully, and let the jelly boil by itself till it is finished. When all is done, put up the gooseberries and the jelly together in glass jars.

Strawberries, raspberries, grapes, currants or any small fruit may in similar manner be preserved in jelly.—[Miss Leslie's "Complete Cookery."

REMEDY FOR STAINS, &c.—If cotton or linen goods, as linen towels, &c., become stained from fruit, tarts, jellies or jams, apply immediately common table salt. This, if well rubbed on before the stain becomes dry, will generally remove it, or will keep the article damp until by the usual process of washing it will disappear. Pure cider vinegar if immediately applied is very useful in removing stains from either cotton, linen, or woollen goods. This should be afterwards rinsed out with soft water. For mildewed linen, salt and sour buttermilk rubbed over the stains and exposing the goods to the sun, a few times repeated, is an effectual remedy. Spots from iron rust are generally removed by applying the juice of a lemon. For the removal of ink spots, milk thoroughly rubbed on and rinsed out with pure cold water is a pretty certain remedy.—*Tribune*.

TO MAKE DOMESTIC ROOT BEER FOR THE BLOOD.—Of Yellow Dock Root half pound; Burdock root, half pound; Sarsaparilla root, half pound; Dandelion root, half pound; Sassafras half pint; Wintergreen 2 oz., Senna 2 oz., Ginger 1 oz., Molasses one pint, and loaf-sugar to the taste. Pour on these say three gallons of boiling water and let them simmer before a slow fire for several hours until it has steamed away nearly one quarter—then strain it off and keep tight and free from air in a cool place, and you will have fine healthy beer.

CEMENT FOR MENDING BROKEN VESSELS.

—To half a pint of milk, put a sufficient quantity of vinegar in order to curdle it; separate the curd from the whey, and mix the whey with the whites of four eggs, beating the whole well together; when mixed, add a little quick lime through a sieve, until it acquires the consistency of a paste. With this cement broken vessels or cracks can be repaired; it dries quickly, and resists the action of fire and water.

Labour brings pleasure; idleness, pain.