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### THE HUMAN FACE IN HEALTH AND DISEASE.

[OUR readers will be interested in the following abstract of an article which appeared some months since in the *New York Medical Journal*, since the subject

to spend weary nights in watching the sick, can often render a prognosis which seems little short of inspiration when her utter ignorance of all medical knowledge is considered.

Despite the fact that some of our best authors have denounced the attempts of



FIG. 1.—The Transverse Ridge.

treated is one which rarely receives attention at the present day, though really a very important and interesting one.—Ed.]

It is not infrequently the experience of the most erudite of the profession to be amazed at the gift which is possessed by some less scholarly brother, of making a diagnosis, which seldom errs, without the aid of the thermometer or the stethoscope; and many an old nurse, long accustomed

De Salle, Jadelot, and Seibert to establish certain facial lines and wrinkles as of positive value in diagnosis, and have pronounced all such statements as a mere fantasy, still no one of large experience can deny that the face may at times afford most positive and valuable information.

The physiognomy of the sick presents innumerable shades of expression. It may

assume the various conditions expressive of sadness, dejection, attentiveness, indifference, uneasiness, or terror; it may, at times, be smiling; occasionally menacing or wandering; and may sometimes show a series of changes in rapid succession.

These various conditions of the countenance may not only be the direct result of the influence of the ever-varying passions upon the muscles of the face, as is the

the motor nerves supplying the affected muscles. It is important, in using these lines and wrinkles as guides in diagnosis, that the discrimination be made between those lines which are natural to the face of the sufferer and those which are developed as a result of the disease. For the reason that the face of the adult is always more or less marked by lines, it must be evident that these lines are a more reliable



FIG. 2.—The Oculo-frontal Ruge.

case in health, but they may also be classed as morbid phenomena, each of which possesses some special significance. Chomel lays great stress upon these variations of countenance, and endeavors to point out the special diagnostic value of each.

**FACIAL LINES AND WRINKLES.**—The theories of De Salle, Jadelot, and Seibert as to the diagnostic value of facial lines and wrinkles, have had their share of support from time to time; while they have also been considered by some authors as speculative and destitute of any value. The existence of these marks may be attributable to one of two conditions, viz., a disappearance of the fat from the subcutaneous tissues of the face, or the abnormal contraction of certain facial muscles, dependent upon some apparent irritation of

guide in the infant than in later life, if their diagnostic value remains unquestioned. Without entering into a discussion as to the merits of the question, I give the theories advanced for whatever interest and value they may possess to the reader. The wrinkles of the face may be classified into six groups, as follows:—

(1.) Those which are situated upon the forehead, and are formed by the action of the muscles of the forehead. They are thought to be expressive of an extreme amount of pain, arising from causes outside of the cavities of the body.

(2.) Those which extend vertically from the forehead to the root of the nose, and are formed by the corrugator supercillii muscles. They are thought to express distress, anxiety, anguish, and ex-

*cessive pain from some internal cause.* It is said that they furthermore indicate an imperfect or false crisis; and that, in attacks of acute diseases, an impending efflorescence, and sometimes a fatal termination, may be indicated by their occurrence. In those types of headache where the pain is very excessive, these rugæ may exist simultaneously with the one previously described. It is stated that when the for-

muscle of the mouth. This line is said to be strongly marked in phthisis and in atrophy. Its upper half is thought to be a reliable indication of *intestinal disease*, if extensively developed and prominent; the lower half is supposed to indicate the existence of some *disease affecting the stomach*. It is claimed by Peiper that, when this line appears conjointly with the line of Jadelot, it may be regarded as a positive



FIG. 3.—The Line of Jadelot.

mer rugæ meet the latter abruptly, during the course of an acute disease, some serious lesion of the brain, or its coverings, is developing.

(3.) *The line of Jadelot.*—This line extends from the inner angle of the eye downward and outward, passing across the face below the cheek bone. It is said to indicate, in children, a *cerebral or nervous affection*; and in adult life, some disease of the genital organs, masturbation, or venereal excess.

(4.) *The line of De Salle.*—This line extends from the upper border of the nose downward, in a direction more or less curved, to the outer edge of the orbicular

indication of worms in children, if a peculiar fixed condition of the eye exists and a pallor of the face is present.

(5.) *The line of the Lips.*—This line extends downward from the angle of the mouth till it becomes lost in the lower portion of the face. It is usually developed in connection with those *diseases which render breathing laborious or painful*, and is more common in children than in the adult, as a sign of diagnostic value.

(6.) *The Linea Collateralis Nasi.*—This line extends from the nose downward to the chin, in a semi-circular direction. It lies outside of the preceding, and is thought to be a reliable guide to diseases of the *chest and abdomen*.

**COLOR OF THE FACE.**—The color of the face is subject to variations which, to the eye of the medical adviser, afford unquestioned aid in diagnosis. *Flushing* of the face, as evidenced by a diffused redness which is of a transient character, is very common in women suffering from irregularity of the menstrual periods and during the menopause. In plethora, especially after exertion or excitement, an unnatural redness of the face may occur, associated

effects, the pallor of the face assumes a peculiar *leaden color*. A *greenish tint* is present in profound attacks of anæmia and during chlorosis, giving to the face an appearance similar to that of imperfectly bleached wax.

Malaria and cancer are often manifested by a *light straw color* of the face, although it may occasionally result in the deep yellow of jaundice. In the early stages of jaundice, the sclerotic coat of the eye



FIG. 4.—The Line of De Salle.

with symptoms indicative of cerebral hyperæmia. *Red patches* occur on the cheek during an attack of croupous pneumonia. In wasting affections of a chronic character, especially of the lungs, such as phthisis, cancer, etc., a circumscribed redness over the malar bones, known as the "hectic flush," is usually present. It may occasionally affect only one cheek, where only one lung is diseased. *Pallor* of the face is the rule during convalescence from any severe disease, and in patients long deprived of sunlight. A *waxy pallor* exists in chronic Bright's disease, which renders the skin almost transparent. In the chill of fevers and malarial attacks, a *dusky paleness* is usually perceived; while in cases of hemorrhage, where the loss of blood has been sufficient to produce constitutional

and the corners of the mouth first show the *yellow color*, although the discoloration soon tends to become diffused over the entire face. A *blue tinge* exists in those cases where the venous return to the right heart is obstructed, or where, from any cause, the oxygenation of the blood is imperfectly performed. It occurs therefore in cyanosis, asphyxia, the fevers, certain diseases of the pulmonary organs, which interfere with the circulation, and in diseases of the heart which render its action weak or imperfect. In cases of poisoning from nitrate of silver, the skin assumes a still deeper blue tint than in those cases above mentioned, and the staining is permanent. In Addison's disease of the supra-renal capsules, a *dark-brown color* of the skin results, which may be either uniform

or in isolated spots, and which may, in severe cases, almost rival the pigmentation of the negro. The redness of erysipelas is usually accompanied by an oedema which renders the face tense and shining, and which often causes a markedly altered expression of the countenance.

**THE NOSE.**—The nostrils are of some practical interest from a medical point of view. They *dilate* forcibly and rapidly in difficult respiration, when produced by

### SIMPLE THERAPEUTIC MEASURES.\*

BY J. H. KELLOGG, M. D.

I HAVE chosen for my subject "Simple Therapeutic Measures," in the hope that I may be able to present a few fragments of knowledge which might have escaped notice by the several essayists who have recently favored your association.

By *simple* measures, I mean those of a non-medicinal character; and perhaps I



FIG. 5.—The Linea Collateralis Nasi.

disease; and *itching* of the nostril is regarded by many authors as a valuable diagnostic sign of intestinal worms. The nose seldom points directly forward, being, as a rule, slightly inclined toward the right side. This fact is explained by Beclard as the result of the habit of wiping the nose with the right hand, since, in left-handed people, the opposite deflection exists.

*Marked elevation of the nostril* is regarded by some authorities as an indicator of pain within the cavity of the thorax.

(TO BE CONTINUED.)

should preface my paper by the remark that I do not offer this subject because I believe in this class of remedies alone, but because I believe them to be of very great importance and really of greater value, on the whole, than those of a more complex character; at least, their value is far greater than is generally supposed.

We have termed simple therapeutic means, those which include the various ap-

\*A lecture delivered by request before the Ann Arbor Medical and Surgical Society, in the amphitheater of the Medical Department of Michigan State University, February 28, 1881.

plications of *water, air, light, heat, electricity, exercise, food and mental influences*. These agencies are sometimes termed *hygienic*, because they are not only useful in disease in aiding in the restoration of health, but are also essential to the maintenance of life and health at all times. Of all remedies which may be employed in the treatment of disease, we consider these the most important,—

(1) Because a great share of the maladies to which human beings are subject, arise from disturbances in the relations of these agents to the human system, which only need to be regulated to effect a cure of the disease.

(2) Because they sustain to the vital organs friendly, rather than hostile relations, and harmonize with its processes in a most admirable manner.

(3) In consequence of these facts, the remedies comprised in this class, are those which are the least expensive to the system, since they will accomplish the results desired with the least expenditure of vitality.

Recognizing this fact, the attempt has been made in the last quarter of a century, to found an exclusive system of medicine, known as the *hygienic* or *hygieo-therapeutic* system. The attempt has been a futile one, however, the inadequacy of the system being thoroughly exposed by the death of the would-be founder, from malarial fever.

The value of most remedies is usually estimated by the number of "properties" which they possess, and the efficiency and certainty with which their various effects may be obtained. Considered in this light, water may be considered as one of the most useful of the known remedies; indeed, when the great diversity of its uses, and the prompt and efficient character of its effects, together with the kindly manner in which it is received by the system are considered, it is not to be wondered at that it has found not a few enthusiastic advocates, who have believed it to be a universal remedy, a panacea for all human ills. Those who are best acquainted with its properties and its po-

tenency when properly applied, are the most enthusiastic in its praise. The eminent Dr. Fothergill, of England, well known in this country through his admirable papers in American medical journals, would seem to be almost as warm an advocate of its use as the most ardent disciple of Priessnitz. In his "Hand-book of Treatment" he says: "Personally, I believe, that hydropathy, rescued from quackery, and under proper professional guidance and superintendence, will form one of the most universal remedies of the future." The same author again remarks, in the work referred to: "Indeed, in hydropathy we see empirically achieved what a scientific physiology would ere long have indicated as the logical and rational plan of treatment of numerous affections of mature and advanced life, which take their origin in the imperfect elimination of waste, either the products of tissue change, histolysis, or the results of protein compounds, imperfectly assimilated or furnished to the system in excess of its needs."

Percy, an eminent foreign physician, surgeon-in-chief of the armies of the Moselle and Rhine, declared that he would abandon the practice of medicine if water were denied him as a remedial agent, saying, "Water furnishes immense resources as a curative agent."

The remedial or therapeutic properties of water at various temperatures, and applied in various forms, may be stated to be the following: *Refrigerant or antiphlogistic, tonic, sedative, antispasmodic, anodyne, anesthetic, styptic, dissolvent, eliminative, laxative, emetic, derivative and alterative.*

Others might be added, but these are sufficient to represent its several uses. When applied at a temperature less than that of the body, water lessens the production of heat, and also abstracts it by conduction. For this purpose it is unrivaled in the whole range of remedial agencies. No other will so readily, so easily, so certainly, bring down the temperature of a fever, diminish the pulse, and ameliorate all the symptoms depending upon exaggeration of vital activity as this.

Water may be used in such a way as to

increase the rapidity of the circulation and the temperature very quickly and powerfully. The hot bath is a most efficient stimulant in the true sense of the word. It will so excite the circulation as to increase the pulse from seventy to one hundred and fifty, in fifteen minutes. The tonic effects of a short, cool bath are well appreciated by all who have ever enjoyed it.

Remedies which depress vital action are termed sedatives. Cold water is one of the most efficient sedatives. It will lower the temperature, rapidly diminish the pulse, and restrain excessive vital action to almost any degree desired, and without any of the unpleasant after-effects, and few of the immediate dangers which accompany the use of such remedies as prussic acid, tobacco and blood-letting. The cool or tepid bath, will often reduce the pulse twenty or forty beats per minute in a short time, and diminish the temperature accordingly.

No remedy is more certainly successful in hysterical convulsions than water. In infantile convulsions its success is almost unrivaled. In cramp, tetanus, and various forms of spasmodic affections, and even in puerperal convulsions, its utility has been well demonstrated.

The effects of local applications of both warm and cold water in relieving pain, are well known. In many other modes of application, it is also effective in a very high degree in relieving pain and nervous irritability.

The anæsthetic effects of water at a very low temperature in the form of ice, are too well known to need more than mention.

The efficiency of cold water as a ready means of arresting hemorrhage has long been recognized in surgery; within a few years; however, it has been discovered that hot water, when properly applied, has a still more powerful effect, especially in cases of capillary oozing, or bleeding from small vessels. We have, on several occasions, checked, almost instantly, a bleeding which resisted all other means which could be applied.

The power of water to secure the ab-

sorption or dispersion of some forms of morbid growths, particularly glandular enlargements, is now well recognized. By cold, or alternate hot and cold applications, chronic swellings of the joints and other parts, serous accumulations, enlargement of lymphatic glands, of the thyroid gland, and even of the spleen and liver, may be successfully treated.

As water is a perfect solvent for the various excrementitious substances, produced in the body through tissue waste, as well as of all the foreign elements which find entrance into the blood, it is of all substances, the most efficient and powerful eliminative. It has been proven to be thus eminently useful as a *diaphoretic* in increasing the action of the skin; as a *diuretic* in facilitating excretion by the kidneys; and as a most excellent *cholagogue* in increasing the activity of the liver and occasioning a consequent increase in the production of bile. It is also, when properly applied, an excellent *expectorant*, and undoubtedly also increases the action of all the excretory organs of the body.

Used in various ways, water is very effectual in producing movement of the bowels, but never occasions those violent and unpleasant symptoms which accompany and succeed the use of purgatives.

As an emetic, in the great majority of cases no other is needed. Nearly all emetics require water to render them efficient.

For a long time mercury has been considered the champion alterative of the *ateria medica*. It must yield the place to water, however; for water not only accelerates waste, but increases construction in even greater proportion, according to the experiments of Professor Liebig, and other eminent observers. This effect of water results from both its internal and its external use. One of the most important properties of water applications is their powerful derivative effect. Few other applications, internal or external, can equal them in efficiency and certainty of action.

The utility of water as an agent in the treatment of disease, is not a modern discovery, as the pretensions of some aspir-

ants for notoriety have led many to believe. A very cursory glance at the history of various ancient nations, furnishes sufficient evidence that the use of the bath, as a curative agent, was of very remote origin. The works of the oldest medical authors contain numerous references to the bath, recommendations of its use in cases of disease, and testimonials of its good effects when properly applied.

The learned Greek, Hippocrates,—the father of medical literature, and a very acute observer of disease and the effects of various agents upon the body,—highly recommended the use of water in many diseases, describing with great care the proper mode of administering a simple bath. He laid great stress upon the careful and skillful use of the bath, asserting that when improperly applied, it “instead of doing good may rather prove injurious.” His directions for the employment of the bath were very discreet. He very wisely remarks that those patients whose symptoms are such that they would be benefited by bathing, should be bathed even though some of the requisite conveniences may be wanting; while those whose symptoms do not indicate the need of this remedy, should not employ it, though all the necessary appliances are at hand. He made great use of water as a beverage in treating disease.

Celsus and Galen, two noted Latin physicians, extolled the bath as an invaluable remedy almost two thousand years ago. The latter pronounced the bath to be one of the essential features of a perfect cure, which he termed *aphotheraphia*, exercise and friction being the other essentials. If the regular physicians of half a century ago, had followed the practice of Galen as described in his works, they would have refreshed their languishing fever patients with cold water as a beverage, instead of leaving them to be consumed by the pent-up fires which parched their lips, disorganized their blood and finally ended their sufferings with their lives. Celsus was proud to boast of employing the bath more frequently and systematically than others had done before his time.

The North American Indians employ

the bath for many diseases. They have original and peculiar ways of administering both water and vapor baths. The most common bath among them is the vapor, followed by a plunge into a neighboring stream. They generate the steam by pouring water upon hot stones, while they are enclosed in a small, close hut made of mud or skins.

The native Mexicans secure a hot-air bath by confining themselves in a brick sweat-house, which is heated by a furnace outside. These savages seem to have the most implicit confidence in the efficacy of the bath, always employing it when ill, and with excellent success. The Africans also are not unacquainted with the medical uses of the bath. It is stated that on the outbreak of small-pox on a slave-ship many years ago, the negroes begged so piteously when treated in the usual manner, by smothering beneath many thicknesses of blankets and mattresses, to be allowed to follow their own method, that they were at last permitted to do so, when they at once tied ropes about the bodies of the patients and let them down into the sea. This was done several times a day, and all thus treated recovered.

In the latter part of the last century Drs. Jackson and Currie each published reports of cases of fever in which they had found the use of the bath a remedy of remarkable efficacy. Dr. Currie obtained many followers for a time, but no very deep impression was made upon the public mind, though his cases were authentic and very ably reported.

About the end of the first quarter of the present century, a native of Graefenberg, a small town in Austrian Silesia, by the name of Priessnitz, met with an accident by which three of his ribs were broken. He treated himself by the application of cold water, and then tried the same remedy upon others in similar cases. His success encouraged him to make further experiments, and though an ignorant peasant, his natural acuteness enabled him to devise various means for applying water to the body, and to suit the application to various diseases. His increasing success attracted numerous patients, and his fame



became in a few years world-wide. Many of his methods were very rude, and his ignorance of medical science led him into many errors; but he succeeded in restoring to health hundreds of patients, whose maladies had been pronounced incurable.

The interest in the new method became so great that numerous other individuals equally ignorant, and possessing less shrewdness, undertook to imitate the German innovator. Some of them were successful, many were not; all were alike in committing numerous blunders through ignorance of scientific medicine. But public attention was called to the utility of water as a remedial agent so forcibly, that a powerful impression was produced in its favor. From that time until the present, the use of water has been largely in the hands of unscientific empirics, who have advocated it as a specific, and employed it to the exclusion of other remedies in a large measure. This course, together with many other gross errors connected with the practice, has deterred scientific physicians from employing it sufficiently to test its merits, only in a few exceptional cases.

The friends of Priessnitz claimed for him a great discovery, but as we have seen, he discovered nothing which was not known a century before, if not indeed some thousands of years previous. It is doing Priessnitz no injustice to say that he did little or nothing toward establishing principles, but followed chiefly a routine method of practice.

At the present day, the utility of water is a well-recognized fact, and it is now often prescribed in the standard text-books as an excellent remedy for many diseased conditions. Yet, that there is still a want of appreciation of the remedy, is fully attested by the infrequency of its use by the regular profession. This neglect may be due, in part, to a prejudice which the members of the regular profession have acquired, on account of the quackery which has too often been connected with the use of this remedy. Nevertheless, there is no good reason why an efficient remedial agent should be suffered to receive the stigma which attaches properly,

only to those who are responsible for its abuse. Within the last few years there has been a growing interest in hydrotherapy, especially among the leading physicians of France and Germany. In this country also, an interest has been awakened in the subject, although among the non-progressive part of the medical profession, there still remains much of the "old time" prejudice, which has for years prevented this powerful remedial agent from taking its proper place in the front rank of therapeutic agents. From conversations with many physicians, we are convinced, however, that the hesitancy in the use of water at the present time arises far more from a lack of accurate information respecting the details of its therapeutic application, than from any settled prejudice.

Among those who have investigated in a scientific manner the value of water as a therapeutic agent in modern times, may be mentioned the well known names of Brand, Hagenbach, Ziemssen, Winternitz, Immerman, Mosler, Wilson, Fox, Bartels, Liebermeister, Ludwig, Schroeder, Fiedler, Hartenstein, Weber, Greenhow, Thompson, Niemeyer and Ringer, among foreign physicians of eminence; and a still larger list of physicians of the highest standing in this country might be added.

A few years ago, we were present at a meeting of the New York Academy of Medicine, where we had the pleasure of listening to an able paper by Professor Austin Flint, president of the academy, entitled "The Researches of Currie, and Recent Views concerning the use of Cold Water." Professor Flint did not confine his attention to *cold* water, but considered the subject of hydratics in general.

In referring to his own experience in the use of water, Dr. Flint remarked, "The relation of my own experience will of necessity be stated in a few words, as my employment of the remedy has heretofore been much more limited than it will be in the future, if my life is spared." He then related some very interesting cases in which he had employed water as the chief remedy, with most excellent success. He also took occasion to recom-

mend, as one of the best means of applying water in fevers, the wet-sheet pack, as employed in the various hydropathic institutions of the country. He had used the continued cold pack in a number of the worst cases of sun-stroke in Bellevue Hospital with marked success. This remedy is still employed there in this class of cases.

Dr. F. also related a remarkable case of acute inflammation of the kidneys, in which the patient exhibited the characteristic symptoms of poisoning from the retention of urea. After other remedies were tried in vain, the patient's life was saved by the simple administration of water as a beverage, at short intervals. The diuretic effects of water soon washed away the poison and gave immediate relief.

Another case mentioned by Dr. Flint, was one of remittent fever which he had treated with water, administering thirty-five cold packs in the course of a week. The patient died, but the doctor thought that if he had been more thorough in his treatment, giving more packs and longer ones, he would have lived.

We might dwell at length upon the special applications of the various means of employing water, but have not space for such consideration here. Rightly used, water is a potent agent for good, but it is capable of doing harm. When most skillfully used it is not a cure-all, and sensible people have been rightly disgusted with the claims which have been made by certain pretentious persons for its use. One declares that the bath will dissolve out of the body mineral substances which have been taken into it. Another claims to have been able by the application of fomentations to a rheumatic knee, to extract in regular order the various ointments which had been successively applied. Numerous other claims, equally preposterous might be related, if it were necessary. They have all tended to excite a feeling of contempt for a means of treating disease which is really worthy of the highest estimation, and which is now rapidly gaining general recognition, in spite of obstacles placed in its way by fanatical advocates.

(CONCLUDED NEXT NUMBER.)

### HOW TO PREVENT DROWNING.

I WISH to show how drowning might, under ordinary circumstances, be avoided, even in the case of persons otherwise wholly ignorant of what is called the art of swimming. The numerous frightful casualties render every working suggestion of importance, and that which I here offer I venture to think is entirely available.

When one of the inferior animals takes the water, falls or is thrown in, it instantly begins to walk as it does when out of water. But, when a man who cannot "swim" falls into the water, he makes a few spasmodic struggles, throws up his arms, and drowns. The brute, on the other hand, treads water, remains on the surface, and is virtually insubmersible. In order, then, to escape drowning, it is only necessary to do as the brute does, and that is to tread or walk the water. The brute has no advantage in regard to his relative weight, in respect to the water, over man, and yet the man perishes while the brute lives. Nevertheless, any man, any woman, any child who can walk on the land, may also walk in the water, just as readily as the animal does, if only he will, and that without any prior instruction or drilling whatever. Throw a dog into the water, and he treads or walks the water instantly, and there is no imaginable reason why a human being under like circumstances should not do as the dog does.

The brute, indeed, walks in the water instinctively, whereas the man has to be told. The ignorance of so simple a possibility, namely, the possibility of treading water, strikes me as one of the most singular things in the history of man, and speaks very little indeed for his intelligence. He is, in fact, as ignorant on the subject as is the newborn babe. Perhaps something is to be ascribed to the vague meaning which is attached to the word *swim*. When a man swims it means one thing, when a dog swims it means another and quite a different act. The dog is wholly incapable of swimming as a man swims, but nothing is more certain than

that a man is capable of swimming, and on the instant, too, as a dog swims, without any previous training or instruction, and that, by so doing without fear or hesitancy, he will be just as safe in the water as the dog is.

The brute in the water continues to go on all-fours, and the man who wishes to save his life, and cannot otherwise swim, must do so too, striking alternately, one two, one two, but without hurry or precipitation, with hand and foot, exactly as the brute does. Whether he be provided with paw or hoof, the brute swims with the greatest ease and buoyancy. The human being, if he will, can do so too, with the further immense advantage of having a paddle-formed hand, and of being able to rest himself when tired by floating, a thing of which the animal has no conception. Bridget Money, a poor Irish immigrant, saved her own life and her three children's lives, when the steamer conveying them took fire on Lake Erie, by floating herself, and making them float, which simply consists in lying quite still, with the mouth shut and the head thrown well back in the water. The dog, the horse, the cow, the swine, the deer, and even the cat, all take to the water on occasion, and sustain themselves perfectly without any prior experience whatever. Nothing is less difficult, whether for man or brute, than to tread water, even for the first time. I have done so often, using the feet alone, or the hands alone, or the whole four, many times, with perhaps one of my children on my back. Once I recollect being carried a good way out to sea by the receding tide at Boulogne, but regained the shore without difficulty. A drop of water once passed through the rima of the glottis, and on another occasion I experienced such sudden indisposition that, if I had been unable to float, it must, I think, have gone hard with me.

Men and animals are able to sustain themselves for long distances in the water, and would do so much oftener were they not incapacitated, in regard to the former at least, by sheer terror, as well as complete ignorance of their real powers. Webb's wonderful endurance will never

be forgotten. But there are other instances, only less remarkable. Some years since, the second mate of a ship fell overboard while in the act of fisting a sail. It was blowing fresh; the time was night, and the place some miles out in the stormy German Ocean. The hardy fellow, nevertheless, managed to gain the English coast. Brock, with a dozen other pilots, was plying for fares by Yarmouth; and, as the main-sheet was belayed, a sudden puff of wind upset the boat, when presently all perished except Brock himself, who, from four in the afternoon of an October day to one the next morning, swam thirteen miles before he was able to hail a vessel at anchor in the offing. Animals themselves are capable of swimming immense distances, although unable to rest by the way. A dog recently swam thirty miles in America in order to rejoin his master. A mule and a dog washed overboard during a gale in the Bay of Biscay have been known to make their way to shore. A dog swam ashore with a letter in his mouth at the Cape of Good Hope. The crew of the ship to which the dog belonged all perished, which they need not have done had they only ventured to tread water as the dog did. As a certain ship was laboring heavily in the trough of the sea, it was found needful, in order to lighten the vessel, to throw some troop-horses overboard, which had been taken in at Corunna. The poor things, my informant, a staff-surgeon, told me, when they found themselves abandoned, faced round and swam for miles after the vessel. A man on the east coast of Lincolnshire saved quite a number of lives by swimming out on horseback to vessels in distress. He commonly rode an old gray mare, but, when the mare was not at hand, he took the first horse that offered.

The loss of life from shipwreck, boating, bathing, skating, fishing, and accidental immersion is so disastrously great, that every feasible procedure calculated to avert it, ought to be had recourse to. People will not consent to wear life-preservers, but, if they only knew that in their own limbs, properly used, they possessed the most efficient of life-preservers,

they would most likely avail themselves of them. In every school, every house, there ought to be a slate tank of sufficient depth, with a trickle of water at one end and a siphon at the other, in order to keep the contents pure. A pail or two of hot water would at any time render the contents sufficiently warm. In such a tank every child, from the time it could walk, ought to be made to tread water daily. Every adult, when the opportunity presents itself, should do so. The printed injunction should be pasted up on all boat-houses, on every boat, at every bathing-place, and in every school. "Tread water when you find yourself out of your depth" is all that need be said, unless, indeed, we add, "Float when you are tired." Every one, of whatever age or sex, or however encumbered with clothing, might tread water with at least as much facility, even in a breaking sea, as a four-footed animal does. The position of a person who treads water is, in other respects, very much safer and better than is the sprawling attitude which we assume in ordinary swimming. And then the beauty of it is that we can tread water without any preliminary teaching, whereas "to swim" involves time and pains, entails considerable fatigue, and is very seldom adequately acquired, after all.

The Indians on the Missouri River, when they have occasion to traverse that impetuous stream, invariably tread water just as the dog treads it. The natives of Joanna, an island on the coast of Madagascar, young persons of both sexes, walk the water, carrying fruit and vegetables to ships becalmed, or it may be lying-to, in the offing miles away. Some Kroomen, whose canoe upset before my eyes in the sea-way on the coast of Africa, walked the water, to the safe-keeping of their lives, with the utmost facility; and I witnessed negro children on other occasions doing so at a very tender age. At Madras, watching their opportunity, messengers, with letters secured in an oil-skin cap, plunge into the boiling surf, and make their way, treading water, to the vessels outside, through a sea in which an ordinary European boat will not live. At

the Cape of Good Hope, men used to proceed to the vessels in the offing through the mountain-billows, treading the water as they went with the utmost security. And yet here, on our own shores, and amid smooth waters, men, women, and children perish like flies annually, when a little properly-directed effort—treading the water as I have said—would haply suffice to rescue them every one.—*Nature.*

#### INDIAN CORN.

THE plant commonly known as corn, has assumed such an important place in our economical system, that its origin, history, and uses are subjects of much interest. The word corn was formerly used as we still use the word grass, to mean any and all kinds of grain. This plant, now so widely cultivated, and so highly prized, belongs to the natural family of grasses, the genus *zea* and the species *maize*. There seems to be an endless variety of *zea maize*, but they are so much alike and hybridize so readily that botanists are unable to distinguish more than the one species. This plant unmistakably belongs to the flora of America, notwithstanding the efforts of certain European writers to make it appear otherwise. The first explorers of this country found patches of corn in cultivation from Chili to the White Mountains, and forthwith conveyed the seeds to Europe, where its great life-supporting qualities soon became known and appreciated. But its American origin was so easily forgotten that the Jamestown colonists, 100 years later, experimentally brought seed-corn from the mother country, and were equally surprised to find it so much at home in Virginia.

At the end of another century, the North American Indians, having forgotten their own traditions, were procuring their seed-corn from our more skillful agriculturists along the frontier, without suspecting that the white man had first obtained this staple grain from their depauperate patches. When travelers in the South American provinces and Mexico found the natives dissolving the hoary testa of maize in strong lye, as we do to make samp, and

then washing and soaking the skinless grains until they could easily be macerated between a couple of flat, smooth stones, and patted into thin cakes for baking, called "tortillas," they thought these unenlightened heathens should thank Europeans for the discovery of their delicious bread.

A spirited controversy arose between the botanists Hogg and De Candolle about forty years ago, over the nativity of *zea maize*; the former claiming it as a European plant which had become adventitious in America, and the latter as fearlessly claiming its western origin. A number of newspapers in both countries took sides with their favorites, and continued to defend their opposite positions until 1846, when Darwin and other English explorers, found baked "tortilla" fossil among the ancient ruins of the Incas in Peru, which settled the mooted question, and placed American corn-bread among the hoary-headed relics of the western continent. They also found heads of maize together with numerous species of tertiary sea-shells imbedded in a beach which had been upraised at least 85 feet above the water level of South America, thus proving this plant to have belonged to the flora of our continent prior to its last upheaval.

With the single exception of rice, more human beings are now subsisting on corn than any other kind of grain. It contains about 10 per cent of albuminous or flesh-forming matter; from 64 to 68 per cent of starchy matter; and the flinty varieties from 14 to 18 per cent of oleaginous or fatty matter; so that man can subsist longer upon it alone than any other single article of food. In fact, people who are not exposed to a rigorous climate can subsist entirely upon corn-bread. In the agricultural districts of this country it is the poor man's harvest, and it is difficult to understand how we could get along without our roasting-ears, succotash, hasty-pudding, batter-cakes, and light-pones. Corn fields are now cultivated in America from east to west across the continent, and from north to south over 85 degrees of latitude; in Europe from the Azores to the

isthmus of Suez; and in Asia to a considerable extent among the Celestials. In the United States alone we are producing over 800,000,000 bushels annually.

In some of the Western States, where timber is scarce and coal dear, it has frequently been economically used as fuel, for which purpose the flinty varieties containing less starch and more oil, are best adapted.—*The Millstone.*

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#### MENTAL HEALTH NECESSARY TO PHYSICAL SOUNDNESS.

For perfect health, or the nearest possible approach to it, not only is a sound body requisite, but a similar mental condition is indispensable. It is not sufficient that the body merely be kept in temperance, soberness, and chastity; the mind must also be controlled and governed. Consuming passion and carking care affect the body, and mental anxiety stamps its impress upon the outward man. Inevitable burdens are borne with a sense of resignation which renders them intolerable; but when self-inflicted, no such mitigating force is in action, and contrition and remorse bring but slight and uncertain relief. Cleanliness of mind is as important as cleanliness of body. The habits of thought are as subject to our choice as the fashion of our garments. Self-respect is incompatible with rags, and health is equally incompatible with moral beggary. The mind may be debauched while the frame is in its integrity, but ere long the effects will be apparent enough. The breaches of the moral laws are neither so apparent in themselves, nor in their consequences, as similar infringements of the physical laws; but this should not lead to the inference that the consequences do not follow, or can be evaded.—*Selected.*

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—It is stated by an English writer that thirty years ago not more than one-third of the people of Northumberland county, ate animal food oftener than once a week. As a result it is one of the healthiest counties in England, while the infant mortality is said to be the lowest in England.

## TEMPERANCE AND MISCELLANY.

Devoted to Temperance, Mental and Moral Culture, Social Science,  
Natural History, and other interesting Topics.

### YOUTH AND AGE.

How beautiful is youth! how bright it gleams,  
With its illusions, aspirations, dreams!  
Book of Beginnings, Story without End,  
Each maid a heroine, and each man a friend!  
Aladdin's Lamp, and Fortunatus' purse  
That holds the treasures of the universe!  
All possibilities are in their hands,  
No danger daunts it, and no foe withstands;  
In its sublime audacity of faith,  
"Be thou removed!" it to the mountain saith,  
And with ambitious feet, secure and proud,  
Ascends the ladder leaning on the cloud!

As the barometer foretells the storm  
While still the skies are clear, the weather warm,  
So something in us, as old age draws near,  
Betrays the pressure of the atmosphere.  
The nimble mercury, ere we are aware,  
Descends the elastic ladder of the air;  
The tell-tale blood in artery and vein  
Slunks from the higher levels in the brain;  
Whatever poet, orator, or sage  
May say of it, old age is still old age.  
It is the waning, not the crescent moon,  
The dusk of evening, not the blaze of noon;  
It is not strength, but weakness; not desire,  
But its surcease; not the fierce heat of fire,  
The burning and consuming element,  
But that of ashes and of embers spent,  
In which some living sparks we still discern,  
Enough to warm, but not enough to burn.  
What then? Shall we sit idly down and say  
The night has come, it is no longer day?  
The night hath not yet come; we are not quite  
Cut off from labor by the falling light;  
Something remains for us to do or dare;  
Even the oldest tree some fruit may bear;  
For age is opportunity no less  
Than youth itself, though in another dress,  
And as the evening twilight fades away  
The sky is filled with stars, invisible by day.

—H. W. Longfellow.

### THE THREE-TOOTHED RAKE.

I SUPPOSE the girls of Milburn would all resent the imputation, if I should say that any of them envied little Phebe Bird when she set up housekeeping with Ridgeway Dayton, on the finest farm the country afforded, in a house that was in thorough repair and fully furnished. It was an establishment to be proud of, and people said if that young couple did not prosper, it would be their own fault.

"There, Ridge," said Uncle Aleck, "is your farm, and stock, and house all paid

for, and now I shall do no more for you. If you do n't hoe out your own row, you'll have to starve. I am going abroad, so I shan't be coming around to advise you and scold you, and I expect it will come pretty tough with you for awhile. But Phebe is a sensible girl, I am happy to say, and I think I leave you in pretty good hands."

Ridge secretly felt rather pleased at the prospect of being "left," but he did not say so. Uncle Aleck was an excellent man to provide, but he was a little sharp in his way, as the young man had occasion to know at times in his juvenile years. The old gentleman himself had been reared under a system which might be formulated in the old couplet—

"A boy, a dog, and a walnut tree,  
The more you thrash them, the better they be."

The system had been greatly toned down in the case of his orphaned nephew, but Ridge thought it strict enough.

His choice of a wife had pleased his uncle as well as himself, for Phebe was a very domestic girl as well as a cultivated one, and it was the general verdict that "both had done well." Still Aunt Cynthia did tell Ridgeway she wished he "had got a wife who would make him stand around a little more."

"Oh, she'll make me stand around enough," laughed Ridge. "You need not be concerned about that."

"She'll have need to," said Aunt Cynthia, nodding her head sagaciously. She had known his manner of life from his youth up, and said he was always a very good boy if he only had a steady hand with him to keep him in order. But Ridge believed "aunts and uncles never did appreciate a fellow." Now it was worth while to have the worshipful direction of such a sweet, appreciative little soul as Phebe Bird's, and he did think himself a lucky fellow; and he was.

A stout, capable hired man was engaged at the outset, who understood his business, and, appropriately, received good wages. So the cares of life sat very lightly on the young farmer's shoulders, though he felt the responsibility of Atlas

when he shouldered the world, having not only his own, but his wife's domain to look after.

Just when the serpent entered into this little Eden could not distinctly be told. I have no doubt he "wired in and wired out," among the vines and shrubbery of that "first garden," for sometime before he presented himself to our first mother.

If Ridgway was a little exacting and very particular, Phebe was very self-sacrificing and painstaking; so there was little jar in the machinery. He thought strict order and system about work a very excellent thing—for other people—especially for a man's wife. Breakfast at seven, dinner at twelve, and supper at six, always on the table at the minute, was his standard, but of course if he could not be on hand just at that time, it was only necessary to keep things hot and at their best for half or three-quarters of an hour; and it would be nice for her to fill up the time with sewing, or some little thing of that kind. It need not be lost time to her by any means. Of course a man's work is the important work of the world always.

Ridge, from his inexperience in household affairs, had imbibed a theory that if a woman is but economical, it costs "next to nothing" to support such a small family "on a farm." He was astounded at the cost of sugar and coffee and tea and the dozens of little outgoes every week. It must be there was something wrong somewhere. All his pet theories were getting knocked in the head. In vain Phebe mildly reasoned with him; showing him how long supplies could reasonably be made to last; proposed retrenching on cake for tea, but of course he would not hear of that. He liked cake. She never spoke of retrenching on cigars, though some women would. But all her "argufying" was without avail.

"A man convinced against his will  
Is of the same opinion still."

Somehow, the more Ridge thought about it, the more convinced he was that his wife could hardly be a wise manager. He was disappointed because the money did not pile up quite as he expected. That was another demolished theory which considerably set him back. But then he remembered an old saw which says, "A man must ask his wife's leave to thrive," and he was somewhat comforted. Phebe was young. She might yet be induced to

change her manner of doing business. Perhaps he had been too indulgent himself, and had provided too lavishly for the supposed wants of the household. He might, and indeed he must, turn over a new leaf. In other words, he would tighten the thumb-screws a little, and see if the effect on his victim would not be salutary.

Phebe had grown very reluctant to ask for what was really needed in the house, so sure was she of that adverse criticism so intensely humiliating to a woman of fine nature. If water will wear a stone, so will perpetual petty fault-finding eat away all home happiness. If Phebe had been more self-asserting in the start, it would have been far better. She could have educated the young man into a reasonable householder. But instead, she took a very wrong course, and, by dress-making in over hours, contrived to earn a little money. This went to eke out the scanty allowance her husband thought so munificent for the expenses of "so small a family."

When supper was over, Ridge harnessed up and drove to the village in his fresh cool suit, to get the evening mail. It would have been a rest and refreshment to Phebe to go too, but there was the supper to clear away, the milk to set, little Aleck to care for; and Ridge would have thought all things going to wreck and ruin if she should so desert the ship.

"Uncle Aleck is at home, Phebe!" said Ridge one evening in great excitement, as he returned with a letter. "He is coming on here next week. Now I need not tell you how important it is for all of us that we make a good impression upon him. My uncle is a good man, but he has his peculiar notions. He was always lecturing me on economy. If he gets the impression that we are living extravagantly, he may cut me off without a shilling. Try to have little Aleck at his best, and, if possible, keep him from crying. We must study to provide his favorite dishes, for he always feels crusty if his meals do not please him. I have laid by a little money, though not half what I expected—our living expenses have been so high; but I know Uncle Aleck will be gratified to know I have saved even a little."

"There are a number of things we need," suggested Phebe, wearily. "I suppose your uncle will always prefer white sugar in his coffee, and it is much the best for everything. We have none. And the

coffee-pot is so leaky I can hardly make coffee in it; and the tea-kettle is a great trouble for the same reason. They really ought to be mended.

"And the same of half the tinware in the house, I suppose," he said with a lofty smile, as he lighted his cigar.

"It is very true," said Phebe, with no smile either.

"Now, don't it seem to you, Phebe," he said, argumentatively, "that three years is a very short time for tinware to last? I think my Aunt Lucinda has pieces she bought forty years ago."

"Tinware is not what it used to be."

"I know women say so, but after all it depends a great deal upon the way it is used." Whereupon followed a discourse on the use of pans and basins, that was supposed to effectually settle the question about the necessity of her particular stock being mended.

This modern Pharaoh still persisted in demanding bricks without straw; so, with the very scantiest resources, Phebe set about preparing for the dreaded visit. She would have liked a little girl to help take care of baby, but her husband objected on principle. It might look extravagant to Uncle Aleck, and the board of such a girl would be more than her wages.

It was a beautiful day in June, and the country at its best, when Uncle Aleck came. He gave his nephew a hearty handshake, and looked over his added pounds of avoirdupois with laughing eyes.

"Farm life has n't worn you down, I perceive," he said, as he stepped out of the buggy.

The supper was excellent, the house like a new pin, baby sweet and fresh in his clean white tucker, and there was only one shadow that those keen gray eyes detected, and that was the worn and faded look of the young mother. It filled him with solicitude, and gave him real pain, as he feared his young niece might be in failing health, and his poor boy be left with only a memory and a pictured face, as he had been these many long years. One thing that had so drawn him to Phebe, was her resemblance to that little ivory-painted picture he bore with him over land and sea. He wondered if there was not a cause for her pallid cheek, that might yet be discovered and remedied. Full of this intent, he kept a sharp lookout from under his shaggy eyebrows, as he walked around the premises. The farm was kept up to a state of high thrift and neatness by the

hired man, and Ridgway got the credit of it. But indoors there was a scrimped, unhandy look about most of the working implements, which did not escape observation. He saw Phebe tinkering her tins with bits of twine drawn into the holes, and he heard Ridge expostulating with her in the kitchen about some supplies she needed. He sat through a Monday in the cosy sitting-room, where he could hear her toiling at the wash-tub, and hurrying to get up the meals, while she attended to the neglected baby when she could catch a moment's time. His indignation was at white heat by night, and he felt that he could have caned "that graceless scamp," his nephew, with pleasure, for permitting such a state of affairs.

They walked out after tea and looked at the growing crops, Ridgway feeling unusually well satisfied with himself and all his doings.

Uncle Aleck's first remark hardly chimed in with this sentiment.

"Did n't it ever seem to you, Ridge, as a rather one-sided arrangement that you should have a stout man to help you out of doors, and your wife no help at all indoors? 'Turn about is fair play.' Suppose now that you try the business for three years alone, and let her have the help."

"Oh, uncle," expostulated Ridge, "there is steady work for two men on this farm the year round."

"And steady work in the house for two women; and yet you have let a young, delicate wife carry it on single-handed, and as far as I know, have never remonstrated with her on the slow suicide she was committing. Such havoc as three short years have made! It ought to make a man ashamed, if his feelings are not iron-clad, to so overwork a woman he has vowed to love and cherish."

Ridgway reddened at his uncle's plain-dealing, but he was not disposed to admit that he was the one so much to blame.

"I tell you, uncle, Phebe has not the faculty of getting along with her work that some women have. It takes her longer than it needs to to get every meal. I am sometimes almost surprised.

"It certainly does take her longer than it need to. I have plainly seen that, and now, young man, I'll teach you a lesson. You are to rake hay to-morrow, I believe. I'll fix you a rake, and I'll see you use it." And the irate old man smashed all but three teeth out of a good rake and handed it over to his nephew. "There's your



implement, and I'll come out and see how you get on with it. There'll be no shirking either. Everything I have seen of your indoor home conveniences have been just of that order. Your wife works with a three-toothed rake from morning till night. It is good to be saving, and lay up money, but not if you must grind it out of the life-blood of those who should be nearest and dearest to you. No more new rakes for you until I see a different order of things in the house! Let Phebe make out a list of all she needs as we are together this evening, and then do you draw a check and foot the bill."

"Why, uncle, you never kept house. You know nothing of a woman's demands. It would sweep every cent I have."

"Let it sweep, then. Money gotten dishonestly as that was, had better go to the place it was stolen from. You have been robbing your wife of her life-power, her health, and her happiness these three years. It is time you begin to make reparation. I have preached economy to you, it is true, but I never preached dishonesty. If you can't keep your wife in a decent way, break up and let Phebe go back to the good home she came from. You can go into a store in the city and make your own living."

What a desolate picture it was! Leave his pleasant home, his wife and boy, and take up with the old solitary lodgings in a boarding-house! He felt lonesome at the bare suggestion. Uncle Aleck went on:—

"I should like to give your wife this piece of advice: The next time you even hint about what is needed in the house-keeping, and what is not, and suggest retrenchment here and a cutting things off there, I want her to walk out and give orders to your hired man; tell him how much grain he must give the horses, how much salt to the sheep, how he must scrimp the wheat when he sows it, and the corn when he plants it. She may tell him to tie up the broken harrow with a string, and not go to the expense of getting it mended, and shall insist on his going ahead if the plow handle is broken—it is too trifling a thing to stop the work for that. All the fault I find with Phebe is that she did not do this long ago. If she had given you a good setting down on the start, and taught you to mind your business, it would have been a blessing all around."

It was pretty plain dealing, but it was a great eye-opener to the young man. He

sat upon the piazza for an hour in the moonlight and thought, and thought. Whatever his meditations were, one thought was uppermost—he must gain ground with Uncle Aleck or his chances were slim. That little talk had, as Mark Twain would say, "knocked more conceit out of him than a fit of sea-sickness." "Humble-pie" may not be very palatable, but it is sometimes just the diet to bring one around right. Slowly and soberly the young man "came to himself," and then the foremost thought was—"What a wretch I have been; can Phebe have a spark of love or respect left for me?"

There must have been something good in the youth, or that loyal heart could not have held fast in her affection for him through thick and thin, as she had done. Uncle Aleck's visit was a godsend to her. He saw a new order of things established in the house, and hung up the three-toothed rake in a conspicuous place in the barn as a standing object-lesson. Phebe scarcely knew how to get meals in the renovated kitchen, but her face was as bright as her new saucepans.

Phebe soon won back her roses, and went about her duties like a singing bird. She would always laughingly head off her husband whenever he began to allude to the old times, and "set down naught in malice," but charged the whole to "our youth and inexperience."

When Uncle Aleck came back the next year to the christening of the "little Caroline," he made out to her the deeds of some valuable property, and added a codicil to his will in which the ivory picture was bequeathed to his namesake of the fair lady who, to him, was always young and beautiful.—*Cultivator and Country Gentleman.*

### SCIENCE AND RELIGION.

ONE of the most frequent charges which skeptical scientists bring against religion is that it makes its adherents narrow, dogmatic, and bigoted. It will be admitted that many religionists do possess the unfortunate qualities mentioned, and doubtless this has done much to prejudice scientists against religion; but we maintain that the reverse is true of religion. It is ennobling, elevating, expanding, inspiring. Science leads her votaries into pleasing fields. She shows them the wonders and beauties of nature, and unfolds to them many of the mysteries of the wondrous works of God. She places in their hands the telescope, and teaches them, through

its instrumentality, the grand melodies of the music of the spheres. She staggers the intellect with the immensity of space and the wonders of the blazing orbs that fill it. Again, she puts into their hands another instrument of magic power, the microscope, which opens up a world of mystery and beauty at the other extreme of creation. As she increases the power of the instrument, a whole world of being springs into view at every glance. Again, the mind trembles as it attempts to grasp a concept of the infinitude of life. Still farther down into the depths of nature science pries, and shows the atoms in their constant whirl, so small, and yet so mighty; miniature worlds, revolving in their ceaseless rounds like planets round their central suns, and still so far apart that miniature men, proportionate in size, with telescopes of proper size, on one of these small specks, might look away and see a neighboring atom as we gaze at the sun and twinkling stars.

To every form of life and every phase of nature, science invites her pupils, and rivets their attention with her revelations. Yet when all is done; when science has told her story through, has emptied out her vast storehouse of knowledge, she at last confesses to her disciples that, though she has nothing more to teach, they have but just begun to learn. The things they know are but a taste of what there is to know, a drop of the nectar stored beyond their reach. The universe is spread out before them ready to be explored, and crowded at every point with richest treasures; but human eye-sight is too short to fathom the depths of the blue expanse which stretches out toward heaven, and human reason is too weak to grasp the grand thoughts of God expressed in his majestic handiwork.

Baffled, disappointed, worn out with weary struggles to surmount the insuperable obstacles in the way, and overreach the possibility of human power, tantalized with visions of gorgeous glory and transcendent beauty just beyond, almost in sight, but still invisible, must man lie down and die? pass into dark oblivion? annihilation? Yes; if infidelity be true. The grand, majestic, fascinating truths of nature, of which we may catch but the briefest, passing glimpse, must forever lie buried in the mystery of infinitude if death is the end of man's career, if we must rest content with what science alone can give. But, thanks to the boundless beneficence of the God of nature and of humanity,

religion offers a key which unlocks the mystery and opens up a whole eternity of glorious, ecstatic, never-ending bliss. No limit to the time for study, no clods upon the feet which long to go in search of truth. No fetters on the wings of reason to impede its flight, or bring it halting to the ground. Unlimited opportunity to study God in nature, and seek out the mysteries of his ways.

Death does not end the scene of human life. Do we love science, do we delight in nature here, do we learn what we may with our dull senses and limited opportunities *here*,—*there* we shall begin where our earthly advancement ceased, and make prodigious progress in the things of God.

Religion narrow? Who can say it, in view of such glorious anticipations? It denies us no good thing. It gladly accepts all that science has to give, and promises an eternity in which to learn, to develop mentally and physically, when science alone, or infidelity, would leave us smouldering in the silent dust, mere clods of earth, mixed with the lifeless clay. Surely religion is noble, glorious, infinitely broad, while infidelity is darkness, death, and infinitely narrow.—J. H. K., in "Science and the Bible."

#### OVERWORKING THE UNDEVELOPED BRAIN.

"OVERWORK," properly so-called, can only occur when the organ upon which the stress of the labor falls is as yet immature, and, therefore, in process of development. When an organ has reached the maturity of its growth it can only work up to the level of its capacity or faculty for work! Fatigue may produce exhaustion, but that exhaustion will come soon enough to save the organ. Repeated "efforts" may, under abnormal conditions, follow each other too rapidly to allow of recuperation in the intervals of actual exertion, and as the starting point will, in each successive instance, be lower than the previous state, there may be a gradual abasement; but even this process should not seriously injure a healthy and well-developed organ. In short, a great deal of nonsense has been said and written about the "overwork" of *mature* brains, and there are grounds for believing that an excuse has been sought for idleness, or indulgence in a valetudinarian habit, in the popular outcry on this subject which awhile ago attracted much attention. Nevertheless there can be no room to

question the extreme peril of "overwork" to growing children and youths with *undeveloped* brains.

The excessive use of an immature organ arrests its development by diverting the energy which should be appropriated to its growth, and consuming it in work. What happens to horses which are allowed to run races too early, happens to boys and girls who are overworked at school. The competitive system as applied to youths has produced a most ruinous effect on the mental constitution which this generation has to hand down to the next, and particularly the next but one ensuing. School work should be purely and exclusively directed to development. "Cramming" the young for examination purposes [college students at this time of year, take heed.—Ed.] is like compelling an infant in arms to sit up before the muscles of its back are strong enough to support it in the upright position, or to sustain the weight of its body on its legs by standing while as yet the limbs are unable to bear the burden imposed on them. A crooked spine or weak or contorted legs is the inevitable penalty of such folly. Another blunder is committed when one of the organs of the body—to-wit, the brain—is worked at the expense of other parts of the organism, in face of the fact that the measure of general health is proportioned to the integrity of development, and the functional activity of the body as a whole in the harmony of its component systems. No one organ can be developed at the expense of the rest without a corresponding weakening of the whole.—*Lancet*.

#### PAT FLANIGAN'S LOGIC.

"Patrick Flanigan," said the District Attorney one day in court, "stand up and plead guilty or not guilty to the charge the Commonwealth hath preferred against you."

When Pat complied with the polite request thus made by the officer of the law, the attorney proceeded to read from a paper in his hand a very graphic description of a certain transaction in which Pat had been engaged a few days before.

"What say you? Are you guilty or not guilty?" asked the attorney.

"I'm not guilty of half thim things you've read to me," said Pat, looking at the court, "but I did have a bit of a row last Saturday was a week; an' I dunno just what I did, for ye see I was stavin'

drunk on the meanest corn whiskey yer honor iver tasted."

"But Patrick, we never taste it," said the judge, while a smile lurked in ambush behind the grave judicial countenance.

"Sure, now, don't ye, though?" said Pat, with a look of mingled surprise and incredulity—"do'n't ye though? Well, thin, ye ought to, jist once, to know how it acts, and to know how to pity a poor fellow that does. Sure yer honor grants licenses, an' how do ye know the mischief yer doin' to honest men like meself, unless ye take a drink now and thin, jist to see how it makes a man behave hisself."

"Who gave you the liquor, Patrick?" asked the court, on a voyage of discovery.

"Well, I dunno vat's his name," said Pat, too honest to turn informant, while a gleam of true native humor twinkled in his eye. "But I know I seed a license haugin' behind the bar. Ye see, Judge, I was wroughtin' for the city, on the streets, jist close by, an' I was dry, an' it was so handy I wint in and took a drink that ortent to have hurt a baby, an' in tin seconds I was crazy drunk, an' I dreamt that I was at Donnybrook fair, an' that's all I remimber till nixt mornin', when I was boardin' at Sheriff Ryan's hotel."

"But," said the court, "you are charged with perpetrating an aggravated assault and battery on Mr. S., the hotel-keeper."

"Well, yer honor," said Pat, "if I did, I only gin him back jist wat's in his own whiskey; an' if yer honor had n't give him that license I would n't've bin drunk; an' if I had n't bin drunk I would n't've got into the fight; an' if I had n't've got into the fight I would n't've been here this mornin', onyhow."

This was a process of reasoning new to the court. It was a self-evident truth dressed in plain clothes, and while the law was with the court, Pat evidently had all the logic, and he here summed up the mischief of the license system in a few sentences.

Scores of men are made beastly drunk every day, just because it is so easy to obtain liquor. The law places it in reach of every man. On the streets of our towns and cities are hung notices of "Choice Liquors," "Cool Lager," "Ale," and "Fancy Drinks," to tempt the laboring man to come in and spend for strong drink the money that his family needs for bread.

On the path he must walk to and from his daily occupation, he sees those temptations. The licensed saloon and grog-

shop afford him every facility to become a drunkard. His appetite, renewed and kept alive by indulgence, urges him on. There is no obstacle in his road to ruin; on the other hand, that road is opened and made plain and easy by the law. What wonder is it, then, that the rum-shops flourish while the families of their victims starve?—*Sel.*

**Advice to Girls.**—“See,” counsels Mr. Ruskin, “that no day passes in which you do not make yourself a somewhat better creature; and in order to do that, find out first what you are now. Do not think vaguely about it; take pen and paper, and write down as minute a description of yourself as you can, with the date to it. If you dare not do so, find out why you dare not, and try to get strength of heart enough to look yourself fairly in the face, in mind as well as body. I do not doubt but that the mind is a less pleasant thing to look at than the face, and for that very reason it needs more looking at; so always have two mirrors on your toilet-table, and see that with proper care you dress body and mind before them daily. Write down, then, frankly what you are, or, at least, what you think yourself, not dwelling upon those inevitable faults which are of little consequence, and which the action of a right life will shake or smooth away, but that you may determine to the best of your intelligence what you are good for and can be made into. Girls should be like daisies,—nice and white, with an edge of red if you look close; making the ground bright wherever they are; knowing simply and quietly that they do it, and are meant to do it, and that it would be wrong if they did n’t do it.”

**Seventy Thousand Acres Wasted.**—According to a reliable authority, a single brewery in England requires all the barley produced upon 70,000 acres of land to supply it for one year. All of this precious, life-sustaining grain is converted into a blood poisoning, health destroying, mind degrading liquid.

—The ninth annual National Temperance Convention was held June 21–23, at Saratoga. A large number of enthusiastic temperance workers were in attendance, among whom were John B. Gough, Miss Francis Willard, Rev. J. O. Peck, D. D., and many others. Resolutions were adop-

ted by the Convention reaffirming the duty of total abstinence, from the medical and scientific standpoint, endorsing the movement for introducing Temperance into public schools, urging upon professing Christians a good war against the liquor traffic, and the introduction of four yearly Sunday School Lessons.

—The Governor of Kansas asserts that prohibition is a grand success in that State, with the exception of two or three of the largest towns, in spite of the fact that the liquor interests are expending thousands of dollars every week to retard the work of the friends of temperance. “It is safe to say,” he says, “that in at least nineteen-twentieths of the State, our law is honestly obeyed, and prohibition is absolute.”

—The city of New York pays more for tobacco than for bread. Dealers say that there are smokers in that city who average one hundred cigars a week, and some whose cigar bills run up to thousands of dollars a year.

—“Champagne” at night and “real pain” in the morning, is the order of things with many persons.

#### A DOCTOR'S ADVICE TO A DYSPEPTIC.

Play with work blend, keep warmish feet,  
Away drive trouble, slowly eat,  
Air pure breathe, and early rise,  
Beware excess, take exercise.

(READ BACKWARDS.)

Exercise take, excess beware;  
Rise early and breathe the pure air;  
Eat slowly; trouble drive away;  
Feet warmish keep; blend work with play.

## POPULAR SCIENCE.

—It is proposed by an enterprising Frenchman to convert a portion of the Mammoth Cave into a mushroom farm.

—An African explorer has recently discovered that some of the numerous varieties of apes are due to crossing between the gorilla and chimpanzee.

—Careful experiments recently made in Scotland show that the light from an electric lamp travels at the rate of 187,290

miles per second, which is 500 miles per second faster than that from the sun.

*Pitch-paper*, the same as that used in covering roofs, when cut into slips and placed in convenient situations under carpets and behind sofas and chairs in a room, will effectually repel the moth miller from depositing its eggs. If similar strips are placed inside the backs and seats of parlor suits, they will render the furniture moth proof.

*An Electrical Railway.*—Two prominent electricians have at last succeeded in completing and perfecting in all its details, an electrical railway, which is now in operation between the city of Berlin and one of its suburbs. The speed attained is eighteen miles an hour, with the possibility of much greater speed if necessary. The project is now considered an assured success, and we may look for an introduction of the same system into this country.

*The Compass Plant.*—This curious plant has its leaves on edge; that is, instead of the edges setting toward the horizon, as other plants do, the apex rises toward the meridian, while one edge inclines toward the north and the other toward the south. When old or when blown about by the wind, these directions may be changed, but the north or south direction of the edges are always thus, except when induced to take other directions by windstorms or overweight.

*How Long We Are to Live.*—According to the tables used by life-insurance companies in calculating their rates of insurance, a person 1 year old may expect to live thirty-nine years longer; of 10 years, fifty-one; of 20 years, forty-one; 30 years, thirty-four; 40 years, twenty-eight; 50 years, twenty-one; 60 years, fourteen; 70 years, nine; 80 years, four. Our readers will easily gather from the above tabulated statement the number of years to which their lives, according the law of averages, may reasonably be expected to extend.

*Capacity of Cathedrals and Churches.*—In Forbes' "Tourists" the capacity of the larger European churches and cathedrals is given as follows: St. Peter's Church,

Rome, holds 54,000 people; St. Paul's, London, 35,000; St. Sophia's, Constantinople, 33,000; the Florence Cathedral, 24,300; St. Petronius, Bologna, 24,000; St. Paul's, Rome, 32,000; St. John Lateran, 22,900; Notre Dame, Paris, 20,000; the Pisa Cathedral, 13,000; St. Stephen's, Vienna, 12,400; St. Dominico's, Bologna, 12,000; St. Peter's, Bologna, 11,500; the Cathedral of Vienna, 11,000; St. Mark, Venice, 7,000; the Milan Cathedral, 7,000. These figures, it will be remembered, do not refer to seating capacity.

*What Becomes of Old Horses.*—In France a large share of the crippled and worn-out horses are dressed for the market and sold for food. Those which are considered unfit to eat are disposed of as follows:—

"The horse is first shorn of its hair, which serves to stuff cushions and saddles; then it is slaughtered and skinned; the hoofs serve to make combs. Next the carcass is placed in a cylinder and cooked by steam at a pressure of three atmospheres; a cock is opened, which allows the steam to be run off; then the remains are cut up, the leg bones are sold to make knife-handles, and the coarser parts, the ribs, the head, etc., are converted into animal black and glue. The first are calcined in cylinders, and the vapors, when condensed, form the chief source of carbonate of ammonia, which constitutes the base of nearly all ammoniacal salts. There is an animal oil yielded which makes a capital insecticide and a vermifuge. To make glue the bones are dissolved in muriatic acid, which takes away the phosphate of lime; the soft residue retaining the shape of the bone is dissolved in boiling water, cast into squares, and dried on nets. The phosphate of lime, acted upon by sulphuric acid, and calcined with carbon, produces phosphorus for lucifer matches. The remaining flesh is distilled to obtain the carbonate of ammonia; the resulting mass is pounded up with potash, then mixed with old nails and iron of every description; the whole is calcined and yields magnificent yellow crystals—prussiate of potash, with which tissues are dyed a Prussian blue, and iron transferred into steel; it also forms the basis of cyanide of potassium and prussic acid, the two most terrible poisons known in chemistry."



## GOOD HEALTH.

BATTLE CREEK, MICH., AUGUST, 1881.

J. H. KELLOGG, M. D., EDITOR.

TERMS, \$1.00 A YEAR.

### WHY WILL THEY DO IT?

WE recently had under our care, as a patient, a lady who for years had been an invalid, confined almost constantly to her room, suffering with a most painful and depressing disease. Her husband was a smoker; and during all the long years of his wife's invalidism, when he returned to his home at night, he insisted upon smoking his loved cigar in her sick-room, notwithstanding he knew very well its sickening effects upon her delicate nerves. At last, after many years of the most acute suffering, the patient wife became fully convinced that patience had ceased to be a virtue, and with a manner which carried more meaning than her words, informed her husband that if he cared more for his cigar than his wife, his presence would, in the future, be dispensed with.

Many times has the appeal come to us from invalid wives, "Can you not write something to induce my husband to give up tobacco? It is killing me, as well as him." We are at a loss to know what to say to such men. What can be said to influence a man who is so far lost to the claims of courtesy, of kindred, of humanity, of self-respect, as to be willing to inflict pain and injury upon others for the purpose of securing a fancied pleasure to himself? Such members of the genus homo are unworthy the title of men. True manhood will never submit to such an abject slavery. No drug but tobacco will so debase the moral tone and benumb the natural sensibilities as to make a man oblivious to all other interests but selfish gratification.

Such men are only influenced by fear.

As a lady, who has suffered in the manner referred to, said to us the other day, "It's no use to talk to them, they will not quit the weed unless they think they must do it or die at once." Well, in some cases at least, would it not be as well to say nothing, and let them die? These tobacco sots often make miserable and wretched for years, the lives ten-fold more valuable than their own, and the world will be just as well, and better, off without them. Perhaps the inspired writer had reference to such as these when he said, "Let him that is filthy be filthy still."

### CHOLERA MORBUS.

**SYMPTOMS:** Vomiting, soon followed by purging; watery, acrid or acid discharges from the bowels; colicky pains; cramp in the feet and limbs; hiccough; rapid and feeble pulse; cold skin, often bathed with clammy sweat; voice feeble and hollow.

The disease most frequently occurs in hot weather, and is generally excited by errors in diet, as the use of green fruit. Sometimes the disease assumes an epidemic form, a large number of persons being attacked at about the same time. Attacks most frequently come on during the night, the first symptom being a feeling of pressure at the pit of the stomach, which is shortly followed by nausea and vomiting. The matter vomited first, usually consists of undigested food. After a time a pale yellow, or greenish fluid, intensely acrid, bitter, or acid, is vomited. Gripping pains in the bowels are also present. The discharges from the bowels are at first pulpy in character, but soon become liquid, enormous quantities of fluids passing

from the body. The result of this great discharge of fluids is a rapid shrinking of the tissues, giving to the features and other parts of the body a pinched appearance. The nose is pointed, the eyes sunken, and the skin appears dry and shriveled. It is always cold, and sometimes covered with a clammy perspiration. The discharges from the bowels sometimes have the appearance of thin rice-water or thin gruel, which gives the disease a close resemblance to cholera. The depression of the patient is very great, the voice becoming hollow, and sometimes being lost altogether. Notwithstanding the serious aspect of the disease, it usually subsides in a few hours, the patient making a rapid recovery. Sometimes, however, particularly in the cases of very old people and infants, the exhaustion becomes so great that the patient does not rally, and passes into a relapse. The discharges become involuntary, the pulse disappears, and the patient finally dies of exhaustion.

#### TREATMENT.

At the beginning of the affection, let the patient drink freely of warm liquids to facilitate evacuation of the stomach. Large warm enemata will also be found serviceable. When the vomited matter no longer shows traces of food, efforts should be made to stop the vomiting as soon as possible. Give the patient small bits of ice from the size of a bean to that of a filbert, allowing him to swallow the bits every few minutes. This is one of the most successful means of stopping vomiting. At the same time apply hot fomentations over the stomach and bowels. In cases in which hot applications to the bowels do not seem to give any relief, very cold compresses may be applied instead.

Another very excellent measure of treatment, upon which we rely with great confidence, is the hot enema. The temperature of the water employed should be as high as the patient can bear comfortably, and the quantity from one to two or three quarts in adults, and a proportionate quantity in children. The same treatment is equally effective in ordinary intestinal catarrh or diarrhea, and also in dysentery.

We have never lost a case in the treatment of this disease, and have very rarely found it necessary to employ other than the simple measures mentioned. It is very important that the patient should be careful in his diet for some time after the severity of the attack has passed away, as a relapse may be brought on very easily by indiscretion. The diet should consist chiefly of cooked fruits, avoiding seedy fruits and grains. Animal foods and coarse vegetables should be wholly avoided until the stomach is fully restored to its natural condition.

#### WOMEN TIPLERS.

THE evidence is such as to be indisputable that the use of alcohol among fashionable women is rather increasing, in spite of the restraining influence of our numerous temperance associations. According to an exchange,—

“Cleveland society is greatly agitated over the bibulous tendencies of some of its best members. It has leaked out that several cosy little bars, where a social glass of liquor may be obtained by ladies ‘on the quiet,’ are running to a large patronage. These saloons are not placed in public sight, and properly called such, but under the guise of bakeries and dress-making stores have a convenient little back-room where the bibulous female can partake of her ‘bitters’ unperceived. This private business of tipping has been ‘given away’ by a married lady of that city, who is heartily ashamed of this degrading habit of her sex. She describes one of these places and her experience there as follows:—

“One of these bars is in a trimming and dress-making store. There is a secretary, or what looks like one, closed up, and when the cover lets down, it discloses three or four Bohemian glass balls and some small cut glass tumblers. You can have whiskey, brandy, or wine in this little alcove, by paying fifteen cents a drink for it. A week ago I was in there with two ladies, when one of them whispered, ‘I am going to treat you,’ and we all went back there and were treated. I never felt so

ashamed in my life. I told them it was just awful, but they said it was *no worse for ladies to be sociable than their husbands*. A very nice young lady who was with us was real boozy, and gabbled as I never heard her before."

Thousands of ladies who do not visit saloons, habitually make use of various "tonics," "bitters," "invigorators," and other compounds which are only whisky in disguise; and to the general use of these popular nostrums may justly be attributed the acquirement of a taste for liquor in thousands of instances, and in men as well as in women.

### FLIRTATION.

WE cannot find language sufficiently emphatic to express proper condemnation of one of the most popular forms of amusement indulged in at the present day in this country, under the guise of innocent association of the sexes. By the majority of people, flirtation is looked upon as harmless, if not useful, as some even consider, claiming that the experience gained by such associations is valuable to young persons, by making them familiar with the customs of society and the ways of the world. We have not the slightest hesitation in pronouncing flirtation as pernicious in the extreme. It exerts a malign influence alike upon the mental, the moral, and the physical constitution of those who indulge in it. The young lady who has become infatuated with a passion for flirting, courting the society of young men simply for the pleasure derived from their attentions, is educating herself in a school which will totally unfit her for the enjoyment of domestic peace and happiness, should she have all the conditions necessary for such enjoyment other than those which she herself must furnish. More than this, she is very likely laying the foundation for life-long disease by the dissipation, late hours, late suppers, evening exposures, fashionable dressing, etc., the almost certain accompaniments of the vice we are considering. She is surely sacrificing a life of real true happiness

for the transient fascinations of unreal enjoyment, pernicious excitement.

It may be true, and undoubtedly is the case, that the greater share of the guilt of flirtation lies at the door of the female sex; but there do exist such detestable creatures as male flirts. In general, the male flirt is a much less worthy character than the young lady who makes a pastime of flirtation. He is something more than a flirt. In nine cases out of ten, he is a rake as well. His object in flirting is to gratify a mean propensity at the expense of those who are pure and unsophisticated. He is skilled in the arts of fascination and intrigue. Slowly he winds his coils about his victim, and before she is aware of his real character, she has lost her own.

Such wretches ought to be punished in a purgatory by themselves, made seven times hotter than for ordinary criminals. Society is full of these lecherous villains. They insinuate themselves into the drawing-rooms of the most respectable families; they are always on hand at social gatherings of every sort. They haunt the ball-room, the theater, and even the church, when they can forward their infamous plans by seeming to be pious. Not infrequently they are well supplied with a stock of pious cant, which they employ on occasion to make an impression. They are the sharks of society, and often seize in their voracious maws the fairest and brightest ornaments of a community. The male flirt is a monster. Every man ought to despise him; and every woman ought to spurn him as a loathsome social leper.

Flirting is not confined to young men and women. The contagion extends to little boys and girls, whose heads ought to be as empty of all thoughts of sexual relations as the receiver of an air-pump of air. The intimate association of young boys and girls in our common schools, and, indeed, in the majority of educational institutions, gives abundant opportunity for the fostering of this kind of a spirit, so prejudicial to healthful mental and moral development. Every educator who is alive to the objects and interests of his profession, knows too well the baneful influence



of these premature and pernicious tendencies. Many times has the teacher watched with a sad heart the withering of all his hopes for the intellectual progress of a naturally gifted scholar, by this blighting influence. The most dangerous period for boys and girls exposed to temptations of this sort, is that just following puberty, or between the ages of twelve and eighteen or twenty. This period a prominent educator in one of our Western States once denominated, not inappropriately, "the agonizing period of human puppyhood." If this critical period is once safely passed, the individual is comparatively safe; but how many fail to pass through the ordeal unscared!

The most painful phase of this subject is the tacit—even, in many cases, active—encouragement which too many parents give their children in this very direction, seemingly in utter ignorance of the enormity of the evil which they are winking at or fostering. Parents need enlightenment on this subject, and need to be aroused to the fact that it is one of the most momentous questions that can arise in the rearing and training of children.

#### TRICHINA AND OTHER PARASITES.

The following is an extract from an interesting article contributed by Prof. Leidy to a recent number of the *Philadelphia Ledger* :—

"The discovery of trichina in man was made by the English surgeon, Hilton, in 1833, and the worm was subsequently named by Owen. The parasite was first discovered in the hog, by the present writer, 35 years ago (see Proceedings of the Academy of Natural Sciences, Philadelphia, 1846, p. 108), in the meat from which he had dined. Luckily for him, the meat was cooked, and while he escaped trichinosis, the trichina did not escape him. Observing minute spots in the slice of meat on his plate, he reserved the piece and examined it with the microscope, which revealed a multitude of diminutive worms coiled up and enclosed in cysts. Little then did he or others suspect the relationship of trichina and the hog and

man, or that it was of any significance as an agent of disease and death; nor was it then suspected that the parasite was probably the cause which led the great Lawgiver of the Jews to declare the hog to be an unclean beast, unfit for food. It is probable, from the scarcity of good fuel in Palestine and other countries of the Orient, that when pork was used as food it was often eaten raw, and thus may have frequently given rise to disease and death, resulting from trichinosis, the nature of which is a discovery of recent date. Perhaps millions have died from trichinosis, through successive centuries, without any suspicion as to the source of the affection. A soldier in the late civil war said to the writer, 'I wish I had as many dollars as I have eaten pounds of raw pork.' Does not this suggest the idea that many soldiers have died of trichinosis who were suspected to have been victims of typhoid, rheumatic, and malarial fevers?

"Let all meats be properly cooked, and all danger of parasitic infection removed. The writer long ago suggested that primitive man was perhaps led to cook his food from the impression that he would burn the ugly worms he observed in skinning and preparing animals, and thus prevent their introduction into his own body.

"Appropriate to the subject, an anecdote may be here related. Some years ago, in Charleston, S. C., at an entertainment, among other dishes served was one of the tail of the drum-fish in nicely browned slices. The writer was helped to a piece, said to be particularly gelatinous and delicate. These qualities seemed to depend on a jelly-like substance imbedded in the flesh. Curious to know its meaning, the next day a drum-fish was procured in the market, and on dissection of the tail, it was found to be due to a huge parasitic worm (*Acanthorhynchus*) coiled into a mass nearly as large as a hen's egg."

—A few days ago a physician, the health officer of this city, called upon us with a number of specimens of well-water for analysis. In the number we found several which were very dangerous in character, though in constant use by scores of persons. Of those drinking the water from one well, seven suffered with typhoid fever.

### THE TREATMENT OF CONSTIPATION BY THE SWEDISH MOVEMENT CURE.

THE estimation of the system of exercises known as the Swedish Movement Cure is daily increasing in the minds of intelligent and progressive physicians. The following paragraph from the *Medical and Surgical Reporter* states but a part of the advantages to be derived from this mode of treatment:—

“In order the more readily to convey a definite idea of the principles on which the Swedish Movement cure is based, and the mode in which these principles should be carried into practical execution for the relief of chronic constipation, Dr. Benjamin Lee, at a recent meeting of the Philadelphia County Medical Society, stated that, in addition to the movements which afforded the introduction of oxygen in the blood, the rapid rotation of the entire trunk upon the pelvis promoted activity in the portal circulation, and stimulated peristaltic action of the intestines; that, in order to relieve congestion of the liver and excite a healthy flow of bile, the patient should assume an attitude that would place the muscles of the right side strongly on the stretch, while the operator produced a rapid vibration of the parietes of the chest and abdomen immediately over the liver. Finally, the patient assuming a recumbent posture, thorough kneading of the abdomen is given, followed by pressure and vibration over the solar plexus. The circulation of all the abdominal viscera is thus stimulated, the passage of both chyle and feces through the alimentary canal is aided, healthy secretion is promoted, undue accumulations of mucus are dislodged, and the great nervous centers of the organic system are roused into the highest state of activity. There are very few cases of constipation, however obstinate, which will resist a fortnight of this treatment daily, and many cases will yield in a week. The manipulation occupies about one hour.”

—It is a well known fact that the individuals who suffer from sun-stroke are usually addicted to the use of alcoholic liquors. We never knew a person who was strictly temperate and abstemious in eating and drinking, to suffer in this way.

*The Cure of Stammering.*—There are thousands of persons who are almost ostracized from society on account of defects of speech, which might be cured by the aid of proper training under a competent instructor. Stammering is really a disease, just as much as is epilepsy or paralysis, and is, in nearly all cases, curable by proper treatment. It is not as generally understood as it might be, that stammering affects the mental constitution of a person thus afflicted, very materially and injuriously; and hence it is a duty which every parent of a child thus afflicted owes to it, to place it under favorable conditions for recovery.

We receive each month as an exchange a journal entitled ‘*The Voice*,’ which is largely devoted to the consideration of various vocal defects. A recent number contains an interesting article by Mr. Julius Ashman, who has for several months been stopping at the Sanitarium, engaged in the treatment of this class of sufferers. Mr. Ashman entertains many original views on this subject, some of which are presented in the article referred to. He has a thorough mastery of the best methods of treatment, and is very successful in his efforts.

*Treatment for Bad-smelling Feet.*—The secretion of an ill-smelling perspiration by the feet, is often the cause of very great annoyance. Various methods of treatment have been suggested. The best is the following:—

Wash the feet twice a day in a weak solution of vinegar. The stockings should be changed twice a day, and the stocking-feet should be washed and then placed for some hours in a jar containing a solution of borax, or better, boracic acid. They are then dried, and are fit for wear again. The boracic acid effectually destroys the smell. But to kill the bacteria, which are always present in the stocking, is not enough. The leather in the bottom of the boot is wet and sodden, and smells as vilely as the stocking. This difficulty is gotten over by the use of cork soles. The patient should get half a dozen, which will usually be sufficient. A pair must be

worn only one day unchanged; at night they should be placed in the boracic solution, and the next day removed and allowed to dry. If these directions be accurately carried out, the bad odor will be perfectly destroyed.

**Muriatic Acid Pickles.**—A short time ago we went to a neighboring grocer's for a bottle of pickles, for the purpose of examination. The pickles had a very fine appearance, and gave no external evidence of adulteration; but upon examination, we found that it was doubtful whether they contained a drop of genuine vinegar, the acid flavor being due to the presence of muriatic, or hydrochloric acid, which had been substituted for the natural acid. We have no doubt that most of the canned pickles sold in the stores are put up in this way. The fraud is easily detected. Turn off a little of the clear solution into a test-tube or a narrow bottle; add a few drops of a solution of nitrate of silver. If a heavy white precipitate is produced, causing a milky appearance, the vinegar is a chemical compound, and is probably innocent of even the most remote relation to the genuine article.

**Varieties of Drunkenness.**—Dr. Short-harse, a writer in a recent number of the *British Medical Journal* claims to have determined by observation that intoxication from wine or malt liquor is likely to cause its subject to fall on his side, whisky brings him down on his face, and cider or perry invariably lays him on his back. He supposes that the different drinks act on various organs of the cerebro-spinal system.

Another journal suggests that if this theory is true, it might be possible to devise a mixture of the various beverages in such proportion that the imbiber would be exactly balanced. Our observation is that a mixture of the sort proposed, produced exactly the opposite effect, and precisely what ought to be expected, whisky throws the toper on his face; wine and beer turn him on his side, and hard cider rolls him on his back. All three together cause him to roll in the gutter.

**An Unsuspected Danger from Fruit-cans.**—People who use glass fruit-cans imagine themselves perfectly safe from danger of poisoning; but it is possible that harm may result from the use of cans which have a zinc top, the inside of which is exposed to the action of the acids of the contents of the can. It is well known that zinc is an active poison, and many cases of acute illness have been traced to the use of the kind of can described. Only such cans should be used as have glass or porcelain tops. No one should continue to use their old cans, if of the condemned variety, simply because they have them on hand, as many will be inclined to do, as they thus render themselves liable to dangerous and even fatal illness; and the danger is none the less because they may have escaped thus far.

**Directions for Preventing Sudden Death.** An exchange offers the following as the best known means for preventing sudden death:—

1. Keep the head cool by taking the world easy.
2. Keep the lungs breathing deeply and fully about seventeen times a minute, by cultivating alacrity in all the bodily movements.
3. Keep the heart beating about sixty-eight times a minute (that is, let the pulse beat four times while the lungs breathe once) by eating temperately, sleeping fully and soundly, exercising moderately, and avoiding all temporary excitants, mental or liquid.

**Tobacco Deafness.**—A few days ago a Cincinnati law student suddenly found himself deprived of hearing. Calling upon an aurist, he was told that the habit of smoking cigarettes in which he had long indulged had occasioned an obstruction of the Eustachian tubes, ducts which lead from the throat to the ear. This is a very frequent cause of deafness in smokers. Tobacco occasions destruction of the sense of sight, of taste, and of smell, as well as of hearing, and not infrequently occasions paralysis of the whole nervous system. Why will our young men destroy their senses by its use?

### QUARTERLY MEETING OF THE STATE BOARD OF HEALTH.

WE are under obligations to Dr. H. B. Baker, the Secretary of the Board, for an abstract report of the meeting, from which we quote a part as follows:—

The regular meeting of the Board was held at Lansing, July 12, all the members being present, as follows: Hon. Le Roy Parker, of Flint; Rev. D. C. Jacokes, of Pontiac; Henry F. Lyster, M. D., of Detroit; J. H. Kellogg, M. D., of Battle Creek; Arthur Hazlewood, M. D., of Grand Rapids; Jno. Avery, M. D., of Greenville; and Henry B. Baker, M. D., Secretary.

Hon. Le Roy Parker was elected President of the Board for the ensuing two years.

#### SMALL-POX.

Dr. Jacokes spoke of an immigrant tramp-burglar who came down with the small-pox while confined in the jail at Pontiac. He and another prisoner were removed to the temporary hospital. The prisoner stole the clothes of the immigrant and leaving his own, ran away. Some one then stole the prisoner's cast-off clothes and bedding, after supposed disinfection, and by this means small-pox was communicated to more than 16 persons. He also reports that a second immigrant brought small-pox near Pontiac, but the disease was restricted.

Dr. Kellogg reported that an immigrant sick with small-pox had recently been put off a M. C. R. R. train at Battle Creek. He remained about the depot all day before it was discovered that he had the small-pox. He was then removed to a tent-hospital.

Dr. Avery reported an outbreak of small-pox apparently brought by an immigrant Dane, who was vaccinated and not sick himself, to a camp in Montcalm county. The immigrant slept with, and gave the disease to, a countryman who was vaccinated before his arrival in this country six years ago. The disease was light, the man not being confined to his bed at all, and finally he went to a family of five unvaccinated persons, all of whom had the disease lightly. There were other cases in the neighborhood, coming from the same source. The immigrant probably brought the contagion in his clothing from some infected city or immigrant on the journey, as he said there was no small-pox on board

the ship on which he came, though there were cases of diphtheria on board.

A communication was received from the American Public Health Association asking the influence of this board to secure legislation making it a criminal offense for any person to communicate any communicable disease, such as small-pox, scarlet fever, or venereal diseases, and giving to boards of health and health officials the same power in the prevention and suppression of other diseases as they now possess in cases of small-pox.

The secretary presented a resolution of the American Public Health Association, asking the Michigan Board to use its influence to secure general vaccination.

#### THE CHICAGO SANITARY CONFERENCE.

By direction of the board, the secretary attended the conference of delegates from local and State boards of health, held at Chicago, June 29, for the purpose of devising means for preventing the introduction of small-pox and other diseases by immigrants. As secretary of the conference, he had prepared an official report and sent it to the National Board of Health for publication in its bulletin.

The action of the sanitary conference, to prevent the spread of small-pox, was indorsed, and

#### RESOLUTIONS WERE ADOPTED,

requesting the National Board of Health to secure, if possible, the vaccination of immigrants before they land in this country; asking the attention of every local board of health in Michigan to the details of the plan adopted at the late Chicago conference; calling upon them to secure a careful inspection of all immigrants entering and remaining within their jurisdiction, and a prompt vaccination, or re-vaccination with pure and fresh bovine virus of all persons not protected against small-pox; calling attention to the need of establishing a quarantine at Port Huron; also, asking the National Board of Health to aid in preventing the introduction of small-pox and other communicable diseases by immigrants landing at eastern ports.

Dr. Baker read resolutions of the Tennessee State Board of Health, indorsing the action of the Memphis Board of Health, commending the inspection service of the National Board of Health as being very much more effective than local quarantines, with less detention and annoyance to commerce.

## VACCINATION FOR VARIOUS DISEASES.

Dr. Lyster, committee on epidemics and other diseases, read a translation of two important papers recently published in France, on the causation of certain communicable diseases, which gave details of successful methods of making viruses which can be used in vaccination, and are effective in preventing deaths from these diseases. He received the thanks of the board, and was requested to embody his remarks and so much of the translation as was essential, in a paper for publication.

Dr. Baker had paid some attention to the same subject in connection with diseases of animals, affecting the public health. He mentioned a paper by Prof. Law, of Cornell University, suggesting that these protective viruses all seemed to be made in accordance with a general law, namely, by their cultivation in fluids with access of free oxygen, and this gives us great hope of soon being able to make protective vaccination for many of the most dangerous diseases in animals and mankind.

## DISEASE FROM EATING HAMS.

Dr. Baker reported the investigation of an outbreak of a new disease in England, traced to the eating of American hams. The cause of the disease proved to be a virus which was used to inoculate animals of various kinds, and reproduced the same disease in them. From the accounts, it seems probable that it is no more nor less than our hog cholera. The symptoms closely resemble in some respects the disease known last winter in this country as "winter cholera."

## SANITARY ASSOCIATIONS.

Dr. Jacokes referred to the Pontiac Sanitary Association, and the work it was doing for public health, in that city.

Dr. Kellogg reported the formation of a Sanitary Association at Battle Creek as a fruit of the recent Sanitary Convention held there by this Board. Among the subjects brought before the Association was that of impure water. He had examined a sample of water used at an eating-house, among the boarders at which there were seven cases of typhoid fever last year. It contains a large amount of organic matter. Also a sample containing organic matter and a large amount of chloride of sodium, used by a family in which there had been much illness.

The request of the Sanitary Convention at Battle Creek, that this Board issue a

circular on criminal abortion, was referred to Dr. Kellogg as special committee.

## FUTURE PUBLICATIONS.

Drs. Lyster and Baker reported their revision of the document on the restriction and prevention of diphtheria, and different points were discussed, amended, the document adopted, 30,000 copies will be printed, and the document stereotyped, so that local boards of health may secure any number of copies at cost of paper and press-work.

Dr. Jacokes referred to the great lack of knowledge among those who ought to know, as to what constitutes thorough disinfection. He proposed to remedy this by the preparation of a circular on disinfection.

Drs. Baker and Kellogg were appointed a special committee to prepare a tract on disinfection, which shall give the best method adapted to each disease and to each article to be disinfected, and which shall call attention to the many useless substances now employed for such purposes.

The document heretofore issued on the treatment of the drowned being out of print, it was referred to a committee for revision, with a view to its republication.

Dr. Baker was instructed to prepare a paper on the best methods of constructing hospitals for communicable diseases, avoiding the use of the name, "pest-house."

## Correspondents' Department.

WE have recently received the following encouraging letter from Mrs. Frances E. M. Trayner, whose husband is an eminent member of the Scotch bar:—

I have been in receipt, for some months back, of your very valuable and interesting journal, GOOD HEALTH. I was in Italy when it first arrived, and afterwards was ill, or so long a time would not have elapsed without acknowledgement on my part, and hearty thanks for the kindness which sends me regularly the numbers. I am sure we begin at the beginning when we seek to understand the physical laws which govern our bodies, and to encourage rich and poor to make these laws matters of careful study and obedience. Almost all recognize this now, and are anxious for enlightenment, and your jour-

nal seems admirably suited for popular reading.

Allow me to send you a copy of the course of lectures delivered in Edinburgh last winter, by some of our most eminent medical men. The lectures were much appreciated by the working classes, who formed the larger part of the audiences, and I hope that this winter's course may be equally interesting, and that the knowledge gained by the people may help them to remove at least a small part of the burden of misery which lies so heavily on the poor of our old country.

Our climate is a very depressing one, so damp and sunless. The body never gets comforted by the simple, natural influence of the sun, even in summer, now.

Work is difficult to be had, with too many competitors in the country, and despite the fact that Scotchmen force themselves well to the front in other countries, they are slow to emigrate. But a re-adjustment and distribution of population is going on, and will proceed, probably, even more rapidly for some time, and meanwhile, education is becoming more practical, and teaching the laws of cause and effect.

Permit me to wish you very sincerely, every success in your undertakings.

EDINBURGH, SCOTLAND, 27 MORAY PLACE, JUNE 20, 1881.

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## LITERARY NOTICES.

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THE second number of the *Indiana Medical Journal*, which has just come to our table, is the organ of the Indiana Eclectic Medical College. It contains several interesting articles, and appears to be well conducted.

THE AGENTS' HERALD. Philadelphia, Pa.

This is a journal devoted especially to the interests of agents. It is one of the most spicy and interesting papers of this class we have ever seen. The paper announces as one of its chief purposes the exposition of fraudulent advertisements. This is certainly a most praiseworthy object, and will doubtless insure for the journal a successful patronage.

WE have just received a copy of the proceedings of the "American Society of Microscopists," at the third annual meeting of the society, held in Detroit, in August, last year. Being one of the charter members of the society, we have been much interested in its progress since its organization at Indianapolis, three years ago, and have been much pleased with the evidences of progress indicated by the growing value of

its reports, though we have not been able to attend the last two meetings. The present report contains among others, a very interesting paper by J. H. Fisher, on the "Structure, Development, and Position, of an Undescribed Flagellate Infusorian." It is illustrated by two beautiful chromo-lithographic plates.

SCIENCE AND HEALTH is the title of a monthly magazine, the first number of which we have just received. It is published by J. A. C. Shamp, Lewisburgh, Pa., and edited by Dr. George G. Groff. It contains several valuable contributions, and if the prospectus is fulfilled, the journal will be a valuable addition to hygienic literature. We wish the publishers much success in their new enterprise, and hope the journal will soon obtain a large number of appreciative subscribers.

A CASE SHOWING THE RESULTS OF INJURIES AT THE BASE OF THE BRAIN, is the title of a paper read by Dr. S. S. French of this city, before the Calhoun County Medical Association, a few months since. The paper is a reprint from "The Detroit Lancet." It gives an interesting account of a case, in many respects one of the most remarkable ones we have ever met,—the patient, having been under treatment at the Sanitarium during a portion of his illness.

THE AMERICAN MONTHLY MICROSCOPICAL JOURNAL, edited by Romyn Hitchcock, F. R. M. S., New York, has now reached its eleventh number. Each number contains twenty pages of matter of value and interest to scientific microscopists. We are glad to see that the enterprise is meeting with success, and trust that it will not only be a success financially, but that it will be the means of encouraging the study of microscopy, which has now come to be one of the most practicable of all sciences of medical development.

THE August number of the *North American Review* devotes a liberal share of its space to a polemical duel between Col. Ingersoll, the great exponent of the unbelief of the day, and Judge Jeremiah S. Black, the eminent jurist.

Other articles in the August number of the *Review* are: "Obstacles to Annexation," by Frederic G. Mather, "Crime and Punishment in New York," by Rev. Dr. Howard Crosby; "A Militia for the Sea," by John Roach; "Astronomical Observatories," by Prof. Simon Newcomb; and "The Public Lands of the United States," by Thomas Donaldson.

HEALTH LECTURES FOR THE PEOPLE, is the title of a little work recently published at Edinburgh, where the lectures were delivered last winter. The series includes lectures on the following subjects: Care of the Body; Food and Drink; A few Words on Lungs and Air; The Blood and its Circulation; Accidents, Emergencies, Wounds, and Operations; Hints to Women regarding their Health, Habits, and Occupations;

The Rearing and Training of the Infant and Child; The Use and Abuse of Water in Houses; The Use and Abuse of Alcoholic Stimulants and Tobacco; and Preventable Diseases and their Causes. Among the lecturers are such distinguished persons as Professor Fleeming Jenkin, F. R. S. S.; Doctor Andrew Wilson, Professor Angus Macdonald, M. D., F. R. C. P.; Professor Andrew Smart, M. D., F. R. C. P. E.; and Stevenson Macadam, Ph. D., F. R. S. E. All of the lectures are eminently practical in character, and must be the means of doing much good. We wish the compilation a wide circulation.

SCHOOL MANAGEMENT. E. L. Kellogg & Co., New York.

This book is a practical guide for teachers upon school management. The author being himself an educator of large experience knows just how to deal with the subject in question in such a thoroughly practical manner as to render the work exceedingly helpful to all teachers. He believes that school government should make the pupils governable, and that good government increases the teaching power of the teacher. The perusal of the volume will benefit any one engaged in the profession of teaching, and they will find the many excellent suggestions contained therein an invaluable assistance in their work.

THE ILLUSTRATED SCIENTIFIC NEWS.—The July issue of the *Illustrated Scientific News* teems with interesting illustrated articles, a few of which are as follows: The Doble Telephone; Glass Grinding Machine; Ancient Pottery from Cyprus; Mechanical Larynx; Pleasure Car of the Days of Louis XIV; Amateur Mechanics; The Remarkable Palmyra Palm; Curious Fishes; Illustrations, explaining the Bursting of Fly Wheels; A Velocipede Carriage. In addition to the numerous engravings, there is a large number of interesting, useful, and practical papers, relating to various departments of popular science. This is one of the most elegantly printed and valuable periodicals. Published by Munn & Co, 37 Park Row, N. Y.

THE ANNUAL REPORT OF THE WASHINGTONIAN HOME, located at Boston, has been received. The buildings occupied by this institution consist of a main building over eighty feet in length, forty feet in width, with a wing fifty-two feet long by thirty feet wide, extending back from the centre. The main building is four stories in height above the basement. The building is heated by steam and is well fitted up in every particular. The number of patients received during the year, according to the report, was 306. The total number received into the institution during the twenty-two years of its existence is 6164. Dr. Albert Day, Superintendent of the institution, asserts, as an observation, sustained by his long experience, that persons accustomed to alcoholic drinks may with perfect safety discontinue them entirely either at once or gradually after a short time. He also asserts

that he has never seen delirium tremens in the habitual drunkard from his having left off the stimulants. The greater portion of the report is made up of the report of the Superintendent, which is presented in the form of an address to the members of the Washingtonian Home Corporation. It contains many interesting facts besides those stated, and is well worthy a careful perusal.

SONGS FOR CLASS AND SCHOOL. J. E. White, 133 W. Main St., Battle Creek, Mich.

This is a new compilation of songs for the use of singing classes, conventions, day schools, and societies, by J. E. White and Frank M. Davis. The first twenty pages of the work are devoted to instructions in the principles of music. These lessons, of which there are twelve in number, are very much more concise and comprehensive than are usually found in books of this class. The music, which is nearly all new, having been written especially for this work, is excellent in composition and appropriate in character. We have no hesitancy in recommending the work as one in all respects superior to any we have ever seen for the use of class and school.

THE REPORT OF THE COMMITTEE ON THE PREVENTION OF VENEREAL DISEASES, presented at the last annual meeting of the American Public Health Association, contains facts and figures of a most alarming character. The author, Dr. Gihon, quotes Professor Gross and Dr. Marion Sims, well-known medical authorities, as saying that "a greater scourge than yellow fever, cholera, and small-pox combined, is quietly installed in our midst, sapping the foundations of society, poisoning the sources of health, rendering existence miserable, and deteriorating the whole human family." The author of the paper, as chairman of the committee on the subject, urges that the legislatures of the several States should enact laws constituting it a criminal offense or misdemeanor to communicate, or to aid or abet in any way the communication of a contagious disease, such as small pox or syphilis; and empowering and requiring health officials to establish such regulations as may be necessary for the prevention, discovery, treatment, and suppression of such diseases. The author is an advocate of a system of license and inspection which has been in vogue in some European countries for a few years back, and was tried for a short time in this country during the war. He argues that the license system does not legalize or countenance prostitution any more than licensing saloons and distilleries legalizes or countenances intoxication. Undoubtedly all will agree with him in the connection; but it is claimed by temperance advocates that the license system as it is applied to saloons and distilleries, does legalize and countenance intemperance, at least to a considerable degree. It seems to us that this is true in both instances, and, consequently, we are opposed to the license system, although in favor of the law and of any system of inspection and surveillance which will check the extension of venereal disease.

## Publishers' Page.

☞ We begin in this number a series of articles on "The Human Face in Health and Disease," which will be found very valuable by those who take the pains to study the subject carefully. The two remaining articles are of still greater interest.

☞ Almost the first remark of new-comers at the Sanitarium is, "What delightful weather you have here! What a nice cool breeze! What a beautiful, healthful location!" During the present season there have not been half-a-dozen days that were at all uncomfortably warm. The thermometer for the last week has been below 70° most of the time, and is rarely above 80°. The result is, that feeble invalids who come here from hot and malarious sections are delighted with the change, and make rapid progress toward health.

☞ Last month we sent out to several hundred of our subscribers a supplement relating to the "Sanitarium Sick Poor Fund." We are already receiving responses from all parts of the United States, from Maine to California. We are glad to see that the sick poor, whom we have always with us, have the sympathy of so many kind-hearted friends, who are unknown to them personally. If there are any who have not received the circular referred to, and would like to do so, we shall take pleasure in sending it on receiving their addresses.

☞ Invalids who have tried the "Sanitarium Foods," find they are indispensable. We have been sending out a large number of packages, and notice that when a sample package goes away we receive in a short time an order for a large supply. Our food products are unexcelled in quality, being prepared with the greatest nicety from a formula obtained by many pains-taking experiments. The Wheatena, Maizena, Avena, and Granula, are foods which will be universally used when their qualities have become sufficiently well known to give them a fair introduction. We would also call special attention to our "Infant Food" as an article which is especially opportune at this season of the year.

☞ The Sanitarium, just now, is a populous community. More than two hundred and fifty people dine at its tables daily. Of this number, one hundred and seventy-five are patients, a larger number by one-half than were ever present at the institution at this season of the year at any previous time. Notwithstanding the extra provision made for patients this year in anticipation of a great increase in patronage, so great has been the demand for rooms that almost every available one in the neighborhood is occupied in addition to the main buildings and cottages owned by the institution. Although quite a large number of new rooms were fitted up last spring, the managers found it necessary to hire three large cottages in the neighborhood, and these, in addition to all the other buildings, are full with the exception of two or three rooms. Both the old and the new main buildings have long been filled to their utmost capacity; the only opportunity for securing rooms in these buildings being through the changes which are constantly taking place. Helpers are being sent further away from the institution to room, and the managers expect soon to be obliged

to erect lodging tents for the temporary accommodation of a portion of our large family of attendants. By this means we hope to be able to accommodate a large number still; so none need hesitate to come, fearing that they cannot find room.

☞ We hope our canvassers will not relax their efforts during the "heated term." At this season of year, GOOD HEALTH can do more to save life and relieve suffering than at almost any other. The great prevalence of bowel diseases at this season, nearly all of which originate in dietetic errors, in both old and young, makes particularly appropos the articles in the preceding number on the "Feeding and Care of Infants," and "Infantile Dyspepsia," and in the present number on "Cholera Morbus." The various hints on disinfection are valuable at this season. The editor aims to make GOOD HEALTH the most practical of all journals of this character, and so endeavors to adapt its contents, as much as possible, to the season of the year.

☞ Two or three weeks ago, after the weekly meeting of the Sanitarium helpers, a Hygienic Missionary Society was organized, the purpose of which is to encourage the circulation of hygienic literature, particularly GOOD HEALTH and such tracts and pamphlets as will inculcate better ideas of living, and secure the highest degree of physical, mental, and moral development. A good degree of interest was manifested in the organization; and it is to be hoped that much good will be accomplished thereby. A fund of \$90 was speedily raised among the helpers to purchase material for beginning work at once.

☞ The whole country is rejoicing over the prospect of the complete recovery of the President from his dangerous wound received at the hands of a political maniac. We have watched carefully the progress of the case, and have noted with interest whatever has been published with reference to the plan of treatment pursued; and if the President recovers, we shall feel that both himself and the country are indebted to the practical good sense which has been displayed by those who had his case in charge, in its hygienic management. One of the principal consulting surgeons, our instructor in surgery, Dr. Frank H. Hamilton of New York City, is, we believe, chiefly responsible for the course of treatment pursued, since it agrees so well with the admirable plan upon which he manages similar cases under his care in the great hospitals in New York. Dr. Hamilton has done more than any other American surgeon to introduce hygienic measures in the treatment of wounds and injuries of every description.

WANTED AT THE SANITARIUM.—Half a dozen strong, vigorous, energetic, willing, young women, who can give good references, to fill positions in the bathroom, laundry, and kitchen. A skillful, experienced cook can obtain a good situation by applying at once. Only those who want permanent positions need apply.

☞ The Sanitarium family are enjoying a visit from Judge Elliott, with his family, consisting of his wife, son, and daughter. The Judge, after having enjoyed for many years a leading position as a member of the legal fraternity in Indiana, was last fall elected to the Supreme Bench of the State. Although a life-long invalid, his indomitable energy has enabled him to triumph over physical ailments to a con-



siderable degree, until now. Though at present his health is considerably impaired, we trust that a few weeks' rest and recuperation will restore him to comfortable health, and enable him to pursue with continued success his chosen lifework.

☞ Messrs. Segner and Condit are meeting with unexampled success in the sale of "Plain Facts." Though they have had many years' experience in the subscription book business, they declare they never saw a book sell so well as "Plain Facts." We have orders from them for 17,000 copies ahead, to be ready for delivery within the next two months. Their headquarters are in Burlington, Iowa, where they should be addressed by those wishing an agency.

☞ We have just received a telegram from Honorable Henry Craft, of Memphis, Tenn., saying that his family will reach us in a few days, to spend the summer and fall. His wife and daughter and three sons will be with us this week, and he himself will follow shortly after. Many old patients of the Sanitarium will recollect the Judge and his pleasant family, and they will find many old friends glad to meet them here this year.

☞ We have received from Dr. Honeywell, whose name is quite familiar to many of our readers, several hundred of whom have made his acquaintance as a canvasser, a nice leather case which he has had made for the purpose of carrying sample copies of GOOD HEALTH, tracts, etc. It is a very neat affair; and, we should judge, would facilitate the work of a canvasser very much in keeping his samples nicely protected from the rain and dust, and out of sight when not in use.

☞ We recently had the pleasure of attending the wedding of our friends, Dr. D. C. Hawxhurst and Miss Nellie Skinner, at the house of the bride's father, Mr. T. B. Skinner, a prominent merchant of this city. Both the doctor and his wife have long been patrons of the Sanitarium, and friends of hygienic reform. The happy couple took the evening train for New York, from which they sailed on Saturday last for Paris, where they will spend a year in study. They have the best wishes of hundreds of friends in this community, and wherever they are known.



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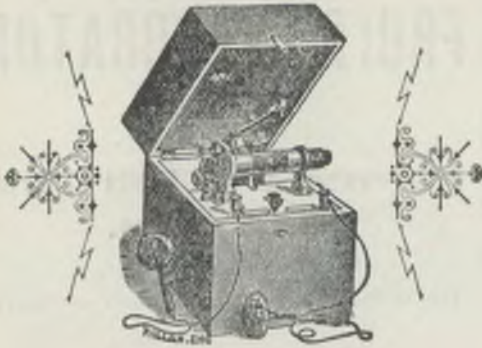
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