Scientific.

To Prevent Taking Cold.

The first thing to be done, in order to break the habit of taking cold—a habit which most persons acquire very early—is to live much in the open air. It may be difficult to do so, but this does not render it less desirable, nor the less necessary.

No rule can be laid down which will be wholly efficient in preventing the habit of taking cold, unless the first or principal rule is complied with. He who is abroad in the open air, accustoms himself, in the first place to atmospheric vicissitudes—than which nothing can be more needful, especially to us, who live on the battle ground between the Arctic and Torrid.

Secondly—He who is much in the open air, inhales more oxygen than he who is less so. For as a general rule, except for a few hours of the day in midsummer, a given volume of air—and a given volume is all we can inhale—inhaled from the open atmosphere, contains more oxygen than when inhaled from other places. But the greater and absolute amount of oxygen inhaled, the stronger the lungs are, and the more efficient they become.

The same may be said of the skin, which is always a handmaid to the lungs. The more oxygen in a given volume of air, is in application to this great membrane, the better are its various offices or functions fulfilled, and the less liable are we to take cold.

Thirdly—One office of both the lungs and the skin is that of generating heat. Now, the more we are in the open air, the greater the amount of heat generated in the organs. But the contrary is also true. The more we are within doors, especially when our roooms are unnecessarily warm, the less heat do both the lungs and the skin generate, and the more susceptible do we become to those effects of sudden changes which so often result in colds and other diseases of the lungs and of the rest of the system.

Numerous other reasons my be given why our enervated population, which is so constantly suffering, directly or indirectly, should be much in the open air. The great Creator has not piled up this mixture of oxygen and nitrogen forty or fifty miles to no purpose. It is not improved by our admixtures of carbonic acid gas, sulphurious acid gas, carburetted hydrogen gas, sulphureted hydrogen, or any other gases except the usual proportion of oxygen and nitrogen. It is not improved by the putrid or semi-putred particles which are exhaled from animal or vegetable bodies, whether living or dying.

I have seen men who did not suffer themselves to go to a fire, or hardly sit in a fire room for the whole winter. Cardinal Cheveurs used no artificial heat in his rooms—not even in his study—and yet who ever saw him effected by a cold?—Others there are who never suffer themselves to remain in hot rooms, or above all, near the fire. I have, for twenty years, avoided them when I could. The time has been—I might almost say now is—when I could say to a friend, I have not gone to a fire or stove to warm my feet in five years. —*Boston Journal.*

Water! Water! all Water.

The extent to which water mingles with bodies apparently the most solid, is very wonderful. The glittering opal, which beauty wears as an ornament, is only flint and water. Of every twelve hundred tons of earth which a landholder has in his estate, four hundred are water. The snow-capped summits of Snowdon and Ben Nevis have many million tons of water in a solidified form. In every plaster-of-Paris statue which an Italian carries through London streets for sale, there is one pound of water to every four pounds of chalk.

The air we breathe contains five grains of water in each cubic foot of its bulk. The potatoes and the turnips which are boiled for our dinner, have, in their raw state, the one seventy-five per cent., the other ninety per cent of water. If a man weighing ten stone were squeezed flat in a dydraulic press, seven and a half stone of water would run out, and only two and a half of dry residue remain. A man is, chemically speaking, forty-five pounds of carbon and nitrogen, diffused through five and a half pailfuls of water.

In plants we find water thus mingling no less wonderfully. A sunflower evaporates one and a quarter pints of water a day, and a cabbage about the same quantity. A wheat plant exhales, in one hundred and seventy-two days, about one hundred thousand grains of water. An acre of growing wheat, on this calculation, draws in and passes out about ten tons of water per day. The sap of plants is the medium through which this mass of fluid is conveyed. It forms a delicate pump, up which the watery particles run with the rapidity of a swift stream. By the action of the sap, various properties may be communicated to the growing plant.—Timber in France is, for instance, dyed by various colers being mixed with water, and poured over the root of the tree. Dahlias are also colored by a similar process.

Recent Erected Houses.—The *London Medical Times* directs attention to the circumstance of many diseases occurring in consequence of newly built houses being too quickly inhabited. He says, that in various parts of the outskirts of London, a large number of new dwellings are constantly being erected, and scarcely are they completed before they are occupied. Five cases of cholera which proved fatal to persons who had recently taken newly built houses, came under his superintendence, which he considered were produced by the exhalation from the damp walls and floors and the fresh paint. We believe that newly built houses, when too quickly occupied, exert a very baneful influence on the health of the occupants. From the fresh materials which compose the dwellings, deleterious exhalations arise, contaminating the air. Houses ought not to be inhabited for a certain period after their completion; and our medical brethren should caution those within their influence of the dangers to which families are exposed by living in houses recently erected.

A Hint to Parents.—Dr. Dewees, of Boston, says the skins of raisins are utterly indigestible. A child recently died in Boston from convulsions produced by eating raisins. Dr. Dewees mentions the death of three children from the same cause, and remarks that "there is no stomach—unless it be that of the ostrich—that can master the skin of the raisin." "I recollect," he adds, "some time since the death of a child in convulsions, caused by eating bits of bark and shreds of wool, which it had picked up in creeping round the room on the carpet. Dried fruit, bark, cork, or wool from the carpet or blankets, or any indigestible substances, in small quantities, cause much suffering; and, in considerable quantities, are almost certain, by obstructing the passage of the bowels, to produce convulsions and death."

Care of the Eyes.—Looking into the fire is very injurious to the eyes, partieularly a coal fire. The stimulus of light and heat united soon destroy the eyes. Looking at molten iron will soon destroy the sight. Reading in the twilight is injurious to the eyes, as then they are obliged to make great exertion. Reading or sewing with a side light is injurious to the eyes, as both should be exposed to an equal degree of light. The reason is, the sympathy between the eyes is so great that if the pupil of one is dilated by being kept partially in the shade, the one that is most exposed cannot contract itself sufficiently for protection, and will ultimately be injured. Those who wish to preserve their sight should preserve their general health by correct habits and give their eyes just work enough, with a due degree of light.

Cure for Corpulency.—At a meeting of the French Academy of Sciences in Paris, Dec. 15, 1851, among other papers received, was one from M. Dancel, on the development of fat in animals. It conveys the result of his observations on the human species. Excessive corpulency is relieved by an almost total abstinence from vegetables, and feculent substances, and by diminishing the quantity of drink, and increasing when necessary, the quantity of meat usually consumed.

The Toothache.—"L'Union Medicale," a medical Review of New Orleans, mentions the success of a new remedy against the toothache. It consists in the application of a piece of cotton dipped in collodion to the cavity of the toooth, to the shape of which it adapts itself, while soft, and when it becomes hardened adheres very strongly to the tooth, aud is not liable to be affected by any liquid taken into the mouth.

It is found by calculation that at 228 yards an an has appearance of one-third his height, at 347 yards one-fourth, and at 546 one-fifth.

The American papers recently noticed the case of a Mrs. Locke, who bled to death in consequence of the extraction of a tooth. Whereupon Dr. Addington, of Richmond, Va., says he never fails to stop the bleeding by packing the alveolus from which the blood continues to trickle fully and firmly with cotton moistened in a strong solution of alum and water. He cured a brother physician in this way, whose jaws had bled for two weeks.

A few cakes of the newly invented solidified milk have found their way to this country. The article resembles in color, consistency, weight, and feel, cakes of pale yellow soap. One pound grated into boiling water, will make several gallons of good milk. It is warranted to keep any number of years. Price, n England, $1 per pound.

The Farm.

Modes of Using Bones as a Manure.

If our readers are not already tired of *picking bones*, by way of agricultural repast, we would like to invite them to one more dish of the kind.

Bones, muscle, and fat, are all made by feeding to man and beast the products of the earth. The great object of cultivation is the production of such articles, in the form of food of some kind or other, in the most economical manner. It is a law of nature that there shall be a reciprocal action between these substances. The vegetables, when eaten and digested in the stomach of an animal, add to the size and strength of the material organs of that animal. On the other hand, these same animal matters, when dissolved in the earth and taken into the vegetable system, add to the size and strength of the vegetable. If it is necessary to lay up vegetable matter and feed it out to animals, in order to increase their growth and strength, it is also necessary to lay up animal matter and feed it out to vegetables in order to increse their growth and strength. The muscle and fat of animals are easily applied in different forms, and are a very considerable portion of the dressing applied to crops—but bones not being eaten, and being more solid and indestructible, are not so much used, and, of course, comparatively little pains are taken to save, prepare, and use them for dressing or manure. Yet they contain elements necessary to form vegetables, and are valuable when used as a manure. They are ground to powder and used in this way. In the form of bone dust, you get the animal (such as the gelatine and fat,) mingled with the mineral, such as the carbonate of lime and the phosphate of lime. It requires, however, an expensive mill to grind them, and of course every farmer cannot procure them easily in that shape. Hence, resourse has recently been had to the chemical process, which every farmer can perform himself, on a little or a large scale, as he pleases.

Professor Mapes, Editor of the Working Farmer, gives the following directions for doing this:

"Since the value of bones as manure has become more generally understood, we have daily applications for methods for dissolving them, &c.

Where whole bones are procured at low prices and no convenience at hand for grinding them, they may still be used with profit.

Fill a hogshead, standing on its end with the upper head removed, half full of water; throw into this one-third the bulk of sulphuric acid, stirring the water while pouring in the acid—the mixture will be found to rise in temperature almost to the boiling point; fill the hogshead full of bones, and in a week the fluid super-phosphate of lime may be drawn from the bottom of the cask for use. The undissolved portion of the bones may then be taken out of the cask and readily broken by an axe or hammer, as they will become brittle and tender by the action of the acid.

Add acid and water as before; throw in the broken bones and fill up the cask with whole bones. In this way a supply of superphosphate of lime may always be on hand to add to composts, or to render guano and other ammoniacal manures less volatile, by changing the carbonate of ammonia contained in them to sulphate and phosphate of ammonia."

Sausage Meat.

Our lady friends will thank us for the following directions about sausage meat, which we clip from a contemporary. They were written by a Mr. Croasdale, who is said to be fully competent to discourse on the subject, and who tells us what he has learned from experience:

"My mode of seasoning sausage meat, for twenty years, has been as follows: For one hundred pounds of meat, one and a half pound of fine salt, six ounces of black pepper, powdered, and three aud a half ounces of sage. For market, or immediate use, a little more salt may be added. And now for preserving them. Immediately after the meat is seasoned, make it up into small cakes, (say as large as the top of a teacup,) and fry them in the usual manner until nearly done—or quite done I think best. Then have clean small earthen or stone pots ready, and pack the cakes in as closely as possible till nearly full, pouring in the fat that comes out in frying them—then put a weight on sufficient to keep them down until cold. If there is not enough fat fries out to cover them, supply the deficit with clean melted lard. When they are perfectly cold, it is best to put a little more melted lard on, as there will sometimes be cracks made in cooling; put a paper over them and set them in a dry cool place, and they will keep from New Years till after the next harvest. as good aswhen put up, or very nearly so. They will keep, I suppose, as well in large pots as small ones, until they are opened. It is only necessary to warm them up for use. Try it. There is no mistake in it—I have proved it.

Foul in the Foot in Cattle.—This is one of the worst diseases to which our neat stock is subjected. Attacking a single animal, it sometimes spreads to the whole herd, occasioning great loss, inconvenience and trouble to the owner, and much suffering to the poor animals themselves. The disease is undoubtedly occasioned by the animal travelling through the mud, urine, and manure of the yard; this collects between the claws and gathers about the foot and leg until this obstinate and sometimes fatal disease is generated, and it is legitimately in the farmer's work for March to prevent it. Keep the feet of your animals clean, and there will be little danger of the disease. Its first appearance is generally between the claws in the form of a crack; this is followed by inflamation and the discharge of a yellowish matter or pus. "Sometimes a little swelling appears on the coronet between the hair and hoof, which discharges offensive matter." Foul in the foot is a most serious disease, and demands immediate attention when the first symptoms are discovered. Attacked in March, oxen are sometimes rendered unfit for any spring work, and cows shrink rapidly in milk and flesh. If not checked early, the foot becomes greatly swollen, intensely sore, and the hoof in bad cases drops off. It may all be prevented by care and cleanliness.

Sowing Seed.—Farmers, as well as other people, like to make good bargains, and we like to have them, especially when they buy a year's paper of us and pay for it in advance. But that is not the bargain we are going to write about. It is the sowing of grass seed. If you would make a good bargain with mother earth, give her a plenty of seed. If you scrimp her, you cheat yourself and cheat your earth, and are guilty of double dishonesty. If you undertake to save five dollars in seed, you will lose twenty dollars in hay and pasture. Be wise, then, and sow bountifully, and you shall gather bountifully, and make a good bargain.—*Vt. Watchman.*

Making Maple Sugar.—It is surprising how very general the practice is of boiling the sap in large cast-iron kettles. Sheet-iron is much cheaper, needs far less fuel, does not crust nor burn round the top, and is decidedly favorable to very clean sugar. A simple mode of making sheet-iron pans is described in the *Ohio Cultivator*—the pans being four or five feet by two and a half, nine inches deep, the bottom and ends one strip of good sheet-iron, and the sides one and a half inch plank. The edges of the iron are punched with holes an inch apart, in a zig-zag line, a strip of slippery-elm bark placed between the iron and plank when nailed on, and the whole then placed on a brick "arch," which entirely keeps the fire from the plank sides.

Trees.—While we are cutting down our noble trees with a rapidity which posterity will deplore, a French chemist has been experimenting for five years to ascertain whether it will pay to stimulate the growth of trees by manuring them. It appears from his experiments that the residnum of soda and potash works, freely scattered in woods, will augment their productiveness one hundred per cent.