PURE AIR AS A DISINFECTANT.

Residence in a pestilential atmosphere cannot but weaken the health, and of all legacies to leave to one's children, an enfeebled constitution is surely the worst. And yet matters might be easily mended, by attention to cleanliness and disinfection. Now most disinfectants cost money, but there is one that does not, and I am happy to say it is the best and the simplest, and always at hand, and its name is PURE FRESH AIR. In the presence of oxygen, the chief constituent of pure air, miasma becomes *non est*, and the most deadly disease-germ loses its own existence. A gale of wind can destroy the cholera, but in a still atmosphere this plague rides rampant, and the victims it claims are legion.

Yet what a bugbear do not most people make of this same fresh air! What is really their best friend is treated as a foe; their very windows are often constructed purposely to exclude it, or if they are ever opened it is only to be pulled down with gingerly hand, a little bit at the top. Regarding respiration there are one or two facts that should never be forgotten: first, that we inhale oxygen—the life-giver—and exhale carbonic acid gas from our lungs, which gas is a deadly poison; and secondly, that a person in ordinary health requires every hour over 1,500 cubic feet of fresh air; out of doors only can he get this, but the rooms in which he lives and eats and sleeps ought to contain an atmosphere as nearly approaching in purity to that of the open air as possible. Depend upon it that sleep taken in a large, well-aired room, is ten times more refreshing than the heavy, uncertain slumber obtained in a close and stuffy apartment. I have cured more than one case of nervous headache in young people, by ordering their bedroom windows to be well opened at night. The only danger is, of course, from draughts; but this may be avoided by placing the bed in a corner, and by covering the body well up. In most houses the chimneys form the ventilating shafts, and it is important that these should never be stopped, with bags of shavings or anything else, as is the too common and most unhealthful custom. The bed should be as high as possible, because carbonic acid gas is heavier than common air, and falls downwards to the floor. Up-stair bedrooms are more healthy, for the same reason, than those on the ground floor.

Now if we remember that the more the infectious effluvia that arise from the sick are diluted, the less dangerous do they become, and the less likely to spread the disorder, we can see at once how valuable a thing is fresh air in the sick-chamber. It ought, therefore, to be perfectly ventilated by means of a little fire in the grate, and the occasional wide-opening of both doors and windows. Care should at the same time be taken lest the patient catch cold, by having him well wrapped up. But it is seldom while a room is being aired that a sick person takes cold; it is more often through getting up for a moment or two, without taking the precaution of throwing some kind of wrap around the shoulders. Every medical man knows, to his sorrow, that thousands of sick people every year lose all chance of getting well, are in fact hurried into their graves, through the ignorant, if kindly meant, assiduity of their friends and attendants, who carefully cover up every chink or cranny through which a breath of air might creep.—*Cassell's Family Magazine.*

HOW TO KEEP WATER PURE.

The reservoir needs frequent examination; and so do the pipes through which it is conveyed, both the mains and the connections. If the pipes are too thin or joints imperfect, sewage soil and soakage and gas may injure the water, when no odor is perceptible. The effect of lead pipes has often been discussed, and is real, although we are still not able always to account for differences of results affirmed by chemical examination. Some allege that the purer the water the more likely it is to be affected by the lead. Lead service-pipes are now made both with glass and tin lining. Such a public source as a reservoir should be frequently tested chemically by public experts, and also here and there as delivered into houses, so that any impurities, either at the source or delivery, may be known.

Where cisterns are used, these must be thoroughly water-tight, frequently cleansed, and, if the water is collected from roofs, the pipes or gutters should be so arranged that at the first part of a rain the roof shall be washed and the water run elsewhere than into the cistern. Examination of the dust on the roofs of houses often shows the *debris* of animal excretions, the seeds and pollen of distant plants, and other decaying animal and vegetable matter. A partition is generally made in the cistern for the filtration of water, for which brick properly laid quite suffices, although by some an intervening layer of sand and gravel is preferred.

Where wells are used, still greater care must be taken that they are not drains for the animal and vegetable decay which the soil contains, or traps for the catching of divers living organisms that may find their way into them. Some have advocated that when a well is dug it should be finished by an arch to a few feet of the service, and a service-pipe then be placed in, and earth be packed over and around, as it does not need exposure to air and is thus protected from surface incursion and contamination. It would be in vain to attempt a comparison or preference amid all the contrivances for drawing water, ranging from the old oaken bucket through the chain-wheel and cucumber pump. So long as it is easy and the material used is not such as adds hurtful metallic or organic substances, it matters little, in a sanitary view.—*N. Y. Independent.*

THE PRE-RAPHAELITE WAIST.

One of the most important features in a graceful figure—hence one of the most conspicuous innovation of the pre-Raphaelites schools—is the waist. The first aim is to have an "antique waist"—which a vulgar mind would pronounce horribly thick—thick, like the Venus de Medicis, thick like that far nobler Venus of Milo. And why? Because the proportion of the figure, the grace of action and carriage, are so dependent on the waist being of the right size that it is impossible to preach too strongly the folly and ugliness of tight-lacing. The coarse, abrupt curve which is formed by a small waist and broad hips is very far removed from Hogarth's true "line of beauty," which is a curve extremely gradual. What is gained by an ugly, angular waist like a V? Nothing but a long list of maladies which sap the health and spoil the complexion. What is gained by a somewhat large, "antique waist?" Good proportion in an artist's eye, ease and grace of movement, often a really statuesque carriage—impossible to the slaves of *la mode*, with their hard, bony cuirasses on. The waist of a pre-Raphaelite is rather short—where a waist ought to be in fact, between the hips and the last rib. Her skirt is cut full or scanty, as she pleases, but is never tied to her legs with strings and elastics. She can therefore stoop without gasping or cracking her corset bone, and can sit down or walk up stairs at will, unlike many votaries of present fashions. Her sleeves are cut extraordinarily high on the shoulder, sometimes a little fulled to fit the shoulder-bone; for it is *de rigueur* that a pre-Raphaelite should be capable of moving her arms when dressed as freely as when undressed.—*Exchange.*

THE "USES" OF PAIN.—The question is often asked, "What is the use of pain? It is scarcely conceivable that the infliction has no object." There are obviously two aspects of this question: in one Science has an immediate interest; with the other it has a secondary, but not unimportant, concern. The first is essentially physical. What useful purpose does pain subserve in the animal economy? The answer is thrust upon us by daily observation and experience. There are two sentinels posted, so to say, about the organism to protect it alike from the assaults of enemies without, and exacting friends within. The first of these guardians is the sense of fatigue. When this speaks there is need of rest for repair. If the monitor be unheeded, exhaustion may supervene; or, before that point of injury is reached, the second guardian will perhaps interpose for the vital protection—namely, pain. The sense of pain, however, is more directly significant of injury to structure, active or threatened, than an excessive strain on function, although in the case of the vital organs pain occurs whenever the pressure is great. Speaking generally, it may be set down as an axiom that, whatever collateral uses pain may subserve, its chief and most obvious service to humanity is as a deterrent and warning sensation to ward off danger. It is worthy of note, though sufficiently familiar to medical observers, that the absence of this subjective symptom in cases of severe injury is too often indicative of an injury beyond repair. The extinction of pain is not the highest, although it may be a generous impulse. If there were no guardian sensibility of this nature, it would be impossible to live long in the world without self-inflicting the most formidable injuries. That pain, in the second place, has an educational value, as regards the mind and temper, no one can doubt. Some forms of pain would seem to be chiefly intended for this purpose: but even in this view pain has a practical interest, because the higher development of the mind which controls the body, and of which the brain is the formative organ, is a process of physico-mental interest governed by natural laws of which Science is perfectly competent to take cognizance. The subject as a whole is one with which the physician and physiologist have much concern.—*Lancet.*

PHOSPHORUS AND THE BRAIN.—In an article on the "Hygiene of Chronic Nervous Diseases," read by Dr. Beard before the Kings County (N. Y.) Medical Society, the author says:—"Although the generalization of Agassiz, that fish feeds the intellect, is among the wildest and most unscientific ever made, yet there is little doubt that the so-called 'sea food,' fish and oysters, is excellent for the nervous system, and very likely in part by virtue of the phosphorus it contains; but it no more feeds the intellect than phosphorus given in any other way. A healthy brain and an intellectual brain are not synonymous. One may be perfectly well, and at the same time perfectly stupid; a fool may eat like a lower animal, while the great philosopher barely keeps himself alive. While food is essential to thought, yet the force in food is not converted into thought force. Good thinkers, like good athletes, are usually liberal feeders; but thousands who eat as much or more have very little intellect or muscle. The effect of a diet largely of fish seems to be sedative, calmative, like that of bromide of potassium, or phosphorus, or electricity—like these remedies, producing dulness rather than intellectuality, and inducing a disposition to sleep more than to think; not accelerating, but slowly quieting down the wheels of the mind, and therefore excellent and adapted for the nervous, and overworked, and overworried."—*N. Y. Observer.*

A WRITER IN THE *Lancet* says: The brain must be fed and nourished by special design. An adequate supply of oxygen is the preliminary requirement. Then comes the question of food: and, whatever else may feed the brain, workers with this organ should be assured that alcohol will not sustain it. Alcoholization and oxygenation are directly antagonistic processes; and even if alcohol be food for the brain, the organ cannot feed when the nutrient fluid circulating in its vessels is disabled from the task of conveying oxygen, which happens whenever spirit is present in more than very moderate proportions in the blood. The relief afforded by alcohol from the sense of depression produced by a lack of oxygen is, therefore, illusory. It is procured by over stimulating an organ which is both exhausted and impaired.—*Medical and Surgical Reporter.*

A GERMAN inventor has patented an apparatus designed to lessen the strain upon a horse, particularly at starting, of a loaded vehicle. The traces are fastened to an iron rod running through the centre of a cylinder containing several rings of gutta-percha. When the horse exerts himself the strain first comes upon and compresses these rings, saving his shoulders. The German war department, having made experiments and found that the saving of force, not alone at starting but during traction, was at least a third, has resolved to employ the attachment in its artillery and military trains. It might pay, from an economical as well as a humane point of view, to introduce it here.—*Ploughman.*

LIEBIG declares that oatmeal is almost as nutritious as the best English beef, and Prof. Forbes of Edinburgh, who measured the students in the University for twenty years, found that in height, breadth of chest and shoulders, and strength of arms and loins, the Belgians were at the bottom of the list; a little above them the French; very much higher, the English; and highest of all the Scotch and Scotch-Irish from Ulster, who, like the natives of Scotland, are fed in their early years with at least one meal a day of good oatmeal porridge.

SPEAKING of boxing the ears of children as a mode of punishment, the London *Lancet* says: Medical men alone can be fully aware how fruitful a source of suffering and danger is represented by the box upon the ear. There are, for example, under observation at the present moment two school-boys who have been the victims of such an assault. Surely, schoolmasters ought to have learned long ere this the danger of a mode of personal chastisement that has apparently usurped the place of others, which, if more disgusting, were not attended with an equal amount of peril."

HARDNESS in water, if excessive, favors the occurrence of certain diseases, roughens the skin, and interferes with digestion. Hard water decomposes soap and produces curdling, so that in this way to cities which use hard water or to families there is a very heavy loss of cleansing quality. One gentleman, who carefully experimented on the difference between the use of hard and soft water in making tea, found the saving in the amount of tea needed for an equal strength paid for all his experiments.—*N. Y. Independent.*

THE average life of the Jew is forty-eight years and nine months, and of the Christian thirty-six years and eleven months, a result of a stricter observance of sanitary requirements by the former.

DOMESTIC.

TO CUT whalebone easily, hold it in the flame of a lamp an instant, and you can cut it with shears.

HARD BUTTER.—A flower-pot wrapped in a wet cloth and placed over a butter plate will keep the contents of the plate as hard and firm as if it were set on ice, and milk will not sour if the can containing it be wrapped in a wet cloth.

THE "RURAL" says that tomatoes picked when just ripe and with a portion of the stems retained, and at once covered with a brine composed of a tea-cup of salt dissolved in a gallon of water, can be kept nearly all the year without noticeable loss of freshness of taste.

POTATO SALAD.—Peel and chop fine freshly boiled potatoes and mix with a chopped onion, make a dressing of one-half cup of vinegar, one tablespoonful of butter, and pepper and salt to taste. Place over the fire till it becomes very hot, then pour over the potatoes, mixing well. This is a fine relish for tea with bread and butter or cold meat. Use more or less potato as you like the flavor of the onion.

CANNING FRUIT.—Many do not know that hot fruit can be put in cold glass jars without breaking. Place an ordinary tablespoon (silver coated, pewter) in the jar, or can, before putting in the hot berries, cherries, or anything that is canned. Also when putting jelly in tumblers place a tablespoon in the glass, then pour in the hot jelly. Do not be afraid, the glass will not break if sound. I have not lost one that way. It saves much trouble in canning fruit. For an experiment, put a teaspoon in a tumbler, and pour boiling water in, and see if it will break.

AN OLD HOUSE-KEEPER sends to the *Household* her way of making lemon syrup—"I boiled the lemons whole, and in that way obtained nearly twice the amount of juice, then squeeze the juice and strain through a jelly bag, add two pints of sugar to one of juice, let it stand till the sugar is all dissolved, straining it after, and bottle it. Then I preserve the skins and keep till summer for flavoring my citron or watermelon peel, which my family think is the best preserves we have. The lemon skin must be soaked in salt and water, and if not perfectly tender, boiled again, then boil slowly in a good thick syrup."

ESSENCE OF CHICKEN.—In a case of extreme sickness, when it is important that what little nourishment the patient can take should be highly condensed, the following is an excellent mode for concentrating, in a small compass, all the nutritive properties of a chicken: After picking the chicken, sprinkle a little salt over it and cut in pieces, as if for frying. Put the pieces in a small glass jar (or wide-mouthed bottle), stop it tight, and put it in a pot of cold water, gradually heating the latter till it boils. Let the jar of chicken remain in the water till the juices are well extracted, then pour them off for the patient.

VEAL LUNCH.—Take what is left of cold veal from the day before, leave out the fat and skin, add some fat of cold ham, chop very fine, add a little grated nutmeg, one cup of bread-crumbs, six blades of powdered mace, the yellow of a rind of lemon grated, two well-beaten eggs, a little salt and a very little cayenne pepper; mix the whole well together, and make it in the form of a loaf, glaze it over with a beaten egg, and strew over even powdered bread-crumbs or crackers, and bake half an hour, or until it is hot through. Have ready the gravy left from the day before—if not enough, add water, salt and a little butter and pepper made hot—beat up an egg, and stir in two or three minutes before it is taken from the fire. Dish the veal in a deep platter, and pour the gravy over it. Cold chicken or turkey may be cooked in the same way.

COMMON PURSLANE.—Everybody who has a garden or vegetable patch in New England knows what this little succulent plant is. We last season mentioned how useful a species of green food this is for poultry; and many a bushel that ordinarily would have been suffered to go to rot, or to the pig-pen, if gathered after the first corn and potato-field hoeing, was picked up and fed to the farmer's fowls, last year, upon our recommendation in the *Poultry World*. This spreading weed grows quickly, and may be taken up in quantities the last of June and during July and August anywhere, in our plowed fields or spaded gardens, where the soil is pretty rich. You certainly won't find it in poor ground. Gather a peck or half a bushel in the morning, while the dew lies upon it. Scald two quarts of cornmeal and bran; chop the "pussley" with a sharp spade in a tub or firkin, and mix it with the meal. Feed it to your twenty, thirty, or forty fowls, and you will find that they will devour it with a great appetite. It costs little or nothing, and for the present season, while grass is becoming tough and wiry, it will answer an admirably economical and beneficial purpose, as every one agrees who has tried this hitherto quite neglected but useful and nourishing food for domestic fowls.—*Poultry World.*