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NATURAL CURE OF DYSPEPSIA.

[WHILE not agreeing with some of the themes and suggestions of the following article by Dr. Oswald in the Popular Science Monthly, the writer presents so many excellent facts in such a quaint and impressive manner, we feel sure our readers will be pleased and profited by its perusal. —Ed.]

Dietetic reforms should begin with the prescription of a strictly non-stimulating diet. A spoonful of mustard, a glass of small-beer or claret, may seem a mere trifle; but the trouble is that all stimulant habits are progressive; the pungent spices are apt to slide into pungent tobacco, and claret into port, or something worse. Salt is not quite above suspicion, and the safest plan is to stick to comestibles that can be eaten without it. Cream, for that and other reasons, is better than fat meat, a whortleberry soup better than a gravy soup, and a raspberry pudding preferable to a blood pudding. All fried and broiled viands, all pickles, all rancid cheese, butter, sausages, and all smoked meats are suspicious. Catchup vials harbor the bottled-up demon of indigestion. But, withal, the diet should not be insipid. Ultra-vegetarians denounce all kinds of fat. Ultra-Grahamites suspect all sorts of sweatmeats. "Let your cook distinctly understand," says one peptic philosopher, "that on peril of her life, she is to set nothing savory before you." Many hygienic institutes feed their dyspeptics on stale bran-bread, water-gruel, and watery vegetables. Man has a right to decline existence on such terms. Not the naturally palatable, but the unnaturally stimulating, qualities

of a dish tempt the dyspeptic to eat to excess. For one man who surfeits himself with sweet grapes or pancakes, a thousand, at least, derange their digestion with strong cheese, or hot-peppered ragoûts. Alcoholic stimulants kill hundreds every year; how many intemperate drinkers have ever killed themselves with fresh milk or lemonade? And cannot fruits, flour, milk, eggs, sugar, and orange-juice furnish the ingredients of a very tolerable meal?—not to mention berries, tubers, and dozens of harmless vegetables that can be creamed and sugared into tidbits to rival the *entrées* of the Frères Provençaux in everything except virulence, *alias* pungency. It is better to improve the digestion than to spoil the appetite, for no man can thrive on a naturally distasteful diet. Nature intended us to be *vegetarians*; but I cannot help thinking that the word is misleading by its popular association with the idea of kitchen-vegetables. Our next relatives in the animal kingdom do not live on pot-herbs, but on fruit. The victims of *plethoric dyspepsia*, the chronic gluttons who gorge for the sake of repletion, would stuff themselves with a potful of watery spinach as quick as with an eelpie; and theirs is a rare, but indeed rather embarrassing predicament: they seem as unable to stop eating as to begin digesting. They are evermore hungry, though as cachectic as a starved Silesian weaver; I have seen gouty gluttons, to whom the sight of a restaurant-window was as tempting as a tavern-sign to a toper. Certain drugs would abridge their *penchant*, but with it, also, the last traces of a digestive function; and instead of reducing their appetite, it is better to reduce its capacity for mischief, by limiting the number of their daily meals. For, after all, that ca-

capacity is circumscribed by the caliber of the stomach; and if the quality of the food is unexceptionable, there is no serious danger of a man's eating more at *one* meal than his system, under otherwise favorable circumstances, can dispose of in the course of the next twenty-three hours. The apprehension in *such* cases as to the insufficiency of one meal a day, is wholly gratuitous. For more than a thousand years the one-meal system was the rule in two countries that could raise armies of men, every one of whom would have made his fortune as a modern athlete,—men who marched for days under a load of iron (besides clothes and provisions) that would stagger a modern porter. Even here, abstinence is easier than temperance; for twenty-three hours of each day it is far easier to abstain from food (though, of course, not from water) than to begin eating and stop in time. Not one glutton in a thousand will do it. Dio Lewis recommends a limited number of dishes—"never put more on the table than you intend to eat;" but the first mouthful re-awakens the passion of Polyphemus, and for those who cannot govern their appetite, it is just about as easy to call for another dish as to reach for another plateful. But it is an excellent rule to *prolong the pauses* between the several dishes of a full meal, in order to give the stomach time to indicate the real wants of the system. "The ingestion of food," says Dr. Carpenter, "cannot *at once* produce the effect of diminishing the feeling of hunger, though it will do so after a short time, so that, if we eat with undue rapidity, we may continue swallowing food long after we have taken as much as the wants of the body require."

The origin of the glutton-habit can often be traced to the mistaken liberality of a host who constantly urges the conviviality of his young guests, or even to the fatuous tenderness of nursing mothers, who so frequently think it their duty, as Dr. Page expresses it, to make a baby "guzzle till it is ready to die with fatty degeneration."

Begin with reducing the number of daily meals; and exercise, a change of climate and of habits, will by and by help to subdue the baneful *penchant*. Occasional relapses cannot be avoided; but the progressive relief from a number of the worst gastric afflictions will at last induce the veriest cormorant to stick to the one-meal plan.

The best time for that one meal is the

end of the working-day—4 or 5 P. M.—when business cares can be laid aside for the rest of the evening. Asthenic dyspeptics, too,—all, at least, who are not complete masters of their own time,—had better choose that hour for their principal meal. No other hygienic mistake, not even the stimulant-fallacy, has done so much to make ours a dyspeptic generation as the fatal habit of *after-dinner head-work*—severe mental labor in the study, the school-room, or the counting-house, at a time when the whole strength of the system is claimed for the digestion of a heavy meal. Not only that the progress of digestion is thus interrupted, not only that the body derives no strength from the inert mass of ingesta; but that mass, by undergoing a putrid instead of a peptic decomposition, vitiates the humors of the system it was intended to nourish, irritates the sensitive membranes of the stomach, and gradually impairs the vigor of the whole digestive apparatus. Hence the gastric torments of poor, overworked teachers, who, unlike happier servants of the public, cannot shirk their work, and have to snatch their dinner during a brief interval of the hardest kind of mental drudgery. Hence the sallow complexion, the hollow eyes, and the weary gait of thousands of city clerks, scholars, lawyers, newspaper drudges, and even physicians. Housewives, after dinner, have generally the good sense to rest awhile, often a very good while, and thus manage to digest their food; for that their immunity is not a prerogative of their sex is demonstrated by the chlorotic complexion of lady-teachers and boarding-school girls, who have only an hour's recess—physiologically no recess at all, if the school-bell rings right after dinner.

For those who have to drudge the whole afternoon, it would be better to postpone the principal meal to the very end of the day, and laugh at the supposed danger of "sleeping on a full stomach." For what do those who add a supper to an undigested dinner?—only with this difference, that their stomachs are obliged to dispose of an acidulated *mélange*. Animals, in a state of nature, nearly always sleep or rest after a heavy meal; only the *homo sapiens* regards the promptings of his instincts, and relies on a dyspepsia-pill.

In most cases, however, the matter could be compromised. Early rising and an unmuddled brain would enable almost any man to go home at 3 or 4 P. M., and count-

ing-house clerks should consent to a reduction of their wages rather than forego the same privilege; at five, a full meal of milk, farinaceous preparations, and nutritive vegetables, followed by a dessert of fresh or cooked fruit; then a *siesta* of two full hours, music, conversation, or, *faute de mieux*, an entertaining book; then, the weather permitting, a ramble in the cool evening air, or light gymnastics; then rest in undress, an air-bath, and open bedroom-windows.

The general adoption of that plan would soon dissipate a strange and strangely prevalent fallacy,—the supposed natural antagonism of the brain and the stomach—the alleged impossibility of combining studious habits with a sound digestion. Restricted to proper hours, head-work is as stimulating as any other kind of labor, and promotes digestion instead of hindering it. The nature-abiding habits of such men as Boileau, Linnæus, Cuvier, Goethe, and Humbolt enabled them to reconcile the mental strain of their enormous literary activity with the enjoyment of almost uninterrupted health.

Dyspeptics, therefore, need not shirk brain work, but, as they would shun the pills of a mercury quack, they should beware of *exasperating mental emotions*. For it is a curious and not quite explained but incontestable fact that a short fit of anger is often enough not only to derange but to completely arrest the digestive process for a whole day. Close behind the stomach is a group of ganglia, the solar plexus, which sends out a large number of nerve-filaments that communicate with the brain, and thus suggest the physiological explanation of the curious phenomenon, though its final or teleological purpose is somewhat less apparent. Haller connects it with the fact that anger vitiates the saliva (*teste*, the virulent bite of enraged animals), and suggests that by a wise arrangement of Nature the suspension of the assimilative process may preserve the chyle from the contamination of malignant humors; and, in connection with the same subject, Camper mentions the circumstance that *fear* often acts as a sudden cathartic, perhaps for the purpose of easing the stomach, and thus preparing the body for emergencies—the necessity of flight, for instance. Speculations of that sort lead to a field of curious but rather recondite biological metaphysics; but the empirical fact remains, and partly suggests the *rationale* of another fact;

namely, that pleasurable mental emotions act as a benignant digestive tonic. Hence, perhaps, the peptic beatitude of “jolly paunches,” fellows who seem constitutionally unable to see the gloomy side of earthly concerns, and wax fat on the perscription of Democritus, “*Ride, si sapis.*” The autocrat of the dinner-table should, therefore, peremptorily exclude all conversational topics of an irritating character, as well as all business talk. A remarkable influence on the action of the bowels can be exerted by *mechanical laughter*—I mean, the agitation of the diaphragm by means of a forcible and long-continued chuckle. Laurence Sterne mentions that he was able to keep up this facetious kind of laughter for minutes together, with or without the association of risible ideas. On solitary evenings that talent could be utilized as a physiological compensation for the absence of merry friends.

For the effects of mental worry, and nervousness (often the after-effect of stimulating medication), the best remedy, next to out-door work, is a *liberal allowance of sleep*; and metropolitans who cannot afford to join the summer exodus, should at least remove their beds to a suburban cottage, far from the sleep-murdering noise of the business centers.

But neither sleep nor short meals can save dyspeptics who will insist on swallowing their food smoking hot. The walls of the stomach are lined with a nerve-interwoven, delicate membrane, which suffers from scalding fluids as much as any other tegumental tissues of the body, and by daily torrefactions becomes either callous or chronically inflamed, and in either case less fit for the performance of its important functions. Our forefathers served their viands steaming hot, but stuck at least to cool drinks, but hot French soups were soon followed by hot tea and hot coffee. The “second breakfast,” as the Germans call the eleven-o’clock refreshment, used at least to consist of cold meats; but competing saloon-keepers have now introduced hot lunches, and in our larger cities there is no escape for dyspeptics; “the smoke of their torment ascendeth up for ever and ever.”

The gastric irritability which forms a lingering after-effect of chronic dyspepsia can be better allayed by a *vegetable diet* than by the nutritive extracts which are supposed to aid the work of digestion. The *bulk* of innutritive admixtures somehow excites and maintains the vigor of

the digestive organs ; and the human organism cannot thrive on concentrated nourishment, as for similar reasons the lungs cannot be fed on pure oxygen.

Water, either pure or in organic compounds, is likewise an effective sedative and depuratory ; it aids the process of eliminating the indigestible or noxious elements of various articles of food, whose ingestion, therefore, excites thirst. But, without waiting for that urgent appeal, we should remember that the diet of our instinct-guided relatives contains about ninety per cent of water, and that a dearth of fruit should be compensated by artificial compounds, supplying the requisite amount of fluids in a palatable form. The remedial influence of many famous spas is due to the water as much as to its mineral admixtures. About fifty years ago, the Brooklyn hotels were crowded with visitors, attracted by the fame of a doctor who cured all manner of diseases with pure rain-water. The mystic motto of Thales, "*Ariston men hylor*" ("The best of all things is water"), might perhaps be explained from such facts. Our diet, in fact, is much too dry, and could be improved without resorting to lager-beer, which redeems its deleterious influence to some degree by helping the Germans to digest their pungent comestibles. Water, in some of its combinations, is also an effective aperient ; in watermelons and whey, for instance ; but still more in conjunction with a dish of *legumina*—peas, lentiles, and beans. No constipation can long withstand the suasion of a daily dose of pea-soup or baked beans, flavored with a *modicum* of brown butter, and glorified with a cup of cold spring-water ; and, moreover, the aperient effect is not followed by an astringent reaction—the cure, once effected, is permanent. Plethoric dyspepsia is almost invariably accompanied by close stools, and the drugs that have been swallowed to ease Nature—for a day—would poison half the living creatures of the American continent.

But rather forego the beans than eat them with *pork*. The interdict of the Hebrew lawgiver, I suspect, has something to do with the climate-proof health of his countrymen ; for in warm weather, fat pork is about as digestible as yellow soap. The Hungarian peasants are ravenously fond of it, and neither out-door life nor the vigor of their Turanian stomachs can save them from the consequences. Every summer, and sometimes three and

four times a year, the digestive system of the rustic Magyar relieves itself by an expurgative process known as the *tzömör*, or pork-surfeit, a three days' purgatory of heart-burns, nausea, and violent retching, accompanied by a burning thirst and an unspeakable loathing of all solid food. He who weathers the storm, says the traveler Kohl, feels like a new-made man, and reappears at the family table ; but so does the pork-pot, and a few months after, the respited sinner has another seizure, and groans, "O Jesus, Maria, meg *tzömöretem*—it's got me again !"

After the re-establishment of intestinal digestion, flatulence, vertigo, and that terror of constipated tea-drinkers, dull headache, become less and less frequent ; the spell of the deliquium is broken, and the re-development of the wasted muscles proves that the system is no longer obliged to feed upon its own tissue. But these first symptoms of improvement should not encourage the patient to relax the rigor of the regimen before he is sure that the gastric inflammation has wholly subsided. As long as spasms and acrid eructations (water brash) indicate the danger of a relapse, give the stomach all the *rest* you can. Never miss an opportunity that will make it easy to forego a meal or two. There are ways to make a fast-day a very trifling inconvenience, and its remedial value exceeds that of a round-trip to all the spas of the Eastern continent. In my experiments on the operation of the fasting-cure, I have noticed the curious fact that for the first day or two the clamors of the stomach are restricted to certain hours, and can be induced to waive a disregarded claim. Convalescents who have already reduced the morning lunch to the standard of a Spartan breakfast, a "heathen fig and a thrice accursed biscuit," can beguile the dinner-hour by diverting pastimes, and upon their return home will find that the craving for food has yielded to sleepiness, and the sweetness of the night's rest will be worth seven meals. It is during such periods of undisturbed rest that the work of repair makes its surest progress, and for the first three or four months it would be a good plan to imitate the example of the Ebonite heretics, who observed a weekly fast-day in the Ugolino sense of the word. Water, of course, should never be stinted, and, after a long fast, will have an especially good chance to depurate the vacated passages of the abdominal labyrinth.

HOUSEHOLD HYGIENE.

BY MRS. E. E. KELLOGG.

WE once read of a juror who refused to award damages against a steamboat company in a suit, the basis of which was a boiler explosion causing the loss of many lives, on the ground that the disaster was an inscrutable Providence, though it was patent to other minds that the catastrophe was the outgrowth of negligence respecting those conditions which would be likely to result in such a calamity. The juror's plea was no more absurd than the popular practice of attributing to a "mysterious Providence" those disasters to human life and health which result from the violation of physiological laws. The ignorance and superstition of the dark ages offer sufficient apology for such a spectacle as that of a pope excommunicating the comet for its supposed malign influence in causing pestilence and plagues; but in these days of enlightenment in all departments of human knowledge, and especially that of sanitary science, man cannot so easily hide his own accountability behind a supposed "dispensation of Providence." The book of natural phenomena is open for his perusal, and the added testimonies of science and human experience have demonstrated that far more often than otherwise the prime cause of illness and suffering lies within his own control, in the abnormal character of his surroundings, or his relations to conditions requisite for health.

The possession of this knowledge renders it the duty of every rational being to employ all means within his power for the prevention of disease; and upon no one rests this obligation more weightily than upon the wives and mothers who stand at the helm of the million centers of social life throughout our land. The home is woman's citadel; it is here disease most often threatens; and who shall meet the foe at the threshold, if not she? A thorough, theoretical, and practical knowledge of the science of health should be considered as imperative a requisite of her education as any other branch of mental or moral culture. The gospel of health and the gospel of Christ go hand in hand; indeed, the duty of properly caring for the body may be regarded as much a part of the Christian religion as any of the explicit commands of the Decalogue; and the mother who conscientiously and sacredly surrounds her loved ones with such companions and influences as will be most

conducive to their moral growth and security, ought to manifest the same care to surround them with such conditions as will insure their physical well-being.

Modern scientists have demonstrated the fact that among the most formidable enemies to life and health are the invisible, microscopical creatures called *disease germs*, which have their origin in filth, overcrowding, bad air, decaying vegetation, defective sewerage or drainage, and the like conditions. They always abound in the atmosphere wherever decomposition and decay are taking place, and are usually accompanied by offensive or musty odors, although it is possible for the air to be swarming with disease germs without the presence of unpleasant smells. The contrary is seldom true, however, and we may safely assert that a foul odor is nature's warning of something dangerous that ought to be at once removed or escaped from. Diphtheria, typhoid and other fevers so prevalent at this season of the year, are occasioned primarily by these insidious enemies of health, often born and bred within the very homes they make so sad and desolate through their destructive agency.

As briefly and informally as possible, we wish to hint at a few of the nooks, in and about modern homes, where these enemies of life and health are most apt to hide, and which should claim the vigilant care of every housekeeper.

A fertile source of germs, and one which, perhaps, oftenest escapes observation, because least frequented, is the cellar. Here are stored, throughout the year, all manner of vegetable products, firkins of salted meats and pickles, barrels of soap, old boxes, bins of coal, refuse of various descriptions, and, indeed, almost every conceivable article. Many of the vegetables undergo decay, the brine of the meat and pickles becomes tainted, and frequently, from lack of proper drainage, every heavy rain covers the floor with water, which becomes putrescent and odorous. The foul gases from these various sources penetrate through every crack and crevice of the floor, and pass upward into the living-rooms of the house, doing no end of mischief to the occupants. Many cellars, likewise, contain the cistern, and sometimes even the well, from which the family is supplied with drinking water, and these are frequently contaminated by the foul water which soaks in through the cellar bottom.

Eminent sanitarians insist that cellars should never be constructed under dwelling houses; but if our houses are already built, and we must for convenience make use of the cellars, we should keep them scrupulously clean from all decaying substances, give their walls a frequent coat of whitewash, secure good drainage, and above all, open the outside door and windows wide every day during warm weather, and every week at least during the winter, thus effecting a free interchange of air.

In many homes the kitchen sink is the avenue through which disease and suffering are admitted to the family circle. Bits of table waste left in the dish-water find their way into its pipes, which usually have a bend, or trap, before reaching the drain, and through this, water containing no sediment would flow freely; but the greasy particles of food lodge by the way, and gradually accumulate, until the pipes are so blocked up that the water passes through very slowly. This keeps the mass of solid matter constantly saturated, thus inducing decomposition, and it at once becomes a hot-bed for disease germs.

In another corner, the kitchen wood-box is scarcely a less formidable enemy to health, used, as it too frequently is, as a catch-all for everything not otherwise disposed of. Several inches of decomposing wood, chips, bark, moldy apple cores, and odds and ends of all sorts cover its bottom. This debris, when stirred up with each fresh armful of fuel placed therein, emits an odor which is accompanied by myriads of germs, which modern scientific investigation has shown to be connected with the development of serious disease.

Many a housewife who does not appreciate the great value of sunlight, in damp weather allows mold and mildew to accumulate on her closet-walls and in dark corners of her dwelling-rooms, never dreaming that any harm may come from it. Such are ignorant of the fact that every spot of this same mold is a forest of little plants which are constantly throwing off millions of spores or germs in every direction, filling the air, getting into the food, making the bread sour, and doing mischief in a score of ways, besides being inhaled by the occupants of the house, and possibly conveying to them the seeds of disease. The guest-chamber and parlors are the rooms most apt to be infected with this "leprosy of the house," as it is termed in the ancient Jewish code

of health (for no doubt Lev. 14: 36-48 refers to a species of mold). Being seldom used, they are seldom disinfected by the sun's rays, and the air becomes close and fusty, laden with death-dealing properties, which are ready to exhibit their malign potency whenever a favorable opportunity occurs.

We cannot too highly value the importance of allowing the sunlight free access to all portions of our dwellings. There is nothing like sunshine and pure air to search out and cleanse away all organic impurities. The sun is the great life-giver to both the animal and vegetable world. Everyone is familiar with the fact that plants droop and die if deprived of sunlight and air, and can we presume that human beings will thrive and flourish where flowers wither and die? Suppose it does fade the carpets and curtains, and make the furniture look rusty; far better that not a color of the carpet remain than that the roses fade from the cheeks of your loved ones from the lack of it.

But the sun brings flies, says the careful housewife. Well, flies are scavengers, and they destroy these very germs we have been talking about. They subsist largely upon germs, and that is the reason they are always present wherever decomposition is taking place. Doubtless the good housewife who objects to the sunlight on this account would find a different reason why flies congregate about her dwelling if she would carefully examine her kitchen and back yard. Perhaps she might see, in close proximity to her back door, a garbage barrel, redolent with an odor of sour milk and decomposing remnants of past meals, from which issues a constant invitation to the flies to take part in a most luxurious repast; and fortunate, indeed, would it be for the inmates of the house were there flies in sufficient numbers to devour all the poison germs from these foul reservoirs so frequently found at the rear of a finely kept front.

A foul smelling waste barrel ought never to be permitted; in fact, it were far better to burn all leavings and table refuse as fast as made, which can be done without smell or smoke by opening all the back drafts of the kitchen range, and placing them on the hot coals to dry and burn, as they will in a few minutes. If the table refuse must be saved, the receptacle should be entirely emptied every day, and very thoroughly scrubbed with hot suds and an old broom. Never pour the chamber slops in with the

kitchen waste; and above all, never allow them to be emptied on the ground in close proximity to the well. Any lady would be horrified to find her servant pouring slops into the well, but she does almost as bad when she pours them on the ground or into a drain leading to a cesspool only a few feet from the well, since the porous soil allows them to filter through into the well.

The water from which the family supply is obtained should be frequently tested for impurities, since often that which looks the most clear and sparkling and tastes the most refreshing, may be contaminated with organic poison of the most treacherous character. A good and simple test solution, and one that any housewife can use, may be easily prepared by dissolving twelve grains of caustic potash and three of permanganate of potash in an ounce of distilled water, or filtered soft water. Add a drop of this solution to a glass of the water to be tested. If the pink color imparted by the solution disappears at once, add another drop of the solution, and continue adding a drop until the pink color will remain for half an hour or more. The amount of the solution necessary to secure a permanent color is a very fair index to the quality of the water. If the color imparted by the first one or two drops disappears within a few minutes, the water should be rejected as probably dangerous.

Considering the fact that at least one-third of life is spent in bed, it is very essential that all our sleeping arrangements should be such as are most conducive to health. The greatest of care should be taken to arrange for an abundant supply of fresh air at all times and seasons, since the air of an occupied, unventilated apartment very soon becomes exceedingly foul from organic poison, and disease germs are always abundant. It is also of the greatest importance that bed-clothes and bedding be thoroughly subjected to the disinfection of the air and sunlight each day, since the human body throws off through the pores of the skin, and by the breath every night, several ounces of waste animal matter, much of which is absorbed by the bed-clothes. If no precaution is taken to rid them of this effete matter, it is reabsorbed by the next occupant of the bed; or, if long neglected, the waste decomposes, and gives the unpleasant, fusty odor often experienced in sleeping-rooms. The use of feather beds is for this reason especially detrimental to health, since the

feathers not only undergo a slow decomposition themselves, but, on account of their remarkable hygroscopic properties, absorb the fetid exhalations thrown off from the body during sleep, thus becoming in time a serious source of poisoning.

In renovating their rooms, housekeepers sometimes forget to remove all old paper from their walls before putting on the new. This is a very objectionable plan, since it is only covering up the dirt that should be gotten rid of, and is almost sure to become a fertile soil for mold and mildew.

Every detail of the home life requires the closest vigilance and care; for disease, like sin, is ever creeping in at most unlooked-for times and places. Nature's laws are fixed and inexorable; and if we do not heed their requirements through love and reverence for them, we are taught them through pain. And every woman who "looketh well to the ways of her household" should feel in duty bound to guard against every point that can affect the health of those under her care.—*Union Signal*.

AN EXAMPLE WHICH MIGHT BE EMULATED.

HARPER'S MONTHLY tells the following amusing story of how a poor doctor became famous, which suggests the thought that possibly those who need medical aid would be better off if a good many doctors would try the same experiment:—

There once lived in a small village a certain physician who had acquired a reputation for great learning and skill. His practice had been at first confined to the inhabitants of the village and the surrounding districts; but rumors of his peculiar method of treatment, and of some remarkable cures that it had effected, having spread abroad, patients began to come to him from points more and more distant.

This physician employed but three drugs, camomile, sweet-oil, and camphor. These, he maintained, singly, or combined in different proportions, contained all the medicinal virtues, and perhaps a few more besides. The extent of his practice, indeed, may have been due more to the novelty of his treatment than to the number of his cures. For I have noticed that people are commonly eager to believe that the untried will accomplish that in which the tried has failed; and that the greater

the seeming improbability is of a new method's meeting with favorable results, the greater is the confidence of men in the superior wisdom of its author. However that may be, whether by good luck or by sterling merit, the fame of this physician grew rapidly, as did also his bank account and his hair. During his life-time he refused to reveal to any one the secret of his success, and how he adapted to the peculiar natures of the thousand and one diseases that beset mankind the few drugs he employed; but after his death the following explanation was found among his papers:—

"I make this confession that learned men may not uselessly consume their time in seeking to discover what they imagine to be the hidden properties of camomile, sweet-oil, and camphor. These drugs have, as far as I am aware, no virtues other than those already known to science. Why, then, I confined myself to them in my practice I will briefly explain.

"I started in my profession with no profound knowledge of medicine; and feeling my inability to succeed in a large town, I settled in the little village of F——. My practice here was at first very small; but in the few and ordinary cases which came under my treatment, I prescribed much the same as I suppose a more competent physician would have done in my place. But one day the village apothecary came to me, and said: 'Doctor, your patients bring me prescriptions which I cannot fill from my stock. Now you can make it profitable to me, and I can, I think, make it of advantage to you, if you will not prescribe beyond my limits.' 'Of what, then,' I asked, 'does your stock consist?' He replied, 'Of camomile, sweet-oil, and camphor.' As my means were at that time narrow, and as I was modestly aware of the danger which my patients must incur from my insufficient knowledge of medicine, thinking that I might at once benefit myself and my fellow-men, I acceded to the apothecary's proposal. I have never had reason to regret my action, for at the moment I write, I enjoy probably the greatest reputation of any living physician."

—Calisthenics, with a march of one hour each day, is no guarantee against crooked backs and broken constitutions; but four hours' unrestrained romping, in an open field, will make girls as straight and as fleet as an arrow.

OUR CHILDREN'S BODIES.

BY WM. BLACKIE.

(Concluded.)

A RECENT writer in a well-known English paper calls attention to the rare intellectual quickness and keenness of the Jew, and his wondrous readiness at a bargain, and then points out that where he fails in the life-race is in the lack of the good old English quality of staying power. But might he not say the same of the typical educated American, especially in business? When a young man, every means is brought to bear to urge him on,—the examples of successful men of all the past, and those of to-day, the comfort and often preposterous influence and power which money brings, the countless avenues which open to it in our land for him on whose neck "no jewel," as Hafiz says, "sparkles like that of enterprise." The busy man of to-day is not content with his business, or with keeping his money in it. He must also be in constant communication with his broker and the stock tape, must be bank director and railroad director, and make himself felt in a hundred other ways. One little man, for instance, at the start a poor boy, then a school-master, though but forty-seven years old, has amassed tens of millions of dollars, controls ten thousand miles of railroads, more yet of telegraph lines, and, if half the rumors are true, tries his hand occasionally at controlling a Legislature or two besides. But there is one thing even he cannot control, with all his brains and millions, and that is facial neuralgia. When a shrewd coroner summoned him to jury duty awhile ago, he could not serve, because he was suffering from this disorder, and was too deaf also from otorrhœa to hear the testimony. How many more such Job's comforters as these would it take to so cut down his power of enjoying anything that he would be inclined to feel like clearing out all his assets to the highest bidder, if he could only have in their place a little sound good health? And yet there are thousands, almost millions, of men in our land to-day, who, constantly under great strain of mind and nerve, are carrying often vast responsibilities, and doing their utmost to one day obtain, like him, great power.

But is not the pace telling, and especially on those who, like him, started out, not with the sinewy strength and fibre of that other railroad king, Vanderbilt the

First, but rather with the light allowance of the average city boy? Observe what one of the most intelligent Englishmen who ever visited our shores has to say on this point. At a dinner given Mr. Herbert Spencer at New York City by Mr. Evarts and other gentlemen just before he left for Europe, after a somewhat extensive tour through this country, after speaking of the marvelous energy he discovered everywhere, he said:—

“What I have seen and heard during my stay among you has forced on me the belief that this slow change from habitual inertness to persistent activity has reached an extreme from which there must begin a counter-change, a reaction. Everywhere I have been struck with the number of faces which told in strong lines of the burdens that had to be borne. I have been struck, too, with the large proportion of gray-headed men, and inquiries have brought out the fact that with you the hair commonly begins to turn some ten years earlier than with us. Moreover, in every circle I have met men who had themselves suffered from nervous collapse, due to stress of business, or named friends who had either killed themselves by overwork, or had been permanently incapacitated, or had wasted long periods in endeavors to recover health. I do but echo the opinion of all the observant persons I have spoken to, that immense injury is being done by this high-pressure life—the *physique is being undermined.*”

Does not this look as if staying power was a quality far too rare among our busiest men, and as though we were leaving out from our education that without which nearly all else is of little value? In the steamers they talk of building, in which they threaten to go from Montauk to Milford-Haven in five days, there are always to be engines of consummate power, easily eclipsing everything yet known in the whole field of marine travel. But there are also to be, not one or two, but many compartments, till the whole ship is so bound together by these iron inner walls that she can safely stand the mighty vibrations of engines so powerful that they would soon shake ordinary craft to pieces. But what sense would there be in putting such engines, not into one of these inflexible steel hulls, but into a craft made of deal boards? How many revolutions would be needed to send such a crazy ship to the bottom? But if we steadily increase the man's power of thought and

action, and extend the field of his activity till it is almost boundless, yet let his body grow up anyhow, are we supplying much better than a pasteboard hull which may possibly slip along at half speed in the smooth harbor water of youth, but when the gales and heavy seas come and the real tests which tell what is in him, will all go to pieces in the fashion told by Mr. Spencer, and so familiar to all men who know what protracted brain work is? Precocities, like Webster and Gladstone, were able to do their work because they appreciated the priceless value of enduring bodies kept in working order by sensible daily exercise, and with fishing-pole, ax, and walking-shoes, took care that the machinery did not get too far run down.

Mr. G. R. Emerson, in his recent life of Gladstone, says that at Eton “he was not only one of the most active and successful in all school sports,” but “throughout his long life he has recognized the natural alliance of the physical and intellectual portions of our compound being. Naturally hardy and muscular, he cultivated his bodily powers by regular active exercise, and his high moral nature preserved him from the temptation to indulge in enervating luxuriousness.” “Don't talk to me about Gladstone's mind,” said Sidney Herbert, more than a generation ago; “it's nothing compared with his body.” “Throughout his life,” says a recent writer in the *London Standard*, “Mr. Gladstone has been a particularly fast, enduring, and vigorous walker. Wiry, lean, sinewy, without an ounce of superfluous lumber about him, when a younger man, he was in the habit of saying, but without a tincture of vanity or ostentation, that he was good for a forty-mile walk any day. Although his thoughtful face and lithe figure are as well known in every part of this metropolis as those of any resident within its borders, who ever yet saw Mr. Gladstone in a hansom or any other cab?”

What a profitable step it would be for thousands of our well-to-do business men who are getting on in years, if, instead of sitting on a cushion and holding two leather straps for an hour, and calling it exercise, they would take Mr. Gladstone's brisk four or five mile tramp, or would spend their hour on their horse's back, instead of back of their horses! And if this daily attention to bodily exercise has done so much toward keeping Gladstone in such good working order, why should we not see to it that our children likewise, espe-

cially those whose lives are to be spent indoors, have some systematic, rational exercise which will go far toward insuring to them this same priceless working health and vigor, not only for their younger years, but throughout a long and useful life?

Well, what shall they do? Gladstone's Eton School had a beautiful and attractive play-ground, and one which has for generations been well used; but most of ours either have no play-ground at all, or only a bit of brick sidewalk, where, if you get a fall, it hurts. The best school of the near future will see—indeed, a few of them even now are awakening to—the need of a first-class play-ground, and the prominent part it should play in the boy's real education, and will doubtless bestir themselves to supply this want. St. Paul's School at Concord, New Hampshire, for instance, has a pretty flat of several acres, with a quarter-mile cinder path, and a roomy cottage specially for the demands of the players. Harvard has nearly sixty acres of play-ground, and easily the finest gymnasium in the world; while Yale recently purchased thirty acres in addition to what she already had. The spacious gymnasium and drill-room of the Boston Latin and High schools in their new building would be fair substitutes for their old fighting ground on the now distant Common, if they were only used daily vigorously and by all, and especially by the large majority who need them. But the schools with anything worthy of the name of play-ground are to-day very rare exceptions, nearly all the city schools being built not only without an approach to a suitable or adequate play-ground, but so hampered by other houses, and where adjacent property is so valuable, that the prospect is slender of their ever being much better off in this respect.

Probably no benefactor of Harvard University in this century has rendered her a better or more widely-felt service than young Mr. Hemenway when he built that gymnasium, at once so commodious, useful, and attractive, though already it has become so popular that it will have to be enlarged to meet even the present demands of the students. Where other donors have reached the comparatively few students who elect the branch taught under their endowment, here is a branch—provided always a really competent teacher can be had—of signal service to every one of the many and increasing hundreds of favored

youth who are enjoying an education at the university. Persons who have in mind a legacy for their school or university may well consider whether they could put their money in a way to do more good to many persons there than by aiding them in securing a reasonable degree of health and vigor for their life's work, and the knowledge how to retain them, no matter in what field that work may be.

But while the prospect of better arrangements in the future are fair, that does not help to-day. How shall the millions of children now at our public schools, and with no attention paid to their physical education by any competent teacher, be provided for in this important matter? Dr. Sargent, in his recent article in the *North American Review*, laments the lack of gymnasia, their antiquated and poorly constructed appliances, and, even more, the dearth of teachers. Strange as it may seem in a country where intelligence and enterprise are as general as in ours, the teachers thoroughly qualified for such work, who have come to be at all known for thoroughness and real success, would scarcely make a corporal's guard. Physicians, with their exceptional acquaintance with the human body would, if they would become equally familiar with bodily exercise, make easily the best teachers, as Dr. Sargent has so well proved at Harvard, or as did Aristotle when he tutored Alexander. But we call the doctor in to cure us when we are ill, not to keep us from getting so; hence we make it no object to him to do what he could do so well.

There are to-day two hundred thousand ladies and gentlemen in this country who, with very little preparation, could become sufficiently acquainted with any sensible system of gymnastics for school use to render the rising generation lasting benefit, and yet avoid all the risks which are likely to accompany unguided efforts in this direction, and these are the teachers themselves. They already know how to get the children forward in other branches. Why not as well in this one, so important that without it the others may never be of much use? One of the chief services a teacher of physical culture can render is in checking and holding back the pupils, and keeping them from overdoing, and teaching them what will overdo and what will not. But if the thirty, forty, or fifty boys and girls in a school-room exercised for ten minutes each morning right in the school aisles, either with no appliance other than

the desks and the floor, or at most each with a pair of dumb-bells, each bell weighing about a twenty-fifth of the user's weight, if the user is a girl, or a twentieth, if a boy, doing only what the teacher did, and as the teacher did, they would not only avoid all risk, but could easily in that short time daily progress astonishingly, even in one year, and that in developing and enlarging not only one limb, or a part of one, but the whole body and all the limbs, and that not only side by side with their other studies, but understanding at last just what part any exercise developed, what was enough, and what was too much.

"If properly directed," says Dr. Austin Flint, Jr., of New York, himself famous for his fine physique, "gymnastics will enlarge and strengthen the muscles of the trunk, legs, arms, and neck, will expand the chest, so giving the lungs free room to play, will render the joints supple, and impart grace, ease, and steadiness of carriage, combined with strength, quickness, and elasticity of movement." And why not distribute these good things among all our boys and girls, instead of, as now, to here and there one? At West Point, no matter how stooped the entering pleb, he is soon taught to carry himself as erect as any man in America. But why limit this improvement to cadets only? "If properly directed," says Dr. Flint; but here the teacher who has already shown herself qualified to direct in other and really far more difficult branches, can readily do the directing in this, and in doing it will be sure to find, in a multitude of instances at least, that she will soon know a feeling of greater ease and fitness for all her work, a feeling like that so well put by the soldier Maclaren had exercising for a few months. When asked how the work affected him, he said, "I feel a better man for anything I am called on to do." A hundred exercises which the teacher and scholar at a glance could understand, and at once apply in the school-room, might readily be here suggested, did the narrow limits of a paper like this permit.* Many people know of some such exercises already, and by a little ingenuity could devise many more. But any amount of knowing will not suffice. They must do them, do them *daily and throughout the year*, side by side with the other studies;

* These will be found described at length in a little manual for school use just published by Messrs. Harper and Brothers, entitled, *Sound Bodies for our Boys and Girls*.

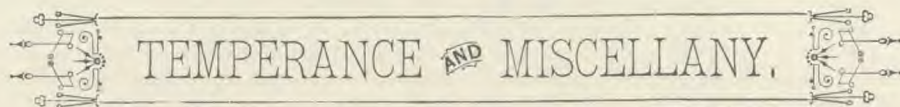
and then they may as certainly look for gratifying progress in this as in other studies. If occasionally problems arise a little difficult for the teacher,—an especially hollow chest or a very high shoulder,—any young physician of ability, not yet overcrowded with practice, and fairly acquainted with physical exercise and its results, could well afford to devote an hour or two a day, without any compensation, to visiting the schools of his town or city, and advising how to meet these special cases: a very rapid and pleasant introduction, by the way, to about every child in the place. With such intelligent guiding in the morning, and doing whatever seemed likely to encourage, on the pupil's own part, some sensible and regular constitutional in the afternoon,—a good walk, run, skate, paddle, row, or such other lively out-door sport as the place and season afforded,—the pupil would soon see that one of his truest friends was the very teacher herself, of whom, until now, out of school at least, he had often felt somewhat shy. Such a course as this would also render the pupil far less likely to overtask himself in his favorite games, which often, without such a training, hinder rather than aid.

MAXIMS FOR THE SEASON.

Keep yourself as cool as possible.—Although we are well aware that by many this direction will be treated with ridicule, it constitutes, nevertheless, one of the chief means for preserving health during the warm season. It does not imply that you are to live in an ice-house, or to seek for any artificial refrigerant, but simply to avoid all unnecessary excitement, whether mental or physical.

Let your clothing be light and loose.—At the same time that this maxim is adhered to, care must be taken, whenever any sudden reduction of temperature occurs, to adapt the clothing to this change; hence, a warmer dress will be required early in the morning and late at night, than during the middle of the day.

When in a state of profuse perspiration, never throw off a portion of your clothing.—The best plan in such cases is to retire immediately within doors, and change the damp clothes for others perfectly dry, the whole surface of the body being previously well rubbed with a towel. The same precaution is proper when you have been accidentally wet by a shower of rain.—*Journal of Health*, 1832.



TEMPERANCE AND MISCELLANY.

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Conducted by MRS. E. E. KELLOGG, Superintendent of Hygiene of the National W. C. T. U.

IT PAYS.

It pays to wear a smiling face,
And laugh our troubles down;
For all our little trials wait
Our laughter or our frown.

Beneath the magic of a smile
Our doubts will fade away,
As melts the frost in early spring
Beneath the sunny ray.

It pays to make a worthy cause,
By helping it, our own;
To give the current of our lives
A true and noble tone.

It pays to comfort heavy hearts,
Oppressed by dull despair,
And leave in sorrow-darkened lives
One gleam of brightness there.

It pays to give a helping hand
To eager, earnest youth;
To note, with all their waywardness,
Their courage and their truth.

To strive, with sympathy and love,
Their confidence to win;
It pays to open wide the heart
And "let the sunshine in." —*Selected.*

SKETCHES OF TRAVEL, NO. 15.

BY MRS. E. E. KELLOGG.

THE VATICAN PALACE.

THE most magnificent treasure house of art and antiquities in all the world is the Vatican, the residence of the pope of Rome, and the largest palace in existence, containing upwards of eleven thousand different apartments. Here the wealth of ages has accumulated the rarest and richest gems of sculpture and painting, while some of the very rooms themselves are the masterpieces of those two great artists, Michael Angelo and Raphael, who adorned their walls with most beautiful and wonderful creations of art. Never did we realize more completely that "art is long, and time is fleeting" than during that one day of our stay in Rome set apart for an excursion to the Vatican.

The entrance to the palace is guarded by Swiss soldiers, dressed in a picturesque costume of yellow and gray, who doffed their caps politely as we passed, and prepared to ascend the *Scala Regia*, the grandest stairway in the world, decorated with frescoes illustrating the history of the popes, and covered with a tunnel vaulting borne by Ro-

man columns. Our first visit was to the Sistine Chapel, the apartment where most of the religious solemnities requiring the especial presence of the pope, take place. The entire ceiling of the large room was painted by Michael Angelo, and is regarded as the chief work of that great artist. He was nearly two years in accomplishing the task; and it is said that in consequence of such long-continued gazing upward, his eyes became so affected that he could not read a letter until he had placed it above his forehead. The upper part of the vaulting is in nine sections, each representing some great event of the world's history from the creation to the deluge. The lower portion of the ceiling is divided into triangles, and is occupied by figures of the prophets and sibyls, twelve in all. The conception of the character and appearance of the prophets, as embodied in their portraits, is marvelous. Once seen, they can never be forgotten. In the four corner arches are the pictures of *The Israelites in the Wilderness; Artaxerxes, Esther, and Haman; David and Goliath; and Judith*,—each a beautiful production of art. How salvation came to the world, and how proclaimed, is said to be the theme which Michael Angelo undertakes to illustrate with these ceiling paintings, the central portion showing how sin entered the world, and the promise of redemption, while the prophets proclaim the promise; and the corner pieces portray some of the wonderful deliverances of God's people. The elucidation of the idea is very fine, the figures most life-like, and the adaptation of scenes and persons to the places they occupy, makes the whole, architecturally as well as artistically, a masterpiece.

Reaching across the entire altar wall of the same chapel, sixty-four feet in width, is another magnificent painting by this talented master, called the *Last Judgment*. The upper portion represents Christ surrounded by the apostles, patriarchs, saints, and martyrs, in the act of judging the world; while the lower half depicts the resurrection of the dead with the place of everlasting torment just below, in accordance with Dante's conception, where are to be seen the boatman Charon and the judge Minos, whose face is the portrait of Biago de Cesena, master of ceremonies of Paul III., who had censured this picture on account of the nudity of the figures. In revenge, the artist painted him as Minos; and when, in real distress, he went to the pope concerning it, the pope asked, "And where has he put you?" "In hell," was the answer. "Ah!" said the pope, "then I can do nothing for you. If it had been in purgatory, I might have got you out, but over hell I have no power."

Other paintings by celebrated artists, representing parallel scenes in the life of Christ, adorn the sides of the chapel.

From the Sistine Chapel we passed to four consecutive rooms, called Raphael's *Stanza*, and decorated with frescoes executed by that master, unrivaled by any other work of art in existence, save the ceiling of the Sistine Chapel. The ceiling of the first of these rooms is decorated with allegorical figures, and Biblical and mythological scenes symbolical of the four principal spheres of intellectual life, *Theology, Poetry, Philosophy, and Justice*; while the wall paintings under each are elaborations of the same idea. Beneath *Theology* is a painting called the *Disputa*, intended to represent the glorification of the Christian faith; with portraits of St. Peter, Adam, St. John, David, Paul, Abraham, Moses, the Fathers of the church, with Christ and the Virgin, and many other Bible characters. Beneath *Poetry* is a scene in which are portrayed the nine Muses; and beneath *Philosophy* is the celebrated painting called the *School of Athens*, a picture in which the great philosophers and masters of thought in ancient times stand out clear and unmistakable. In the center are Plato and Aristotle, Socrates with his bald head, Diogenes, Ptolemy, Pythagoras, and a score of others.

The second *Stanza* is decorated with frescoes and paintings representing the triumph and divine protection of the church, in which the portraits of the popes figure conspicuously.

The third *Stanza* contains a most celebrated painting, called the *Conflagration of Borgo*, founded upon a traditional incident of the extinguishment of a fire which had broken out in the Borgo, by the sign of the cross made by Pope Leo IV.

The last *Stanza* is called the hall of Constantine, and is almost entirely devoted to paintings representing scenes in the life of that king. In another part of the Vatican is an extensive hall, or gallery, sometimes called Raphael's Bible, the frescoes of which, executed by that great artist, are all scenes from the Bible, forty-eight being taken from the Old Testament and four from the New. In the picture gallery is the last work of Raphael, the *Transfiguration*, said to be the grandest painting in the world. Here, too, is Raphael's *Madonna*, Titian's *Madonna and Saints*, the *Last Communion of St. Jerome*, by Domenichino, and the *Adoration of the Shepherds*, by Murillo, besides many other celebrated works of art.

The Vatican museum is an immense collection of antiquities and relics. Here are sarcophagi, vases, bas-reliefs, and specimens of almost everything useful and ornamental used in ancient times. Here we saw the only ancient Roman chariot in existence, an ancient crematory grid-iron, and a magnificent porphyry bath basin from Nero's Golden House. Ten rooms are filled with Egyptian antiquities, and twelve with Etruscan terra-cottas, vases, jewels, ornaments, and cinerary urns, among which we noticed some curious ones in the form of houses and huts found in the very ancient graves near Albano.

The library of the Vatican is an enormous

collection, occupying twelve rooms, and comprising no less than twenty-three thousand Greek, Latin, and oriental MSS., registers of papal acts, letters of the popes, and many other interesting and important documents. The books and manuscripts are, however, kept in closed cases, so there is no pleasure to be derived from a visit there. Twelve other galleries are filled with statuary,—perfect gems of sculpture and marvels of art. Here are busts of emperors, philosophers, heroes, and the statues of gods and myths. Here is the *Apollo Belvedere*; and the famous group of *Laocoon*, the father with his two sons strangled by serpents at the command of the offended Apollo. According to Pliny, this group was executed by the three Rhodians, and was placed in the palace of Titus. Here is the beautiful *Minerva Medica*, in Parian marble; the *Perseus*, by Canova; the *Colossal Group of the Nile*, one of the finest specimens of classic sculpture, consisting of a male figure of colossal proportions, in a recumbent position, resting its left arm on a sphinx, and surrounded by sixteen playing children, emblematic of the sixteen yards the river rises, with hundreds of other lovely creations of art.

In the great hall of the palace are to be seen the various expensive gifts that have been presented to the popes from different emperors and nations. Another apartment of the Vatican contains curiosities from the catacombs, and another still with a floor of ancient mosaic, contains a collection of ancient pictures of interest.

Neither the pope nor his apartments are shown, but his portrait is to be seen occasionally on canvas and stained glass.

THE GOLDEN APPLE.

WHEN Jovius, emperor many a year,
Felt that his end was drawing near,
To Probus thus he spoke, and said:
"To-morrow thou shalt reign instead;
But I have charge to lay on thee,
And thou must keep it faithfully.
Here is an apple made of gold,
Studded with gems of worth untold,
Modeled and carved by a workman fair
Into a jewel rich and rare.
Now, when my form is placed away,
Ashes to ashes, clay to clay,
Travel a year strange lands to see,
That thou the wiser man may be;
And the greatest fool within thy path,
Before thy journey ending hath,
Give him the jewel; then return,
And from his folly wisdom learn."
"Beau sire and emperor," said the son,
"What you command shall well be done,
Laying all other things aside."
At that the emperor smiled, and died.
Probus his father's 'hest obeyed,
His brother straightway Cesar made,
Leaving the empire in his hands
While he sought far and foreign lands,
Hoping that fool of fools to find
To whom the toy might be resigned.
Many he found with little wit,
But none so fairly merit it
Through the assumed pre-eminence

Arising from all lack of sense.
 At length it chanced he came one day
 To a city far beyond Kathay,—
 A noble city, rich and great,
 The capital of a noble state,—
 And asked a stranger in the way:
 "Who is the monarch here, I pray?"
 "That question proves you stranger here.
 Areiphaz is the king this year."
 "This year!" "Why, yes; the custom strange
 May seem to you. Each year we change.
 We choose our monarch, and his sway
 Just for a twelvemonth we obey,
 And then we banish him." "To where?"
 "Beyond yon desert, bleak and bare,
 To a country strange. If weal or woe
 Be his hereafter, who may know?
 None ever yet came back to tell
 If his after life were ill or well;
 But while he reigns, few monarchs see
 Such pomp and luxury as he.
 A thousand ministers for him
 To execute each wish or whim,
 He sits or moves in splendid state;
 His will is law, his nod is fate;
 Why for his future should he care
 Whose present is so fine and fair?"
 Straight to the palace Probus went,
 And at the throne in homage bent,
 Saying, "This apple, sire, your due,
 My sire, when dying, sent to you."
 The King, with pleased but wondering look,
 In hand the costly jewel took.
 "'Tis passing strange, methinks," quoth he,
 "Your sire should send such gift to me—
 A gift the richest king might seek.
 Some hidden meaning's in it. Speak!"
 Then Probus: "Is it as they say
 That, ere a year shall pass away,
 From state and sway and honor riven,
 O'er yonder border you'll be driven,
 To some unknown and distant regions,
 Where joys are few and woes in legions?
 Your majesty inclines your head
 In gracious answer, words instead;
 And have you then made preparation
 For such a change of situation?"
 "No," said the king. Then Probus said:
 "A lucky chance that hither led.
 My father bade me this bestow
 On the hughest fool my search should show;
 And when I find here in thy power
 Provision made not for the hour
 Wherein thou shalt be driven hence
 To exile, woe, and indigence,
 This jewel here, it seems to me
 Belongs of eminent right to thee."
 "Friend," said the King, "thy rapid tongue,
 Looks, air, and manner speak thee young.
 A mortal thou, as well as I;
 The day must come when thou shalt die.
 What preparation dost thou make
 For the journey that thou then must take?
 What acts of grace, what pious care,
 What vigils with the soul laid bare?
 What treasure for the world to come
 Laid up for use? So—thou art dumb,
 Take back—'tis thine—this jeweled sphere;
 Thou art the fool of fools, 'tis clear."
 The monarch sat no longer there,
 Throne, chamber, city, change of air,
 And Probus found himself at home,
 In the imperial palace at Rome.— *Independent.*

MY NERVOUS PATIENT.

I LEFT my carriage at the lodge-gate, instead of going in and right up to the hall-door, as usual. I told my man to drive slowly up to Mrs. Smith's, deliver a message which I gave him, then return and wait for me.

This done, I entered the grounds, and walked somewhat wearily up the long, winding avenue; for I was going to see a case that I had very little pleasure in, and that I had never derived much comfort from attending. He was not what one might call a satisfactory patient; and I was getting tired of him. I do not think it was through any fault of my own that he was not progressing favorably. I did all I could for him in the way of advice and medicine; but now, at the end of six months, I felt that, though he could well enough afford to pay my bills, I was taking his money for nothing.

I had another cause for being somewhat weary and discontented to-day; I had been up most of the night, and late hours are not conducive to serenity of temper during the day that succeeds them. Mr. Montgomery's private sitting-room was in a corner of the house, with a large French window overlooking the lawn and shrubbery. He was at the window, and saw me coming along, making my way toward the hall door. Perhaps he had been watching for me; for he opened the case-ment, and ran down the steps to welcome me. "Goodness, Doctor!" he exclaimed, as we shook hands, "you are not walking, are you? you are surely never walking!"

I assured him I was, but admitted that my brougham was not a very long way off.

"Come in, anyhow," he said. "Come in, come in."

"It is a lovely spring morning," I remarked, lingering on the lawn, and gazing around me. Some parts of the lawn were all aglow with snowdrops and crocuses, and it was quite a treat to see the dewy primroses peeping out from under the sheltering rhododendrons and laurels.

"Yes, it is a fine day; but come in," he said; "it is raw and cold."

"On the contrary," I replied,—for I felt just in the mood to contradict him,—"it is deliciously mild and balmy, and if you feel cold, it is because your blood is thin and not sufficiently aërated. If you went out every day, and kept yourself out for hours, as I wish you to do, you would not find it cold, I can assure you."

"And that is precisely what I mean to do," he said, "as soon as the weather gets a little more settled, and these terrible spring winds cease to blow. Come in."

We entered. He was about to close the window, when I said:—

"No, my friend; don't let us banish the ozone. You and I both need it; for I have been up all night with a bothering case."

"Yes," he said; "and you look pale."

"And you—how do you feel?"

"Just a little return of my old foe, the ague, last evening, but I think I banished that by taking a good nightcap, putting my feet in hot mustard and water, and having an extra cover on the bed. Feel flying pains all over me to-day,—rheumatism, I suppose,—some slight fullness in the head, too; hands hot, and eyeballs tender to the light. I hear that fever is about. I sincerely hope I'm not in for anything of that kind, Doctor?"

"Put out your tongue. Thanks. Let me feel your arm."

"Am I worse?" he asked. "No fever—eh?"

"Nightcap fever," I replied, bluntly. "The flying pains you talk about have no existence except in your own imagination. That's so, I assure you."

"Well, I dare say I should n't have taken the nightcap."

"No, I'm sure you should n't."

My patient had not, to outward appearance, the diathesis of a nervous man, but he was really so. He was not strong-looking, being somewhat pale, but he seldom looked anxious, and he was in fairly good condition; hight, about five feet eight; age, nearly forty.

"That is the worst of it," he had more than once told me, confidentially; "none of my friends will give me credit for being ill."

He had enjoyed the pleasures of the world to some considerable extent when a younger man, and had traveled a good deal abroad, but had never been really intemperate, either in eating or drinking. I know that he would have told me of it had he been so; for he kept no secrets from his medical adviser. But idleness was his besetting sin. I do not know that for six months previous to the day on which we had the serious talk which forms the subject of this paper he had done anything else but read. He reads the newspapers all the forenoon, and books, books, books all the remainder of

the day, and often, I believe, late into the night.

"Well, Doctor," my patient said to-day, "I've taken all your medicine, and I do n't feel one whit the better."

"Yes," I replied; "you've taken all my medicine—you are very good at taking physie; but had you taken my advice as well in other and hygienic matters, I would not have been sorry had you thrown the medicine to the dogs."

"Do you say so?" he exclaimed. "Now I'll tell you exactly how I feel—"

I certainly do not mean to plague my readers with a detail of my patient's symptoms, real and imaginary. I *had* to listen to them, and did so most patiently, although probably a great deal of what he said went in at one ear and out at the other. I sat silent for some time after he had finished.

He looked at me somewhat anxiously, then got up and walked about the room for a few minutes, and finally re-seated himself.

"You are unusually quiet, Doctor," he said at last, in an earnest tone of voice. "You do n't think there is anything *very* serious the matter with me to-day?"

"I think the very worst," I said solemnly, and probably, some might say, mischievously, but I had only the good intention of thoroughly rousing him, even if it caused him to call in another medical man, I felt I should not be sorry.

"Your heart is affected!"

This was no exaggerated statement; for it is always the case in nervousness or in nervous debility that the heart's tone is lowered. We physicians call it functional disorder, to distinguish it from actual organic disease. It should be remembered that the heart is a muscular organ, and is liable to be below or above par as the other muscles of the body; nor, on the other hand, should it be forgotten that if nervousness becomes chronic in any patient, the heart itself is liable to become permanently affected, and life necessarily much shortened. This only shows us that a strenuous effort toward restoration of health should be at once made by one suffering from the complaint we are now considering,—a complaint which, owing to the struggle for existence going on in our midst, is every day becoming more common. A cure, as may be gleaned from the conversation that follows, is not to be looked for from medicine alone, but

from strict adherence to the rules of hygiene, *physical* and *mental*.

"You cannot mean it!"

"It is my duty to tell you so, and I *do* mean it."

"O Doctor!" he gasped, seizing me by the arm above the wrist with a grip that spoke volumes for the strength of his voluntary muscles, at all events, "O Doctor!—you—do not mean to say I am—going to—to—to die?"

"We must all die."

"Oh! this is awful! this is terrible!" he cried.

He gazed around him in a semi-dazed, bewildered way, as if beseeching the very chairs and sofas and the pictures on the walls to step in and save him from the inevitable.

"I have often," he said, slowly, at last—and there were sweat-drops on his brow—"I have often said I wished to die, and be done with it all, to die and be at peace; but I did not think it would come so soon, and come thus. Say, say you are but joking, Doctor."

"I never joke," I replied, "on so serious a matter as disease. But I have not said you were soon to die. That you are in danger, in real danger, I cannot conceal from you. Hope I can, or could, give you, if you would but follow my advice. If you do not do so, I would infinitely prefer your calling another physician, for I can do no more to save you."

"Do not *you* give me up, Doctor. Your advice has always seemed to me so different from that of any one else. You make things so plain to me."

"Do I? Thanks. But what of it if that advice is not taken? Might I not as well talk to the cat there on the hearth-rug? You have every advantage in life; your existence might be a very happy one, if you had—excuse me—any method in your madness; if you were not entirely a slave to your own feelings, whether real or imaginary—and they are more often the latter than the former. There are tens of thousands in these islands suffering from nervousness, with functional disease of the heart, that have not half the chances of getting well that you have, although there is really no case that ever I met with that cannot be either cured or alleviated by attention to diet, avoidance of stimulants, the daily use of bath and friction with rough towels and flesh-brush, unlimited exercise in the open air, whether the weather be wet or dry, cold or hot,

and *pleasant society*. Mixing with pleasant society is one of the very best means for the cure of nervousness. It takes one for the time being quite out of one's self, quite away from one's troubles and aches. It must, however, never be *exciting* society; for this sends the blood to the head, and injures the very foundation of nerve-power. What do you tell me? You never take stimulants to excess? I doubt it; for *tea*, if too much indulged in, is a dangerous stimulant, and so is coffee. A cup of milk that has been boiled and allowed to cool would often do far more good than tea. Tea-drinking grows on one, and assuredly, when it does so, it shatters the nerves as irremediably as does wine or even spirits."

Reader, a week after I had the above talk with my nervous patient, I had the satisfaction of seeing him out-of-doors working in his garden; a month after this he was in every way a new man; and a still greater treat was in store for me; for in less than six months more I had the extreme satisfaction of being a kindly welcomed guest at his WEDDING.—*Cassell's Magazine*.

A Vacation from Tobacco.—The Pittsburg *Dispatch* speaks of a distinguished physician who abstains from smoking every October, in order to give his system thirty days' recuperation every year from the effects of tobacco, in accelerating the movements of the heart. He finds this acceleration very marked by the end of September. His October abstinence causes the heart to return to normal action; and on the first day of November he commences another year's course of smoking. How much better, how much more sensible, how much more manly it would be, to abstain altogether from a manifestly injurious, and therefore manifestly wrong, practice! What a grand opportunity conscientious physicians have to set a good example in this matter, and give the weight of their powerful influence against a useless and harmful habit!—*Bible Banner*.

—Everything that tends to emancipate us from external restraint, without adding to our own power of self-government, is mischievous.

—Spurn not good counsel, and never boast of your strength or of what you can do, for the strongest and wisest may fall when they least think of danger.

Popular Science.

—A new method of nickel plating has been invented in Germany. A bath of granulated tin, argols, and water is prepared, to which is added a small quantity of red-hot nickel oxide. This solution is brought to boiling heat, and the article to be plated immersed therein, whereupon it almost immediately becomes covered, and when submitted to rubbing with chalk or sawdust, takes on a fine polish.

—A new process of bleaching has been invented, by which much time and labor may be saved. A preparation of which petroleum is the principal ingredient, is the agent employed. Several experiments have been made by the inventor before various scientific societies, and it is said the strength of the fiber of the material is in no way lessened, and the loss in weight scarcely perceptible, so that "filling" with starch and clay, as heretofore done, is unnecessary.

—Brushes or combs used on the heads of persons afflicted with scaly baldness will communicate the disease to other heads, and Dr. O. Lassar considers that baldness is spread by hair-dressers who employ combs and brushes on their customers, one after another, without any regular cleansing of these articles after they are used. Hair which fell from heads in which dandruff occurred plentifully, was collected and rubbed with vaseline. The ointment thus made was applied to the fur of rabbits or white mice. Soon baldness made rapid progress in the parts so treated. Vaseline alone produced no effect.

—Hall, the science crank who has undertaken to upset the acoustic theories of Tyndall, Helmholtz, and other scientists, has now assailed the accepted physiology of the ear, and asserts that the "drum-skin," or tympanum, does not vibrate. It is impossible that it should vibrate, as otherwise his theory could not be correct. Unfortunately, Prof. Pollitzer, of Vienna, and numerous other aurists have, by means of delicate instruments, not only made the vibration of the membrane visible, but actually measured the amount of the vibration. Yet Hall wonders why Tyndall and Mayer, and other scientists whom he has abused, do not turn upon him, and, metaphorically speaking, cremate his theories.

—The waiting-room of a New York furniture establishment has been recently found to possess a lounge curiously charged with electricity. How the electricity was produced was for some time a mystery. On investigation it was found, however, that the room was located directly over a hot air engine, employed to work the elevator. Two belts from the engine were located over the room, and ran with great speed in opposite directions from which sparks of electricity were frequently given off.

As the room above was kept perfectly dry by the heat of the engine, and the belts were not far from the floor, it is supposed they acted like a frictional electric machine, electrified the floor above, some of the electricity passing to the lounge, charging it like a Lenden jar, and delivering sparks when touched.

The Length of Lines of Type.—A prominent medical man of France has published an article in which he unequivocally condemns the lines of type in books and newspapers, arguing that their present length—being too long—is unfavorable to the eyes and nerves of the readers. He maintains that the eyes cannot, as of right they should, take in all the words of each line in the range of one focus. This doctor insists that the line of type ought not to extend much over two inches, that being the normal range of the eye when it is stationary. In regard to the shape and size of the letters, the same authority declares that the smaller the type, the harder the strain on the eyes. An example is given in the miniature edition of Dante, shown in the last French exhibition, which ruined the eye-sight of three printers and two proof-readers. Concerning the shape of letters, the tall, thin Roman letters, technically known in France as poetic type, are the most trying on the eyes. Short heads and tails are to be preferred, because the eyes run more easily over them, and there is less liability of confusing one line with another. Like the German oculists, the French doctor maintains that the shortsightedness so prevalent in Germany is due entirely to the use of Gothic type.

How Animals have Foretold Earthquakes.

—An Italian writer on the dreadful catastrophe which occurred on the Island of Ischia, mentions those prognostications of an earthquake which are derived from animals. They were observed in every place where the shocks were such as to be generally perceptible. Some minutes before they were felt, the oxen and cows began to bellow, the sheep and goats bleated, and rushing in confusion on one another, tried to break the wickerwork of the folds. The dogs howled, the geese and fowls were alarmed, and made much noise; the horses which were fastened in the stalls were greatly agitated, leaped up and down, and tried to break the halters with which they were attached to the mangers; those on the road stopped suddenly, and snorted in a very strange way. The cats were very much frightened, and tried to conceal themselves, or their hair bristled up wildly. Rabbits and moles were seen to leave their holes; birds rose, as if scared, from the places on which they had alighted; and fish left the bottom of the sea, and approached the shores, where at some places great numbers of them were taken. Even ants and reptiles abandoned, in clear daylight, their subterranean holes in great disorder, many hours before the shocks were felt. The dogs, a few minutes before the first shock took place, awoke their sleeping masters by barking and pulling them, as if they wished to warn them of the impending danger; and several persons thus escaped.—*Sci.*



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A HYGIENIST ABROAD.

SCENES IN ITALY.

ITALY is a country so full of interest to a foreigner that it furnishes an inexhaustible amount of reminiscences to one who has traveled through it. As our visit was made chiefly in search of matters of interest pertaining to our profession, we had not much time to devote to miscellaneous sight-seeing, and hence shall not attempt to draw in detail a picture of Italian life, which, indeed, would be a useless task as the work has been so frequently and so well accomplished by numerous writers who have traveled through this sunny land. We will notice, however, a few pictures which impressed us particularly by their novelty, without attempting to follow any regular method in so doing.

On first entering Italy, one is struck with the odd construction and infinite variety of the vehicles. In a large city like Naples, for instance, one may see every imaginable form of two-wheeled and four-wheeled vehicles, drawn by every variety of domestic animals—excepting fowls and cats—harnessed in every absurd and fantastic manner allowed by the law of permutations and combinations. Here comes a little two-wheeled cart, rattling over the pavement, drawn by a donkey whose ears are almost as long as his body, and driven by a bare-headed washer-woman, who sits in front of a great heap of washed linen which she is carrying back to her customers. Down the street comes thundering the country stage-coach, drawn by three stout horses, which are kept on a good round trot by the driver's long whip. Something more than a score of people are snugly packed away in the inside, or perched upon perilous seats on the top, or clinging to a sort of plank behind as the poulderous coach rocks to and fro, and sometimes even suspended in a sort of net from the hind axle-tree, smeared in dirt from head to foot, and half choked with dust. Just round the corner comes a great wagon with a long tongue. On one side is hitched a single mule, which is almost jerked off his feet every time the wheels strike a stone, or fly out of the rut. The first time we saw one of these one-sided establishments, we supposed that the poor animal had been deprived of his mate by some accident

and was obliged to pull the whole load home alone; but we soon discovered that nearly all the one-horse vehicles were constructed on this plan, only cabs or elegant carriages intended for one horse being made with thills, after the American fashion.

If we look out on the harbor, we see the same variety in the shipping; but most numerous of all are the little sail-boats, furnished with their huge, awkward, square sails, exactly like those in use two or three thousand years ago.

We are just at the door of the Cathedral. Let us run in a moment, and see the chapel of St. Januarius, said to contain the sacred blood of the saint, which, by some sort of jugglery, is made to undergo a miraculous liquefaction three times a year. It is also claimed that the distant rocks, where the saint was slain, become red at the same moment the liquefaction occurs. Italy abounds in pretended miracles of a similar sort, most of which are so patently absurd as to excite the most profound disgust in a person whose education has been such as to enable him to view them with eyes unbiassed by prejudice.

The place to see churches and miracles, however, is at Rome, where every sacred edifice is duly provided with some popular humbug, by which the gullible people's pockets may be emptied. For example: the church of the Ara Coeli in Rome contains a little wooden doll called the Babino, which represents the infant Saviour, and is supposed to possess miraculous powers, being carried about the city to the bed-sides of sick persons, to whom it is presented with tedious incantations, the result of which, in every case, is that the patient either gets well or dies sometime. If he dies, it is because he did not make a full confession of his sins. If he recovers, the wooden doll has wrought a miracle. Of course, the maintenance of such a marvelous doll must be very expensive, so a large sum must be charged for its valuable services.

Another Roman church contains an altar on which is inscribed the name of every celebrity who frees his soul from purgatory at it. Over the door of a church we frequently passed, was a Latin inscription to the effect that perpetual indulgences were daily granted within. We were surprised not to see throngs of people crowding in through the open door,

since our observation assured us that there were plenty of people in Rome standing in great need of indulgence. In some places among old ruins, crosses are placed, bearing inscriptions promising indulgences for a certain number of days to whoever kisses the cross, the length of time varying with the supposed sanctity of the particular cross, one cross being efficacious for a hundred days, another for two hundred, etc.

A church in another quarter of the city shows the identical chains by which Peter and Paul were confined in the Mamartine prison, which, by the way, was also exhibited as the place where Paul and Peter were confined previous to their execution, although positive evidence is yet wanting that Peter ever visited the "holy city." In the dungeon where it is claimed Peter was confined eighteen hundred years ago, is shown a hole in the rocky floor in which water may be seen rising within a foot of the surface, this is claimed to be a miraculous spring produced by the apostle for the purpose of obtaining water to baptize one of the early Christians. The miracle-mongers have evidently forgotten that the apostle baptized only by immersion, since the little fountain is barely large enough to provide for the modern substitute for baptism—sprinkling.

There is an old church near the outer border of the city, called St. Stefano Rotondo, whose walls are covered with fresco paintings, representing the tortures and martyrdoms of the early Christians. The scenes depicted could scarcely be equaled by the most horrid night-mare, and must make a vivid impression upon the pilgrims who come to view the sacred relics.

Beneath the church of St. Paoli is the entrance of a vast range of subterranean chambers, which are said to communicate with the Coliseum. There are two series of these vaults, one above the other, according to church tradition. The lower series was formerly occupied by wild animals destined to participate in the games in the amphitheater; while in the upper series were confined the persecuted Christians, whose days and nights in darkness were rendered doubly hideous by the savage howlings of the hungry beasts beneath their feet, which they knew were soon to feast upon their bodies.

We shall not attempt to show you through St. Peter's, that grandest of all church edifices in the world, six hundred feet in breadth, and over four hundred and fifty feet in height; but you must peep in through the great door-way long enough to take a glimpse of the great bronze statue of St. Peter, made from a heathen idol. The great toe of his right foot has been nearly worn away by the lips of pilgrims in depositing their devout kisses, an act of humility by which they doubtless hope to atone for some misdeed. As we looked about, and saw the scores of people on bended knees before the pictures and images of various saints, our first thought was,

"Surely, here is sincere, though strangely benighted, devotion;" and we felt almost guilty for having in sport followed the example of our good Catholic predecessors, in depositing a kiss upon St. Peter's toe, first taking care, however, to make a stealthy application of our pocket-handkerchief. But a little more extensive observation led us to a different conclusion respecting the devoutness of a large portion of the worshipers. For example: a few feet before us we saw, leaning in front of a magnificent picture of the Virgin Mary, a man repeating his prayers in a half audible whisper, and at the same time looking curiously around at the passers-by, as though the act in which he was engaged was of little more consequence than the revolving of the water-wheel, by means of which the Hindoo devotee turns off his written prayers by proxy. The professional beggar pauses in the midst of his prayers to St. Michael, and holds out his hand for alms, offering to say a prayer for you for a few coppers. A gentleman asserts that he once saw a man pause in the midst of his prayer to administer a caning to his dog, which had become involved in a quarrel with another canine, and then immediately resume his devotions, while the sacred walls were echoing the howlings of the irreverent brute. Another visitor declares that a woman, who was earnestly engaged in her devotions, arose from her knees as he passed her, and presented him her card, announcing her profession as a music teacher.

But let us take one glimpse at the holy stair-case, and then we are done with churches. Here we are at the entrance, and we find a dozen or more persons are making the ascent. The most devout ones say a prayer on each step of the long stair-case. Others hurry along as though it were a matter of very little consequence, only so they get to the top wholly on their hands and knees. Gray-haired old men, and women long past the middle of life, young men, young women, little boys, little girls,—all climbing in the same ridiculous fashion, but not so deeply absorbed in their devotions but that the most of them, especially the women, feel sensitive about being looked at, and keep peeping over their shoulders to see that their dress and inferior extremities are properly disposed. Here is a worldly-looking man who is actually perpetrating a fraud. He has brought his umbrella along on purpose to pull himself up by, which is evident from the fact that there never was a brighter day in sunny Italy than this one.

But here comes a woman, with a little girl, who seems to hesitate about starting in while we are gazing, and so we will content ourselves with what we have seen, and leave the reader to find out for himself, if he can, whether this is the veritable, identical stair on which our Saviour trod when he descended from the judgment hall of Pilate. We had not humility enough to climb the stair-way in the proper fashion, and so we did not see the wonderful relics exhibited behind an iron railing at the top.

HOW A SENATOR SAVES HIS STOMACH.

WE have often been asked by persons whose business took them from home most of the time, and deprived them of the advantage of a steady boarding-place, "How can we live healthfully under such circumstances?" The following paragraph respecting an eminent member of the United States Senate will suggest a plan by which the difficulty can be obviated. We would recommend this illustrious example as highly worthy of emulation.

"When Senator Palmer goes to New York, and stops at the Fifth Avenue hotel, he always carries a loaf of Graham bread in his satchel. Before going to his meals, he cuts a couple of slices from the loaf, and puts them in his pocket. At the table he pulls the bread out, and has always something before him he can eat. In his house at Detroit he has a mill constructed on purpose to grind the flour for this bread, and at home he will never eat bread made from flour ground at any other mill. When he first came to Washington, he was invited to so many dinner parties, and was obliged to eat so much, that he was distressed and sick most of the time. At a dinner party later in the season, however, he happened to notice that Senator Mahone skipped every other course, and only barely tasted of the dishes he took. He profited by this suggestion, and since then, when invited to dine, he keeps his jaws in motion, but only nibbles his food."

A SIMPLE METHOD OF TESTING THE AIR.

THE following from the *Sanitary Enquirer* presents a simple method of testing the air, which can be used in any household. In ordinary practice in the household, the fractional ounces given in table of dimensions of bottles may be ignored. Three bottles holding respectively one pint, ten ounces, and one-half pint are all that are needed, as a greater degree of impurity than that shown by an eight-ounce bottle is extremely dangerous.

"The simplest method of estimating approximately the proportion of carbonic acid present in the air of a room is by shaking up a small quantity of lime-water with a certain amount of the air to be tested. The lime-water is prepared by shaking slacked lime with distilled water, allowing it to settle, and then carefully drawing off the clear liquid by a syphon, so as not to disturb the sediment. It can be obtained from any druggist, but should be freshly made.

"When this lime-water is shaken up in a bottle of air containing carbonic acid, the acid combines with the lime, forming an insoluble powder of carbonate of lime; and when this is in sufficient quantity, it makes the water turbid, or milky, so that it can be recognized by the eye. By having a series of bottles of various sizes, filling them with the air to be tested, placing in each bottle a large tablespoonful of lime-water, and then shaking them vigorously for three or four minutes, so that all the air in the bottle shall be brought in contact with the lime-water, and all the carbonic acid be taken up by the lime, we shall find that in one bottle of the series the turbidity is just perceptible, while in bottles of less size the fluid remains clear, and in those of greater size it is dense.

"The following table is given by Dr. Smart as expressing the relation between the size of the bottle in which turbidity occurs and the volume of carbonic acid in the air:—

Size of bottle in fluid ounces.	Carbonic acid in volumes per 10,000 air.
20.6.....	3
15.6.....	4
12.5.....	5
10.5.....	6
9.1.....	7
8.0.....	8
7.2.....	9
6.5.....	10
6.0.....	11
5.5.....	12
5.1.....	13
4.8.....	14
4.5.....	15
3.5.....	20
2.9.....	25
2.5.....	30
2.0.....	40

"If an 8-oz. bottle shows turbidity, the presence of more than 8 volumes per 10,000 is indicated; how much more must be determined by a second experiment. Taking a 6½-oz. bottle, the air is known to contain less than ten volumes if no precipitate is developed. The carbonic acid can therefore be stated as constituting from 8 to 10 volumes per 10,000 of the air. But a third experiment with a bottle intermediate in size will correspondingly reduce the limits of uncertainty regarding the carbonic acid figure.

"There is no test-paper which can be made practically useful as a quantitative test for carbonic acid."

RELATION OF DIET TO MIND AND CHARACTER.

"As a man eats, so is he," is an old German proverb, the truth of which has never been contested; yet all the world goes on eating and drinking whatever the palate suggests, or the cook's caprice invents, asking no questions for conscience' sake, stomach's sake, or for the sake of the higher mental and moral interests of the individual.

According to an English medical author, Byron cured himself of epilepsy by restricting his diet to the simplest vegetable fare, taking only potatoes seasoned with vinegar for dinner. The same author says:—

"It is no doubt true that the constant use of animal food ill-qualifies the mind for literary application. . . . We can scarcely imagine a philosopher living on horse-flesh like a Tartar, or on buffalo meat, like a Red Indian; and it is a fact that these tribes appear incapable of civilization until they acquire the habit of using a less stimulating diet, and begin to cultivate the fruits of the earth for their own use. The effect is not due merely to quieter objects thus suggested to their minds, as might be imagined, but really to the state of their blood. The difference in the success of Christian missionaries among such people, and among those whose chief sustenance

is farinaceous, is very striking and worthy of especial notice. In the East and in Polynesia, literature and Christian doctrines are seized on with avidity; but in vain were the most earnest labors of the best men to introduce reading and writing among the American Indians, until they had first been taught to grow corn and to eat bread."

Moderation vs. Total Abstinence.—A certain class of persons calling themselves temperate people and friends of temperance, while opposing the efforts of total abstinence societies and advocates, have urged as a cure for the vast evils of intemperance the encouragement of the production and use of light wine, asserting that in wine-growing countries, where natural wines are almost universally used as a beverage, drunkenness is far less common than in this and many other countries. But now comes a statement in a leading journal, the *Chicago Tribune*, which has heretofore advocated the moderation theory, to the effect that Switzerland, one of the leading wine-growing countries of the world, is the most drunken nation of Europe. Observations while traveling through Switzerland last year lead us to believe that the statement is not wide of the truth.

Bread from Seaweeds.—A scientific journal states that "on the west coast of England grows a sort of sea grass (*porphyra lacinata*) which is made into something very like bread. In the main, it is gathered by women; they then wash it, and pluck all other plants carefully from it. After this, it is boiled for some two hours; then the mass is cut in pieces with knives and kneaded into loaves. Oatmeal is then strewed over it to give it greater cohesion and a more inviting appearance, and then it is baked. It keeps in summer for four days, and in winter for eight. Many women on the coast of Devonshire earn their living by selling this bread, but most of it is sent to Swansea, in Wales, where it is much liked by the poorer classes."

Bed Blankets.—The best material for bed coverings is undoubtedly woolen blankets. During sleep, the process of elimination through the skin of effete products gives rise to a large amount of poison-laden exhalations which ought not to be retained in contact with the body by impervious coverings. The body needs contact with fresh air during the night as well as during the day, to secure the removal of these waste products. Several woolen blankets are much to be preferred to one or two heavy "comfortables," so-called, which are much less pervious to air, and are by the weight often very uncomfortable, besides rendering impossible a proper adjustment of the amount of covering to the varying requirements of the changeable weather of spring and fall. Bed blankets lined with paper must be condemned as totally unfit for use. An Englishman who has turned his attention to this subject has invented a ventilated quilt.

A Veteran Vegetarian.—One of the characters of Revolutionary times was Gen. Timothy Ruggles, of Hardwick, Mass. He took no part in the war with England, having been a brigadier-general in the French war, and being unwilling to violate his oath of allegiance to the mother country. His property being confiscated, he left Massachusetts, and settled in the wilds of Nova Scotia, dying at the advanced age of eighty-four, having been a vegetarian nearly all his life, eating no animal food and drinking no intoxicating liquors, as a result of which he enjoyed, during his long life, uninterrupted health and vigor. He was at one time speaker of the House of Representatives, president of the Congress at New York, and chief justice of the Court of Common Pleas.

—A Philadelphia doctor claims to have discovered that serious results sometimes follow the wearing of the tight trousers so attractive to the fashionable "dude," as well as from tight waists and tight sleeves.

Practical Education.—Juliet Corsar, in writing of cookery in the public schools, refers to the fact that "the experiment has already been thoroughly tried in England, and shown to be a success in every way. Sewing and cooking are taught there in institutions corresponding practically to our common schools. The British association appointed a committee to investigate the matter, and the chairman reported that not only was the instruction in these departments signally successful, but that it appeared that in the schools where these things were combined with the regular course of study, better work was done in the regular branches. The mind of the student requires diversion for most efficient work, and this explains the fact cited, which is certainly a strong argument for the introduction of these departments in our schools. I don't see why it is not quite as necessary that the home should be properly managed as the business. In a country like ours, where so much is made of the common people, I do not see how a public school system can be considered complete that does not include practical instruction which can be used in every-day life by both sexes."

Vaccination against Hydrophobia.—The experiments of M. Louis Pasteur seem to show that the virus of hydrophobia may be modified by passing it through the system of the monkey in such a manner that it will no longer produce fatal effects. He has produced the virus of rabies of three degrees of strength, and claims that any person who will take the three degrees in vaccination with this virus will be efficiently protected against this dread disease. He also claims to have demonstrated that vaccination after a person has been bitten will prevent fatal effects from the active poison.

—The last report of the public analyst for London shows one-half of all the milk sold in some portions of the metropolis to be adulterated

Couldn't Stand the Remedy.—A few years ago we recommended an old gentleman to take a bath for an ailment concerning which he had consulted us, but he at once objected, remarking that a drop of water had not touched his back for forty years. The *Boston Post*, under the above heading, tells a story of an old man who must have been closely related to the man whose back was so great a stranger to water:—

“A miserly, unkempt old man, who had been sick for some time, called on a doctor, and, after telling his symptoms, asked what he should do.

“Well, sir, you must take a cold bath every morning.”

“What! wash all over every day?”

“Yes.”

“Will I die if I don't do it?”

“You certainly will.”

“Well, doctor, I ain't able to walk down town; will you go and get a preacher and an undertaker? I'll go home and get ready to see them. You may send your bill to my administrator, and he will settle it after I'm gone. Good day.”

A Slander.—A magazine scribbler has attempted to make it appear that the ancient Greek women wore corsets, or something closely akin to this instrument of torture. The ridiculous absurdity of this charge is apparent to any one who has ever gazed upon the models of female beauty carved by ancient Greek sculptors, and now exhibited in the museums of the old world as unapproachable in grace and symmetry of form as well as skillful workmanship. The Venus of Milo and the Medican Venus were certainly not brought up in “stays.”

—A Frenchman who has been investigating the fermentation of bread, finds that a *bacterium* is the cause of the process rather than the yeast plant; and also that the fermentation destroys the gluten very appreciably, thus lessening the nutritive value of the bread.

A Well-Preserved Man.—The Abbe Moigno, a distinguished mathematician who prepared the “*Calculus of Variations*,” at the advanced age of eighty rejoices in the possession of all his faculties intact, a memory as wonderfully retentive as ever, an “unconscious digestion,” and a countenance free from “wrinkles and pimples.” He attributes his remarkable preservation to abstinence from tobacco and intoxicants, and the employment of a diet chiefly vegetarian in character.

—Mr. Wm. Tebb, an earnest anti-vaccination agitator, calls attention to the curious fact that in years when small-pox is prevalent, the total mortality is less than the average. He argues that vaccination is worse than small-pox, on the whole, and stoutly contends for the repeal of the law making vaccination compulsory.

—The mania for electrical appliances to be constantly worn upon certain portions of the body still continues. An English dentist has constructed plates for false teeth, so arranged as to produce a current in the mouth, by which it is proposed to cure dyspepsia.

—A Brazilian physician claims to have discovered, by experimentation, that the earth from a graveyard in which yellow-fever patients were buried, will excite the disease in Guinea pigs when the cage containing them is placed over a quantity of the earth from the cemetery.

—A friend informs us that an Eastern educational institution in which the use of liquor and tobacco is prohibited, requires all the students to pass in line before a monitor appointed for the purpose, who smells the breath of each boy as he passes.

—A strange disease has appeared among the cattle near Galesburg, Ill. Death occurs in forty-eight hours after the attack.

DOMESTIC MEDICINE.

TREATMENT OF SIMPLE CHRONIC NASAL CATARRH.

THIS is by far the most common of all forms of nasal catarrh. It is chiefly characterized by the thick, yellow discharge which necessitates the frequent blowing of the nose, and the use of the handkerchief, or clearing from the throat the thick mucous discharges which are constantly dropping into it from the back part of the nasal cavity. Either or both of these prominent symptoms may be present, according as the disease is chiefly located in the anterior or posterior part of the nasal cavity, or throughout the whole extent of the nasal mucous membrane. Other symptoms of this form of the disease which we have previously described, we do not need to recapitulate. The examination of the nasal mucous membrane by means of instruments for the purpose, shows the affected portion to be red and swollen with congestion, and covered more or less with a thick yellow discharge which is characteristic of this stage of the disease. The indications for treatment are two: 1. To cleanse the diseased mucous surfaces; and 2. To apply such remedies as will remove the congestion, and induce a healthy action in the mucous membrane.

Cleansing the Nasal Cavities.—For this purpose a solution is required which will not irritate the mucous membrane, and at the same time will possess the property of dissolving the nasal mucus. Pure water will answer neither of these purposes. The fluid naturally secreted by the nasal mucous membrane is slightly saline. When pure water is injected into the nasal cavity, it is absorbed too rapidly by the mucous membrane, so that it becomes quickly swollen, producing pressure upon the sensitive nerves, thus giving pain. The addition of a small quantity of common salt or carbonate of soda increases the specific gravity of the water, giving it more nearly the character of the normal nasal fluid. The amount of salt required to produce a solution most nearly corresponding with the natural fluid, is one dram, or an even teaspoonful, to a pint of water. Both common salt and carbonate of soda, especially the latter, possess the property of dissolving with readiness the nasal mucus. Borax also possesses this property to some degree. These substances, there-

fore, are the proper ones for use in making the solution. The following formulæ are thoroughly satisfactory:—

Common salt, an even teaspoonful; soft water, warm, one pint. To be used in cases in which there is a small quantity of discharge only.

Common salt, one-half teaspoonful; carbonate of soda, one-half teaspoonful; soft water, warm, one pint. To be used in cases in which there is an abundant discharge.

We frequently add glycerine to either or both of the solutions in the proportion of an ounce to the pint of the solution.

The temperature of the solution is a matter of no small importance. The water employed for cleansing the nasal cavity should never be at a temperature lower than that of the body, or about 100° F., and an extensive experience in the use of solutions of various kinds and temperatures has convinced us that hot water is more effective than warm. We had entertained for years the belief that hot water would be found as effective in the treatment of nasal catarrh as it is well known to be in other parts of the body; but had been deterred from making decisive experiments by the belief that the thinness of the structures lining the nasal cavity was such that water of a high temperature would be intolerable. On making experiments, however, we found to our surprise that a very high temperature was borne without discomfort, and that a temperature considerably above that of the body was more comfortable than a lower temperature. In our experiments, a temperature of 130° to 140° taken in the reservoir, was found to be tolerated without discomfort. We believe that the temperature of the douche should rarely be less than 120° F., and may be employed at 130° in most cases, and even higher in some.

Having our solutions ready, we are now prepared for the operation of cleansing the nasal cavity, which is a very important part of the treatment of all forms of nasal catarrh, and should be thoroughly understood and carefully practiced.

How to Cleanse the Nasal Cavities.—There are several methods by which the affected cavities may be thoroughly and effectively cleansed.

Some of these possess special advantages, as simplicity, freedom from danger, etc. We shall mention first the most simple methods, which do not require other appliances than those which are found in every household.

First Method.—The simplest and one of the most efficient methods of cleansing the nasal cavity consists in drawing water into the nose from the hand, snuffing it up with sufficient vigor to expose the whole surface to the cleansing action. After the solution has been prepared, care being taken to give it the proper temperature, a portion should be dipped up in the palm of the hand, shaped so as to form a scoop for the purpose, and, with the head bent forward so as to make the line of the face nearly horizontal, the water should be snuffed up strongly into first one nostril, then the other, and refilling the hand, the head should be placed at an angle of forty-five degrees with the body, or about half way between the perpendicular and horizontal plane, and the operation repeated. Filling the hand again, it should be brought to the nose with the head held in a perpendicular position, the water being snuffed as before. By snuffing the water into the nostrils with the head held in these three positions, the whole nasal cavity, and even the extreme back portion, may be thoroughly cleansed. A sufficient amount of water should be used in each position to secure the thorough cleansing of the nasal cavities from every particle of cohering mucus,—a condition which will be indicated by the readiness with which the air can be drawn through the nostrils, and the sense of comfort and cleanness which will be experienced when the cleansing is effectively performed.

Second Method.—A somewhat more convenient mode of cleansing the nasal cavities consists in substituting a sponge for the hand. The sponge, being saturated with the cleansing solution, is brought to the nose with the head held in the different positions previously indicated, and placed over the nostrils in such a way as to insure the entrance of the fluid into the nostrils when the air is forced through the sponge. The entrance of the air and water together, which is secured by this method, as well as the preceding, is favorable to the most thorough cleansing, as the water is broken up into a coarse spray, which strikes forcibly the various portions of the membrane, and dislodges the adhering mucus.

Third Method.—The nasal douche is one of the oldest methods in use for cleansing the nasal cavity, and when properly used, is a very satisfactory method. The requisite conditions for

its proper use are: (1.) A reservoir containing the water, which must be placed just above the level of the head, so that the water will flow gently through the nasal cavities without too great force; (2.) The mouth should be held open with the head inclined slightly forward; (3.) The patient should avoid swallowing while taking the douche. These directions are necessary to avoid the one danger connected with the employment of this method, namely, the liability of forcing a portion of the fluid through the eustachian tubes into the middle ear, and thus setting up an acute inflammation which may result in the impairment of hearing. This accident has occurred so frequently in connection with the use of the nasal douche, that many specialists have condemned it altogether as too dangerous for common use. If the directions given are carefully observed, however, it may be used without danger.



Fourth Method.—The post-nasal douche is another method which cleanses the nasal cavities in a more effective manner than any one of the methods before given, and hence is especially adapted to those cases of catarrh in which there is a very troublesome dropping at the back of the throat. For administering the post-nasal douche, a tube shaped something like the italic letter *f* is required. The upper end of the tube must be passed into the mouth to the back of the throat, then upwards behind the velum, or soft palate. The head should be inclined forward, so that the injected fluid may flow out

through the nose with ease. The reservoir should be held a short distance above the head, so that the water will not flow with too great force. The same care must be observed respecting swallowing, as there is some danger of forcing water into the eustachian tubes, with this method as well as the preceding. One of the best forms of syringes for administering both the nasal and post-nasal douche is that known as the Syphon Syringe, a cut of which is given on the preceding page. The position of the patient as shown in the cut is not properly represented by the artist. The head should be inclined forward, as already stated.

Fifth Method.—Another very effective method for cleansing the nasal cavity, is by means of the air atomizer. The atomizer produces a coarse spray with considerable force, and is best for this purpose. This spray should be directed into each nostril in various directions to insure cleansing of the entire surface, and in cases requiring it, may also be directed behind the soft palate, thus cleansing the back part of the nasal cavity also.

Medicated Solutions.—Having cleansed thoroughly the nasal cavity by some one of the various methods, we are now prepared to apply a medicated solution for the purpose of relieving the chronic congestion of the membrane, and inducing a more healthy action. In cases of simple catarrh, the thorough application of the cleansing solution alone is often sufficient to effect in time an entire cure. In very chronic cases, however, and in most severe cases, great good may be done by the application of solutions, astringent in character, which will cause the contraction of the blood-vessels of the swollen membrane, thus relieving the congestion and diminishing the secretion of the mucous and serous glands, and in this way gradually check the discharge. A variety of astringent solutions may be used with good results. A point of paramount importance is that the solution should always be weak. Strong, irritating solutions should never be employed.

The following are among the most useful remedies of this sort which we have found: Sulphate of iron, or copperas, sulphate of zinc, or white vitriol, ferric alum, and tannin. Each of these should be used in the proportion of one dram by weight to the pint of soft water. A solution stronger than this should never be employed, and in some cases it will be necessary to diminish its strength at first by adding an equal quantity of water, which should be gradually lessened until the membrane will tolerate the solu-

tion full strength. The four remedies mentioned will usually accomplish all that can be done by medicated solutions in this class of cases, and our experience in using these remedies in hundreds of cases has led us to be well pleased with their effects. The medicated solution may be applied by any one of the methods above described, but we consider the air atomizer the best of all means of applying them, as it thoroughly distributes the solution over the entire mucous surface. The saturated sponge is perhaps the next best method for applying these solutions. Only a sufficient quantity should be applied to thoroughly cleanse the entire mucous membrane. From half an ounce to an ounce is sufficient to accomplish this. When the atomizer is used, a much less quantity will suffice.

While all the remedies mentioned are efficient, each one may be more especially adapted to some particular case, and hence one after another may be tried if the case proves obstinate, or two or more may be used in alternation.

We have been particularly pleased with the results following the use of ferric alum in a large number of cases, and have usually reserved the iron and zinc solutions for cases which would not yield to the remedy mentioned.

HAY FEVER.

DR. MORELL MACKENZIE writes as follows respecting the management of this very eccentric and annoying malady:—

“The treatment of hay-fever is by no means satisfactory, and in no disease is the old adage, that ‘prevention is better than cure,’ more truly applicable than in the case of this complaint. If the poison be continually introduced into the system, the antidote, if one exist, can have but little chance of effecting a cure. The first measure, therefore, must be to remove the patient from a district in which there is much flowering grass. A sea-voyage is probably the most perfectly satisfactory step that can be taken. Patients who are unable to go to the sea should endeavor to reside on the coast, where they will generally be free from their troublesome complaint, except when the land-breezes blow. Dwellers in towns should avoid the country, and those who reside in the country should make a temporary stay in the center of a large town. It often happens, however, that such a change of abode is not practicable; and, under such circumstances, if the complaint be very severe, the patient should, if possible, remain indoors during the whole of the hay

season. Many persons, of course, cannot keep in the house during the month or six weeks of the hay-fever period; and those who can are apt to find such detention not only irksome, but very injurious to the general health. If, therefore, a patient be obliged to go out of doors, he should plug his nostrils with cotton-wool or wadding, and should defend his eyes by wearing spectacles with large frames, accurately adapted to the circumference of the orbits. Plugging the lachrymal ducts with small glass rods has also been recommended, and Thorowgood speaks favorably of a little apparatus containing a few drops of camphorated or carbolized solution, which can be comfortably worn in the nostrils. Instead of *plugging* the nose, it has been advised to close it by compression with a little metal clip. As rapid motion in the open air almost always aggravates the complaint, it may be advantageous to wear a veil over the face while driving. One made of 'three ply' of fine silk gauze has been found very useful. It is recommended that it should be made in the form of a bag open at both ends, one end fitting round the hat, while the other has attached to it a heavy wire ring about ten inches in diameter, which lies on the shoulders and keeps the veil off the face. Those who do not mind being occasionally mistaken for the 'veiled prophet of Khorassan' will, no doubt, adopt this plan. Protected in this way, many people predisposed to hay-fever escape altogether, while others contract the affection in a very mild form."

The unhappy victim of hay-fever who has to undergo the operation of having his nose stopped with cotton-wool, his lachrymal ducts plugged with glass rods, and his eyes encased in goggles, would undoubtedly be glad to wear a veil to hide his face from the curious gaze of the cruel public, and is certainly to be pitied; nevertheless, we have seen decided advantage gained by following the suggestion to plug the nostrils with cotton and protect the eyes when riding or walking in the open air.

We would add another measure of prevention not mentioned by the distinguished writer from whom we have quoted. Our observation has been that persons who suffer the most severely with hay-fever are invariably those who are subject to catarrh during other seasons of the year, usually in a chronic form, as a result of which the mucous membrane of the nose is in a swollen and thickened condition, obstructing the nasal passages to a greater or less degree. A slight additional irritation, such as the cause of hay-fever produces, is sufficient to produce almost

complete obstruction of the nose; and through reflex action, spasm of the air tubes of the lungs is produced, making breathing difficult, and often occasioning most aggravating distress.

—A St. Louis doctor thinks winter cholera and many other diseases prevalent in cities are due to the use of milk, beef, or butter, from animals affected by milk sickness.

Question Box.

All questions which are sent for answer in this department must be accompanied by the name and post-office address of the person sending the question. Otherwise they will receive no attention. It is necessary to insist upon the observance of this rule, as questions are sometimes received which should be answered, but cannot properly be noticed in these columns.

Carbolic Acid—Milk—Sulphur and Cream of Tartar.—A correspondent inquires as follows:

1. Should carbolic acid ever, under any circumstances, be taken into the stomach?
2. Is milk injurious to persons suffering with torpid liver?
3. Are sulphur and cream of tartar good to cleanse the blood?

Ans. Carbolic acid is occasionally useful in cases in which the food decomposes in the stomach before it can digest. It also seems to have a beneficial effect in some cases of persistent vomiting. We have rarely found it necessary to use it, however, as other more agreeable remedies will accomplish the same results.

2. Milk has been charged with being productive of torpidity of the liver, and not adapted to use by persons suffering with inactivity of the liver; but after observing the matter carefully for several years, we are strongly inclined to believe that the opinion referred to is erroneous. A person might use so much milk as to over-stock the system with nitrogenous matter, and thus produce an inactive state of the liver; but as ordinarily used, we should not expect any such results to be produced.

3. Sulphur and cream of tartar produce a laxative effect upon the bowels, but have no effect upon the system except through the stimulation of the mucous membrane of the intestines. It is not reasonable to suppose that the blood can be cleansed by putting something into it. The way to cleanse the blood is to get something out of it, which is better done by increasing the activity of the skin, liver, lungs, and other emunctory organs, than by dosing with drugs of any sort. Hot water drinking to the extent of three to six pints a day, is one of the most effective measures to facilitate the emunctory process.

Varicose Veins.—A Chicago correspondent inquires if there is any remedy for an enlargement of the veins of the calves of the legs, and whether elastic stockings are injurious.

Ans. The only safe remedy for varicose veins

in the extremities is the employment of some form of elastic support. In some respects the rubber bandage is superior to the elastic stocking. It costs less, will last longer, and can always be adapted to the legs; while a stocking soon becomes more or less loose, thus failing to offer sufficient support. However, both are very satisfactory, and one or the other should be used whenever the varicose condition is such as to produce serious inconvenience.

Sore and Weak Eyes.—A Western correspondent writes: "Please state in next number of GOOD HEALTH a cure for sore and weak eyes, and oblige."

Ans. There is no panacea for sore or weak eyes. They cannot be cured by recipes. The eye is a very sensitive and delicate organ, and ought not to be meddled with by persons knowing nothing about it. The best course is to consult a good oculist. If there is none in your vicinity, you may try the following: Bathe the eyes morning and night for five or ten minutes with hot water. Afterwards introduce into the eye one or two drops of a solution of sulphate of zinc, two grains to the ounce.

Poison in Food.—A correspondent says: "When, in conversation with friends, I speak of certain articles in common use which are unwholesome, I am told that there is poison in everything, and that food would not digest without it contained a certain amount of poison. Is this true in regard to the cereals, wheat, oats, rye, corn, etc.?"

Ans. It is undoubtedly true that most foods contain more or less useless material. It is hardly fair, however, to call these substances poisons, as they are not poisons until separated from the food combinations, or concentrated. These substances do not add to the digestibility of food. With reference to the grains, it is hardly possible that they contain any appreciable amount of any substance which, even if concentrated to the highest degree, would act upon the system as a poison.

Dyspepsia—Lemons.—A subscriber asks: 1. What foods would you advise for a dyspeptic who is quite fleshy, and troubled with fermentation after eating, and severe headaches? 2. Are lemons considered beneficial for all persons? If not, what temperaments are most benefited by the use of them?

Ans. 1. Abstain from the use of vegetables. Let the diet consist chiefly of grains, sub-acid fruits, cooked without sugar, and milk. Better not take fruit and milk at the same meal. The food should be thoroughly masticated, and should be hot. It is better to take dry food which requires much chewing. One hour before each meal the patient should take two or three glasses of hot water, sipping it as hot as can be borne without inconvenience. The same quantity should be taken at night just before going to

bed. If the measures suggested do not relieve the difficulty, the diet may be confined for a few days to raw beefsteak, or scraped beef and dry bread, taking the hot water as directed.

2. Lemons taken in moderation are healthful for most persons. We do not know of any particular temperaments which contra-indicate their use.

Kidney Disease.—A new subscriber wishes directions for treating diseases of the kidneys.

Ans. The space in these columns is too limited for the consideration of such a subject, but a few suggestions will perhaps be valuable. The most important thing we can say is that in nine cases out of ten the kidneys are not diseased when supposed to be at fault. A sediment in the urine rarely indicates any disease. A cloudy, stringy sediment is usually mucus, and indicates disease of the bladder. A pinkish or brick-dust sediment indicates a torpid liver. For both of these cases the practice of hot-water drinking is to be recommended. From six to ten glasses may be taken at intervals through the day. Pain in the back is another symptom usually erroneously attributed to the kidneys. It is usually lumbago, and will be relieved by fomentations applied over the affected part.

How to Prevent Colds.—The question is asked: "How may the head be hardened so it will not take cold easily?"


Ans. We suppose the questioner desires to ask how the nasal cavities may be treated so as to prevent a cold in the head. The best method of preventing colds is to harden the skin rather than the nose, as a cold is generally contracted through disturbance of the circulation. The skin may be best hardened by sponging with cold water, either plain or saline water; a tablespoonful of salt to the quart of water, may be employed.

Catarrh and Scrofula.—A patron asks: "Are catarrh and scrofula in any way related, or have they similar symptoms?"

Ans. Nasal catarrh is frequently a symptom of scrofula in children. The thickened upper lip, which is often seen in scrofulous children, is generally due to frequent irritation from the ichorous discharges from the nose. It is generally the result of frequent colds, and scrofula scarcely ever appears in catarrh, without some grossly exciting cause.

Sleeping after Dinner.—A correspondent asks: "Is it best to lie down after dinner?"

Ans. Numerous physiological experiments have shown that the digestive process is carried on much more slowly during sleep than during waking hours; hence sleeping after eating is decidedly objectionable. For a person in health, gentle exercise after eating is better, as it favors the digestive processes; but for persons who are nervous and weak, rest for half an hour or an hour after eating is often not only beneficial but indispensable.



THE COOKING SCHOOL.

Conducted by MRS. E. F. KELLOGG.

A DINNER OF EIGHT COURSES.

SIMPLE PUDDINGS.

Custom has so long since established the usage of finishing the meal with a dessert of some kind, that our "dinner" would be quite incomplete, in the eyes of culinary critics, did we omit this item from our list; and so we shall devote the next two or three courses to the various articles which are usually deemed appropriate desserts, not because we consider the dessert itself of paramount importance, but because we hope the hints and suggestions which our space will permit us to give may be of some assistance to the housewife in preparing wholesome, inexpensive dishes in lieu of the indigestible viands almost universally used for this purpose.

We see no objection to the use of a dessert if the articles offered are of a simple, wholesome character, and are presented before an abundance has already been taken. As generally served, the dessert is but a "snare and delusion" to the digestive organs; compounded of substances "rich," not in food elements, but in fats, sweets, and spices; and presented in addition to the meal when enough has already been eaten, they become a great temptation to overeat, while the elements of which they are largely composed serve to clog the liver, and work general mischief to the system. At the same time their preparation requires an outlay of time and strength better, by far, expended in some other manner, and quite unnecessary in the preparation of a good, healthful, nutritious dietary.

The various nuts and delicious fruits with which nature has so abundantly supplied us, furnish a most desirable dessert, with no expenditure of time or strength in their preparation, and at no greater cost than their more harmful substitutes; but if other forms of dessert are desired, they can be prepared in a pleasing and appetizing manner from wholesome material. We present below a few recipes for simple puddings, inexpensive and easily made.

Strawberry and Rice Dessert.—Soak a cupful of well-picked rice in one and a half cups of warm water for one hour, then add to it one and a half cups of new milk; place all in an earthen dish, and set in a covered steamer over a kettle of boiling water. Steam for one hour, or until dry and tender, stirring occasionally with a silver fork for the first fifteen minutes. When the rice is done, place in the bottom of some cups previously moistened with cold water, five nice, hulled strawberries in the shape of a star. Fill the interstices between the berries carefully with the boiled rice, and then cover the berries with a layer of rice. Add next a layer

of strawberries and then another layer of rice. Press it firmly into the cup and set away to cool. When well molded, turn into saucers, and pile whipped cream around each; sprinkle with sugar and serve. A little care in forming the stars and filling the molds makes this a delicious and pretty dessert. If preferred, the dessert may be prepared in one large mold, and a larger number of strawberries arranged in the form of a cross in the bottom of the dish, covering with rice, and adding as many alternate layers of strawberries and rice as desired.

Steamed Fig Pudding.—Moisten two cupfuls of finely grated Graham bread crumbs with half a cup of thin, sweet cream. Mix into it a heaping cupful of finely-chopped fresh figs, and a quarter of a cup of sugar. Add lastly a cup of sweet milk. Turn all into a pudding dish, and steam about two and a half hours over a kettle of boiling water. Serve as soon as done with a little cream for dressing. Care must be taken that the process of steaming is not interrupted in any way. Do not allow the fire to slacken, and on no account replenish the water with anything but that of boiling temperature. Do not open the steamer, and let the cold air on to the top of the pudding, if you wish it to be a success.

May Pudding.—One pint of well-steamed pearl barley, two cups of finely chopped best figs, one-half cup of sugar, one-half cup of rice, sweet cream, and one and one-half cups of fresh milk. Mix all together thoroughly, turn into an earthen pudding dish, place the dish in the oven in a pan half full of boiling water, and bake slowly till the milk is nearly absorbed. The pudding should be stirred once or twice during the baking so that the figs will be distributed equally through the pudding, instead of rising to the top. The pudding, when done, should be moist and homogeneous. It requires no dressing.

Rice and Fig Dessert.—Steam a cupful of best rice in two cups of milk and one of water until perfectly tender and dry. Have ready a cup of chopped figs, which have been stewed in a pint of water, to which was added one table-spoonful of sugar, until they are all one homogeneous mass. Arrange the rice on a hot dish, place the stewed figs in the center, and serve hot with cream or without dressing.

Sago Pudding.—Soak a cupful of sago for twenty minutes in a cup of cold water; then turn over it a quart and a cupful of boiling water, and add a cup of sugar and one-half cup of raisins. Cook till the sago is perfectly transpar-

ent, flavor with vanilla, and set away to cool. Serve with whipped cream.

Farina Blanc Mange.—Heat a quart of milk, reserving one-half cupful, to boiling. When boiling, add a little salt, two tablespoonfuls of sugar, and four heaping tablespoonfuls of farina, previously moistened with the reserved half cup of milk. Let all boil rapidly for a few minutes, till the farina has well set, then place in the double boiler, or a dish set in a pan of boiling water, to cook an hour longer. Turn into cups previously wet with cold water to cool. Serve with sugar and cream, flavored with vanilla or a little grated lemon rind. Much variety may be given this simple dessert by serving it with a dressing of fruit juices. Red raspberry, strawberry, grape, currant, cranberry, cherry, and plum are all good. If desired, the milk with which the blanc mange is prepared may be first flavored with cocoanut, thus making another variety.

Apple Tart.—Pare and slice some quick cooking, tart apples, and place them in the bottom of a pudding dish with a tablespoonful of water. Cover with a crust prepared in the following manner: Into a cup of thin cream stir a gill of yeast and two cups of flour; let this become very light, and then add sufficient flour to mix soft. Knead for fifteen or twenty minutes very thoroughly, roll evenly, and cover the apples; put all in a warm place until the crust has become very light, then bake. If the apples do not bake easily, they may be partially cooked before putting on the crust. Dish so that the fruit will be uppermost, and serve with cream and sugar.

Gooseberry Tart.—Fill a pudding dish with well prepared green gooseberries, adding a tablespoonful or two of water. Cover with a crust as for apple tart, and when light, bake in a moderately quick oven. Cut the crust into the required number of pieces, and dish with gooseberries heaped on top. Serve with sugar and cream.

Cherry Tart.—Prepare the same as for apple tart, with seeded cherries, only omitting the water, as the cherries will be sufficiently juicy of themselves. If the fruit is very juicy, sprinkle a tablespoonful of flour over it before putting on the crust. Plum and peach tart may be made in the same manner, and are both very nice.

Prune and Tapioca Pudding.—Soak one-half cup of tapioca over night. In the morning boil till transparent in just sufficient water to cook it and prevent burning. Stew two cups of well-washed prunes in a quart of water till perfectly tender, then add the juice of a good lemon, and two tablespoonfuls of sugar, and boil till the sirup, of which there should remain but a spoonful or two, becomes thick and rich. Turn the prunes into a pudding dish, and cover with the cooked tapioca, with which should be mixed a little grated lemon rind. Bake lightly in the oven. Serve without dressing, or with sugar and cream.

Stewed Fruit Pudding.—Canned fruit, whortleberries, strawberries, plums, cherries, or raspberries are best for this pudding. Sweeten the fruit to taste, and heat to boiling. Have some pieces of whole-wheat or graham bread cut in slices an inch thick, and wide and long enough to fit around in the bottom of a pudding dish, in the form of spokes to a wheel with an open space between each and in the center. Fill up the interstices with the hot fruit, using just as little juice as possible. Cover this with another layer of slices of bread cut in the same manner, this time placing the strips of bread over the fruit in the first layer, and leaving the spaces for fruit over the first layer of bread. Fill the interstices with fruit as before. Fill the dish with these layers of fruit and bread, and when full, turn the hot juice over all. Put a plate or tin with a weight on it on the top to press it firm. Dip off any juice that may be pressed out. Set the pudding away in the refrigerator to cool, and press until perfectly cold, when it will turn out perfect, and can be cut in slices and served with cream.

Sago Fruit Pudding.—Soak a small cupful of sago an hour in just enough water to cover it. Drain off any water that may not be absorbed, mix two-thirds of a cup of sugar with the sago, and stir all into a quart of boiling water. Let it boil until the sago is perfectly transparent, and then turn into it a pint of nicely-hulled strawberries. Pour into molds to cool, or serve warm with cream, as preferred. Tapioca can be used instead of sago, but needs longer soaking. Raspberries, seeded cherries, and currants can be used in place of strawberries.

Fruit Corn-Starch Pudding.—Heat a quart of strawberry, raspberry, or currant juice sweetened to the taste, to boiling. If the fresh juice of berries is used, it may be diluted with one cup of water to each pint and a half of juice, if a sufficient quantity of pure juice cannot be afforded. Stir into it four tablespoonfuls of corn-starch well braided with a little of the juice reserved for this purpose. Boil until the starch is well cooked, stirring constantly. Turn into molds previously wet with cold water, and cool. This makes a very pretty and palatable dessert.

Picnic Pudding.—Thicken a pint of strawberry or raspberry juice, sweetened to the taste, with two tablespoonfuls of corn-starch, as for fruit pudding. Turn into the bottom of cups previously wet with cold water or a large mold as preferred. Then heat a pint of milk flavored with cocoanut, to which a tablespoonful of sugar has been added, and salt if desired, to boiling. Stir in two tablespoonfuls of corn-starch rubbed smooth in a little milk, and cook thoroughly. When done, cool a little, and turn into the molds on the top of the pink portion, which should be sufficiently cool so that it will not mix. A third layer may be added by cooking two tablespoonfuls of corn-starch, and one of sugar rubbed smooth in a little milk, in a pint of boiling milk, and stirring in just as it is taken from the stove the well-beaten yolks of two eggs.

Banana Dessert.—Dissolve a half-box of gelatine in a half-cup of warm water. Heat three cups of rich milk to boiling, and add to it one cup of sugar and the well-dissolved gelatine; boil all together ten or twelve minutes. Let it partly cool, and mix in three or four bananas sliced thin or chopped fine. Turn all into a mold previously wet with cold water, and leave till hardened, which may require several hours unless the mold be placed on ice. When well molded, turn into a glass dish, and cover with whipped cream flavored with vanilla or lemon, and serve.

Cream Rice Pudding.—One cupful of best rice carefully looked over, one cup of sugar, and eight cups of new milk, with a little grated lemon rind for flavor. Put all in an earthen pudding dish, and place in the top of the range. Heat until the milk is boiling hot, stirring frequently, so that the rice shall not adhere to the bottom of the dish; then place in the oven, and bake till the rice is tender only, which can be ascertained by dipping a spoon into one side and taking out a few grains. Do not stir after placing in the oven. This pudding is very nice made with one-half rice and one-half tapioca which has been soaked over night, instead of all rice. Cracked wheat steamed and used in the proportion of two cups of wheat to two and a half of milk, and one-half cup of sugar, also makes a delicious and wholesome pudding. The milk used may be first flavored with coconut, according to the recipe given in the May number, if desired.

Literary Notices.

THE PACIFIC STATES WATCHMAN, a monthly home journal published in the interest of the Ancient Order of United Workmen, contains many interesting articles each month. It has a fireside department, a children's corner, and a household department, besides the portion devoted to the record of doings and sayings of the Order. Published in San Francisco, Cal. Subscription price, \$2.00 per year.

THE PRESENT TRUTH is the title of a new paper published monthly at Great Grimsby, Eng., in the interest of the S. D. A. International Tract and Missionary Society. Its object is the exposition of all the truths of Scripture, especially the authority, perpetuity, and sacredness of the ten commandments, and the application of such special truths as are taught by the prophecies. Its appearance is neat, and its contents highly interesting and instructive.

Terms 2s. 6d. per year; 72 Heneage St., Great Grimsby, Eng.

SOME suggestions for the improvement of the existing jury system, presented by Judge Robert

C. Pitman in the NORTH AMERICAN REVIEW for July, under the title of "Juries and Jurymen," should, in view of recent notorious miscarriages of justice, receive the serious consideration of every thoughtful citizen. "American Economics" by Prof. Van Buren Denslow, is a lucid and forcible exposition of the grounds upon which the protection theory of national economy is based. Judge Noah Davis writes of "Marriage and Divorce;" Dr. P. Bender, whose subject is "The Annexation of Canada," sets forth the advantages likely to accrue to the United States from the absorption of the Canadian provinces; Prof. D. McG. Means, in an argument against "Government Telegraphy," subjects the management of the Post-Office to a most searching criticism; Charles T. Congdon writes of "Private Vengeance;" and finally there is a symposium on the "Future of the Negro," by Senator Z. B. Vance, Frederick Douglass, Joel Chandler Harris, Senator John T. Morgan, Prof. Richard T. Greener, Gen. S. C. Armstrong, Oliver Johnson, and others.

Herbert Spencer gives his attention, in the leading article in THE POPULAR SCIENCE MONTHLY for July, to "The Great Political Superstition" of the divine right of Parliaments. The Rev. George G. Lyon presents an interesting view of "The New Theology," as a development from the old, corresponding with the growth in human powers of comprehension, not contradictory but harmonious with it, and "reformatory rather than revolutionary in its teachings and tendencies." Professor Woodward, of Washington University, shows what are the "Fruits of Manual Training" as given in that institution, as observed in the better intellectual and moral development and practical fitness of the pupils. M. M. Guyau answers the question, "Are Science and Art Antagonistic?" in the negative, and shows that science is helpful to every branch of art. A most satisfactory account of "The Volcanic Eruption of Krakatau" and its effects, illustrated with maps, is given from the "Proceedings" of the Royal Geographical Society. Perhaps the most important paper in the number is M. Pasteur's account, given before the French Academy of Sciences, of his discovery of "The Prevention of Hydrophobia" by inoculation. Mr. D. P. Penhallow, of McGill University, contributes a valuable article on "Diseases of Plants." The portrait and sketch are of the eminent old Arabian philosopher, Averroës, the portrait being a copy of the picture in the Vatican ascribed to Raphael. Dr. S. A. Fisk appraises the merits of Colorado as a residence for invalids. The editor at his "Table" discusses "The Survival of Political Superstitions," and President Eliot's address at Johns Hopkins University, on "What is a Liberal Education?"

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Publisher's Page.

☞ Battle Creek has won the credit of being one of the healthiest cities on the continent. The death rate last year was only seven per thousand,—a record which has rarely been excelled elsewhere. The present year has been thus far a pleasant one. There have been but few warm days, and an almost constant breeze.

☞ The work upon the new building at the Sanitarium is progressing with very great rapidity. At the time of this writing, the brick is being laid for the fourth story. The finishing coat of plaster is being put on the gymnasium, which will be occupied in a few days as a dining-room, as the old dining-room is already too small for the accommodation of the present number of patients, though the summer influx has not yet arrived.

☞ The Woman's Christian Temperance Union is doing a grand work for hygiene through their State and local organizations, in all parts of the United States. A large share of the Unions devote one of the four weekly sessions each month to the subject of hygiene in its various phases. The demand for information on the subject of health in every part of the country was never so great as at the present time. Temperance Normals are called for all over this country. A hundred well qualified lecturers on health topics would find a field of great usefulness, if on hand to embrace the opportunity. We do not know of any better opening for young men and women who wish to become useful to their fellow-men, than the hygienic lecture field. Of course all are not qualified for this work, but many who are fitting themselves for teaching and other professions might, by pursuing the proper course of training, prepare themselves for great usefulness in this work. We should be glad to correspond with those who feel any inclination in this direction.

☞ We occasionally receive letters from parties on the Pacific Coast, as well as other sections of the country, near and remote, calling for circulars of the Sanitarium at this place, and making inquiries looking toward a visit to this place for the purpose of obtaining medical treatment. We are glad to be able to refer correspondents in the far West to so excellent a home for invalids as may be found at the Rural Health Retreat, St. Helena, Cal., which they can visit at much less expense than to come here. A correspondent of the *Yolo Democrat* writes as follows of the St. Helena Health Retreat:—

"We are enjoying the lovely weather and scenery here at this mountain Retreat. We came here for rest, but there so many beautiful flowers, so many canyons and large rocks, with evergreen trees of various kinds for us to admire and enjoy, that we tire ourselves about as badly as if we were at home keeping house. The location is lovely, the house convenient and pleasant, with all kinds of baths that persons are apt to desire. An accomplished lady physician, who understands her business thoroughly, we think, from personal observation, treats the lady patients. Board and rooms are as reasonable as can be had at other resorts, and it is so quiet here,—just the place

for those who require rest and treatment. Notices are put up around the building: "No profanity allowed," "No smoking allowed near the house or barn," so when a gentleman desires to enjoy the fumes of a cigar, he takes the object of his affection, and goes for a walk, and the aroma is wafted by the breeze to goodness knows where. Thank the good Lord there are some places in this wide world where we are not stifled with tobacco smoke, but can inhale the pure, life-giving element without its being contaminated by the fumes of the detestable cigar. There are some half dozen nice buildings in course of erection, and some that are finished and occupied, which give the hills here a business-like appearance. The pure, soft water of the spring rippled down in abundant quantities, supplying several families."

☞ At the present time there are a hundred or more canvassers in the field presenting **GOOD HEALTH**. Something like forty canvassers, members of the canvassing class which has been held in this place in connection with the College, recently started out. Each one of these persons is a health missionary, sowing the seeds of reform wherever he goes, and the good which may be accomplished by each one of them is scarcely to be estimated.

The change produced in many families by the introduction of such a journal as **GOOD HEALTH**, is sometimes so great as to be almost beyond belief. Some little time ago we received a letter from a gentleman who drew a picture of what his family was ten years ago and what it is now, after having **GOOD HEALTH** as a regular visitor for three or four years. Before, some one was sick in the house almost constantly, and scarcely a week passed without a visit from the doctor, sure to be followed by the doctor's bill. The mother was weak, nervous, and irritable; the father was dyspeptic, dissatisfied, and cross; the children were complaining and fretful, and half-sick all the time,—on the whole, the family was unhappy and miserable. When the table was spread, fried ham and eggs, sausage, rich cakes and pies, and various indigestible and unwholesome viands were conspicuous. Everybody complained of biliousness, no appetite, bad taste in the mouth, and headache. The little folks had thin faces, dull eyes, and unhappy countenances. The father smoked a pipe, chewed a quid, and drank lager beer occasionally. The mother took strong tea and coffee to keep off the sick headache, which inevitably came at least once a week, and sometimes oftener. The whole family were living in total ignorance of the laws of health, and, in consequence, were both physically and mentally wretched and miserable. Indeed, as the father said, they were in such a condition that they could not enjoy religion, though members of the church.

A canvasser brought **GOOD HEALTH** to their door, and the subjects considered were so novel that their interest was enlisted. They subscribed, and adopted its teachings, one by one, and now see the contrast: No more sick headaches, no more scolding, no more children complaining with the stomach ache, no more doctors' bills, no more money expended for drink and tobacco; but everybody happy, everybody contented, a fine farm paid for, business prosperous.

Look on this picture and then on the other. If a journal which costs but one dollar a year will work so great a revolution in a family, is it not worth while to take a little pains to introduce it? In hundreds of families, similar revolutions have been the result.