PACIFIC HEALTH JOURNAL

AND TEMPERANCE ADVOCATE.

VOLUME IV.

OAKLAND, CAL., SEPTEMBER, 1889.

NUMBER 9.

J. N. LOUGHBOROUGH,
M. G. KELLOGG, M. D.,
C. P. BOLLMAN,

A 32-PAGE MONTHLY.

Subscription Price, ... \$1.00 per Year.

Address.—All business for the JOURNAL should be addressed to Pacific Press, Oakland, Cal.

All Drafts or Money Orders sent in payment of subscriptions should be made payable to Pacific Press,

All Communications for the JOURNAL should be addressed to Pacific Health JOURNAL, care of Pacific Press, Oakland, Cal.

Speech is the golden harvest following the flower of thought.

GLASS windows were first introduced into England in the eighth century.

PNEUMONIA causes the death of over 3,700 people annually in New York.

Profit by others' success and failures, and you get a reliable experience at less than club rates.

THE writer does the most who gives his readers the most knowledge, and takes from them the least time.

According to the latest statistics there is in the United States one physician to every eight hundred and twenty-five persons.

It is estimated that the various wars of the last 4,000 years have caused the death, directly and indirectly, of 6,860,000,000 people, or at the rate of 1,715,000 per annum.

"I WENT by the field of the slothful, and by the vineyard of the man void of understanding; and, lo, it was all grown over with thorns, and nettles had covered the face thereof, and the stone wall thereof was broken down. Then I saw, and considered it well; I looked upon it, and received instruction. Yet a little sleep, a little slumber, a little folding of the hands to sleep; so shall thy poverty come as one that traveleth; and thy want as an armed man." Prov. 24:30-34.

FOOD FOR INFANTS.

In the August number of this journal we promised to say something further on the subject of proper food for infants. We will redeem this promise by quoting first from J. H. Kellogg, M. D.*

"Notwithstanding the immense number of physicians, nurses, and mothers, who have had much experience in the rearing of children, the amount of accurate information on the subject of infant care and feeding possessed by the general public is very meager.

"Carefully collected statistics show beyond room for reasonable doubt that the most active cause of infantile disease is improper feeding. This cause is particularly active during the warm season of the year, which occasions the immense number of deaths from various digestive disorders at this period.

"Milk is the natural and proper food for children from infancy to the age of twelve or eighteen months. Starchy foods cannot be digested, owing to the fact that the digestive element of the salivary secretion is not formed in sufficient quantity during the first few months of life to render the child able to digest farinaceous foods, such as potatoes, rice, fine-flour bread, and the like.

"As a general rule, an infant should be fed once in two or three hours during the day-time and once at night until one month old. After this time it should not be fed at night, and it should take its food no more frequently than once in three hours during the day-time until four months of age. Between four and eight months, the intervals should be gradually prolonged to four hours. After this time the fourth meal should be gradually dropped off, so that at twelve months the child will take its food but three times a day.

"If the child is deprived of its natural food, a healthy wet-nurse should if possible be secured,—at least until the child is two or three months old. When a suitable wet-nurse cannot be secured, milk from a healthy cow constitutes the best food."

In reference to the artificial nutrition of infants we

^{*} Home Hand Book, p. 1366.

will quote from the words of H. E. Stockbridge, in the Dietetic Gazette:—

"The protein compounds of foods are chiefly albumen, casein, and fibrin; of which the two former may properly enter into the composition of the food of infants. Of these two substances albumen is easily digested by the youngest child, while casein is assimilated with far greater difficulty, and should form a less considerable portion of the infants' diet. It is in an excess of casein that cows' milk chiefly differs from human milk, and to its presence is due the relative indigestibility of the former. Casein forms the coagulum of milk, and possesses the property of coagulating in different forms according to its origin, only such as forms flakes on coagulation being easily assimilated by the human infantile system, and even then not in all cases, and only in small quantities. .

"Saccharine and fatty foods are easily digestible and may be assimilated without difficulty by infants. Farinaceous substances, on the contrary, are wholly unassimilable. They possess, however, the property of becoming transformed into saccharine matter, and thus digestible material; a process occurring in the mouth and alimentary canal, but only to a very slight degree in the imper-

fect digestive system of infants.

"These facts form the principles on the correct application of which depends the success of any system of artificially nourishing children deprived of the normal food furnished them by nature—

healthy mothers' milk.

"The treatment of such infants naturally divides itself into two classes: those deprived of human milk, and those supplied with a sufficiency of such food, but of such an abnormal character as to fail in its office of a perfect nutriment. In the first case a substitute material must be found. In the second, correction of the imperfections in the mother's product is the rational course. This may naturally involve one or the other of two processes. Either the treatment of the mother, where the abnormal condition of the milk is the result of specific disease, or the direct rectification of the diet of the child by supplying artificially the material in which the milk is deficient. The former process belongs obviously to the domain of medicine, and yields too often but slow and unsatisfactory results, necessitating, most frequently, a temporary recourse to other food than that supplied by the invalid mother. The latter procedure is based on a definite chemical transformation suggested by the results of actual analysis. Its results are, moreover, immediately attainable.

"This practical application of well-known chemical principles in controlling or modifying human diet is so little recognized in attempts at rectifying faulty digestion in infants, that its possibilities as demonstrated by actual experiment must become of appreciable value. The actual conditions and positive results of a heretofore unrecorded experi-

ment of my own will illustrate: Both mother and child were apparently in perfect health, with the single exception that the food of the latter was evidently imperfectly digested, casein-like particles being voided with the bowel excrement. No evidences of an abnormal condition of either child or mother were detectable, and the only food of the infant was that provided by nature.

"Chemistry suggested actual analysis of the mother's milk, that the definite composition of the food consumed might be known. The actual cause of the difficulty was immediately made clear, and is forcibly illustrated by comparing the results with the average composition of mothers' milk.

	Total Solids.	Ca- sein.	Albu- men.	Fat.	Milk Sugar	Ash	Nutritive ratio.
Milk ex-	11.05	.49	1,44	1.56	6.91	.40	1: 3.57
mothers' milk	12.98	-59	1.23	3.94	6.23	.45	1: 6.81

"The results of analysis showed no peculiarity of composition beyond the limits of normal variation, except in the single constituent of fat, and the milk, therefore though not seriously deficient in nutriment, possessed a nutritive ratio of 1: 3.57, most closely resembling cows' milk in this respect.

"The abnormal results of the consumption of this food by an infant are, therefore, perfectly ap-The material consumed resembled in physiological action undiluted cows' milk, producing corresponding results, and failed of perfect assimilation. The cause of the difficulty being thus determined, the remedy was self-suggested. By an abnormally low amount of fat the ratio between protein and carbonaceous matter was reduced below the point of possible perfect assimila-The rational correction of the diet was, therefore, the immediate artificial supply of sufficient carbonaceous matter with each meal to constitute a normal nutritive ratio, that digestion might resume its functions under natural conditions."

After giving us the results of six weeks' observations of the condition of the child while using its mother's milk, compared with six weeks' gain under an artificial diet, Mr. S. says: "Dextrin, therefore, is the most valuable and safe of all substitutes for the carbonaceous constituent, or natural fat and sugar of mothers' milk, and should form a chief ingredient of all substitutes for the natural food of infants.

"As already stated, there is but one substance which naturally fulfills the requirements of a desideratum in the feeding of infants, mothers' milk. The substitute, when ready for use, must approach closely the composition of the article the place of which it is to artificially occupy, as indicated by similarity of ratio between nitrogenous and carbonaceous constituents. In the maintenance of this ratio only perfectly digestible ingredients may be resorted to. If cows' milk is to be used, its casein must be partially pre-digested by artificial means."

Various are the substances that are advertised in the markets as substitutes for mother's milk, or to be used in the preparation of food for the infant. If the parent cannot have the advice of a good physician, who will conscientiously show them just what is lacking in their particular case, I would not recommend to them experimenting with every advertised dose. Dr. Kellogg, in the article above referred to, gives some very wholesome advice on the preparation, and use, of artificial food and feeding, in these words:—

"Care should be taken in the selection of the cow's milk, that being preferred which is obtained from a cow which has calved two or three months previously. The health and care of the cow, particularly the character of her food, are matters of importance which should receive attention, as there is no doubt but that consumption is frequently communicated to infants from cows whose lungs have become diseased through confinement in close stalls with foul odors, and deficient and improper food. Cows' milk should be diluted at first to one-half, the proportion being gradually increased as the child's stomach is strong enough to bear it. Pure water, lime-water, barley-water, and thin, well-boiled and strained oatmeal gruel, may be used to dilute the milk. The object of the dilution is, first, to render it more nearly like the mother's milk in the proportion of nutriment which it contains, and second, to render it less liable to form hard curds in the stomach, which are very likely to occur when the milk is taken undiluted.

"Cows' milk, or other fluid food, is best given to an infant with a proper nursing bottle. The best forms of nursing bottles are those which are furnished with rubber caps. . . . The cap should beremoved and well cleaned with warm water in which soda or saleratus has been dissolved in proportion of a teaspoonful to a pint each time the bottle is used. Both the nursing bottle and the rubber nipple should be kept immersed in a weak solution of soda when not in use. They should

also be cleansed the second time just before the child is fed. Neglect to observe this precaution is one of the most common causes of stomach disturbances.

"The diet of the mother while nursing is of very great importance, as anything that will disturb the system of the mother will affect that of the nursing infant more or less. Her food should be nourishing, simple, and wholesome. Stimulants of all kinds, whether in the form of alcoholic drinks or irritating condiments, should be carefully avoided. Pastry, desserts, ice-cream and confectionary, and all similar articles, should be wholly avoided. Oatmeal porridge, or milk and the various whole-grain preparations, eggs, and, with those accustomed to its use, a moderate allowance of meat, together with an abundance of ripe fruits, constitute the best diet. . . . Vegetables, such as cabbage, turnips, and carrots, together with peas, beans, and onions, which are very likely to produce colic in the child, should be carefully avoided.

"Feeble infants, especially those who are born prematurely, will need to be fed a little more frequently than others, and will require extra care.

"The interior of a child's mouth, as well as its lips, should be carefully wiped free from milk or other food after feeding, a moist cloth being used for the purpose."*

J. N. L.

DIPHTHERIA A CENTURY AGO.

THE selection given below was furnished by Dr. H. S. Orme, Los Angeles, from the Massachusetts Magazine for 1791, chap. xvi., page 634.

Throat Distemper.—A reader of taste and judgment will derive much entertainment from this chapter. He will see, and lament the operation of human prejudice and passions. But his attention will be more particularly engaged by a new species of pestilence, which alarmed and ravaged the country.

About this time the country was visited by a new epidemic disease, which has obtained the name of the throat distemper. The general description of it is a swelled throat, with white or ash-colored specks, an efflorescence on the skin, great debility of the whole system, and a strong tendency to putridity. Its first appearance was in May, 1735, at Kingston, in New Hampshire, an

^{*}Home Hand Book, pp. 1367, 1368.

inland town, situated on a low plain. The first person sized was a child, who died in three days. About a week after, in another family, at the distance of four miles, three children were successively attacked, who also died on the third day. It continued spreading gradually, in that township, through the summer, and of the first forty who had it, none recovered. In August it began to make its appearance at Exeter, six miles northeastward; and in September, in Boston, fifty miles southward, though it was October, before it reached Chester, the nearest settlement on the west of Kingston. It continued it ravages through the succeeding winter and spring, and did not disappear till the end of the next summer.

The most who died of this pestilence were children, and the distress which it occasioned, was heightened to the most poignant degree. From three to six children were lost out of some families; several buried four in a day, and many lost their all. In some towns, one in three, and in others one in four of the sick were carried off. In the parish of Hampton Falls it raged most violently. Twenty families buried all their children. Twenty-seven persons were lost out of five families; and more than one-sixth part of the inhabitants of that place died within thirteen months. In the whole province, not less than one thousand persons, of whom above nine hundred were under twenty years of age, fell victims to this raging distemper.

Since the settlement of this country such a mortality had not been known. It was observed, that the distemper proved most fatal, when plentiful evacuations, particularly bleeding, were used; a great prostration of strength being an invariable symptom. The summer of 1735, when the sickness began, was unusually wet and cold, and the easterly wind greatly prevailed. But it was acknowledged to be, not "a creature of the seasons;" as it raged through every part of the year. Its extent is said to have been "from Pemaquid to Carolina," but with what virulence it raged, or in what measure it proved fatal, to the southward of New England, does not appear.

The same distemper has made its appearance at various times since. In 1754 and 1755 it produced a great mortality in several parts of New Hampshire, and the neighboring parts of Massachusetts. Since that time it has either put on a milder form, or physicians have become better ac-

quainted with it. The last time of its general spreading was in 1784-87. It was first seen at Sanford in the county of York; and thence diffused itself, very slowly, through most of the towns of New England; but its virulence, and the mortality which it caused, were comparatively inconsiderable. "Its remote, or predisposing cause, is one of those mysteries in nature, which baffle human inquiry."

On its first appearance in Boston, it was supposed to be nothing more than a common cold; but when the report of the mortality in New Hampshire was received, and a young man from Exeter, whose brother had died of it, was seized (October, 1735), the house was shut and guarded, and a general alarm spread through the neighboring towns and colonies. Upon his death no infection was observed in that house or neighborhood; but the distemper appeared in other places which had no communication with the sick. The physicians did not take the infection nor convey it to their families, nor their other patients. It was therefore concluded, that it was not like small-pox, or the plague, communicable by infection from the sick or from clothes; and the physicians, having by desire of the selectmen, held a consultation, published their opinion, that it proceeded entirely from "some occult quality in the air."- Weekly News Letter.

Dr. Douglas computes the number of persons who had the distemper in Boston at 4,000, of whom 114 died, which is one in thirty-five. The whole number of inhabitants at that time was estimated at 16,000.—Pacific Medical Journal.

SLEEP AND ELECTRICITY.

Several years ago I read a paper by Professor Crazybone in which he said you should sleep with your head toward the north, so the electric currents on their way to the North Pole would pass through the body the right way. The plan looked reasonable and I adjusted my bed to meet its requirements. A few years after I ran across a scholarly article by Dr. Allhead, in which he proved that the electric current should not pass from the feet to the head but from the head to the feet, and, therefore, we should all sleep with our heads toward the south. I turned my bed around. And now, only yesterday, there came a report from Professor Dryasdust showing that the

electric currents are bad no matter how they pass through, and the least danger is found in sleeping with the head toward the east or the west. I have again wearily turned my bed. If any man will invent a bed hung on a pivot, I will buy it. I am quietly working on a bedstead myself which can be wound uplike a clock, and will revolve all night and occasionally get on its hind castors and prance about the room and turn a few handsprings.—F. H. Carruth.

THE TOILET.

Perhaps you may think this subject belongs especially to the fashion papers, and that we stay-athome country people have little to do with it. I acknowledge, that so far as the extremes in fashions go we are not interested, but the toilet includes much besides the outside dress and adornment, and much, I am sorry to say, that it becomes us to care for but which we totally neglect. True we wash our faces and hands, comb our hair, and bathe once a week or as often as we can. We try to keep decently neat and clean and—"that ought to be enough."

Do you think so? Well, let us reason together a little. Do we not owe something more than mere decency to ourselves, to our families, to our Creator? This is not addressed to the very poor but to the wives and daughters of our well-to-do farmers, who can, if they think it desirable, inin a little more than absolute necessaries I do not believe in extravagant luxuries, but did not God create people in his image? Are not human forms and faces, in themselves, beautiful? When something beautiful and valuable is entrusted to us ought we not to keep it so by proper care? To come to the point, then, we ought not only to keep ourselves decently neat and clean, but so far as we have time and means we ought to do all we can to be beautiful. If we have attractions let us keep them; if we lack let us add what we can, not to aid deception by artificial outsides, but the care that will really make us attractive. Let me whisper a secret: Though I have always known this theoretically it is but lately I have decided it is practically a duty. Beauty or personal attractions, added to moral and mental worth, is desirable-is a power and should be cultivated !

What constitutes beauty? Aside from beauty of expression, which is the result of real worth, it

is desirable to have health, a good developed form, regular features, clear complexion, handsome eyes, and fine hair. Oh! yes, and a couple of rows of clean, white teeth.

We can do much to develop form in a good direction by proper walk, erect attitudes, etc. Our features must remain essentially as created, but thought develops a well-shaped head and forehead, and our eyes of whatever shape and color may beam with intelligence and good-will. The mouth though large may be well-shaped if we are happy and the corners turn up instead of down, while good health will usually insure an agreeable rosy color to lips and cheeks. Our hair can be improved by care; our teeth can be preserved and made beautiful by proper attention, and our complexion can be made over-not by cosmetics but by diets, baths, and the little daily attentions many of us fail to give. Then what prevents us from being personally attractive? Nothing but our own willful neglect.

Finding we can do something to beautify ourselves, what aids do we require? There are so many things advertised—some good—the majority totally bad, that it becomes us to be pretty sure of our helps. I think our editor will pardon me if I mention a few articles my own experience or that of friends has proved of genuine value.

First, the teeth, because they are objects of beauty, or of digust, as well as sources of pain and extreme anguish. There is no doubt but that they should be brushed every day to remove particles of food that cause decay. I have lately tried the Ideal Felt Tooth Polisher so extensively advertised and can recommend it as desirable. There is a bone handle with a metal holder and a box of the felt polishers to insert for use. Each polisher will last about ten days. They really do polish and do not irritate the gums as do bristles. The same company furnish a combination toothpick, which I mean to try, only 10 cts. a package. The brush and polishers are 30 cts. The polishers are powdered, ready for use, but one may add any preparation he chooses.

Whether you use bristles or felt, do not use soap, but get the well-known and reliable Sozodont, or send to E. W. Hoyt, of Lowell, Mass., for his Rubifoam, only 25 cents a bottle. We don't want to put soap in our mouths, as the nicest looking may be made of putrid fats. We must have some soap for our skin, though a very little will do, and in my ex-

perience, I find the best for my irritable skin is Mrs. Ayre's Recamier Soap. It is absolutely soothing and healing. Her preparations for the skin are very desirable for they are effective and entirely harmless. My hands chap easily and get into a wretched condition in cold weather but the Recamier cream cures them up quickly and makes them soft and white. The lotion is a skin healer and the balm is a beautifier. One secret of Mrs. Ayre's success is that she insists on a compliance with laws of health; for her remedies, she says, are to aid nature and not to whitewash. She has also a good aid to digestion.

I believe everybody calls Colgate's Soap and Perfumes exquisite, and certainly they are agreeable to our sense of pleasure in fragrance.

As to the hair—it needs care in brushing and combing. A great many things are advertised as preventives of hair falling out, etc. It happens that in that one regard I need nothing to aid nature so I depend on other's experience. Cold tea is good to wash the head occasionally. Some are pleased with the use of the yolk of an egg well rubbed in and afterwards washed. It is said to make the hair glossy. A removal of dandruff and less use of hair pins in frizzing will have a marked effect for good. As to advertised tonics use as little as possible. Borax water is cleansing, purifying and strengthening but it should be rinsed off.

Shall we try to make ourselves personally attractive not only to strangers but to our husbands and families. Children adore "a pretty mamma," and there is no husband worth the name who does not appreciate the appearance of his own wife.—Mrs. F. A. Reynolds, Willits, Montana.

ARE YOUR CLOSETS WELL VENTILATED?

THERE is nothing so handy in a house as an abundance of large roomy closets; but because they are handy and extremely useful they are apt to be abused. There are many things which, as a matter of course, are always put into a closet, i. e., a closet adjoining, or closely connected with a living or sleeping room. Of such are all soiled under garments, and wash clothes, which should be put into a large bag for the purpose, or a roomy basket, and then placed in the washroom or some other well-aired room at some distance from the family. Having thus exploded one of the fertile sources of bad odors in closets, the next point is

to see that the closets are properly ventilated. It matters not how clean the clothing in the closets may be, if there is no ventilation that clothing is not what it should be. Any garments after being worn for a while will absorb more or less of the exhalations which arise from the body, and thus contain an amount of foreign-it may be hurtfulmatter which free circulation of pure air can soon recover; but if this is excluded as in many close closets, the effluvia increases, and all the clothes, closets and adjoining rooms, in time possess an odor that any accurate sense of smell will readily detect. Every closet in daily use in which the night clothes are hung by day and the day clothing by night, should have an airing as well as the bed. If the closet can be large enough to admit of a window-as it is in some cases-an ample provision for sunlight and a circulation of pure air is provided in the window, which should be left open for a short time each day. In the cases of small closets a ventilator could be put over the door or even in it. In many cases such precautions for pure clothing is not practicable, and the next best thing is to see that the door of the closet is left open for half an hour or so each day, at that time when the windows are thrown up and the large room purified with fresh air from out doors. In this way, first by keeping out clothes intended for the wash, and second, daily changing the air, the closets may be comparatively pure. - Selected.

POND MUD AS A DIARRHŒA BREEDER.

A FACT is related in the report of the State Board of Health, of Connecticut, that illustrates the effect upon health of exposing the bottom of a pond. A small village in the town of Union was situated close upon the borders of a pond that was drawn down entirely during the summer and fall, for several years in succession, in order to get the water from another pond lying above it and communicating with it. When the pond was first drawn down, while the decaying materials at its bottom, which probably extend over twenty or thirty acres at least, were drying, offensive odors were complained of, and it was stated that they caused nausea and vomiting; and diarrhoeal and dysenteric troubles were stated to be unusually frequent. But no cases of malaria were reported as having originated in any part of the town.

THE salt of money is almsgiving.

THEORY OF A COLD.

IT is a generally accepted theory that a cold is the result of exposure in some form or another. People are generally able to trace a cold, in a manner satisfactory to themselves at least, to some unusual contact, to exposure of some kind, and seek no other explanation. By a little thought it will readily be seen how great a fallacy this conclusion is, except that exposure usually culminates the conditions of disease which already exist in the system, in an effort of nature to throw them off. Remove the causes and a cold will be impossible. Bad food, or food of the best kinds eaten in excess of the needs of the system, makes bad or impure blood, and bad air fails to purify the blood, so that the diseased and poisoned conditions of the system continue to accumulate until the vital tides of life are choked and a congestion of some of the secretory or excretory organs is the result. This is what is termed a cold, and usually culminates by coming in contact with a draft of air or exposure of some part of the body. Too much clothing is no protection against it, but rather a detriment. The clothing should be properly distributed over the body so that the extremities are protected, and of such character that the person is not much affected by sudden changes of temperature. Soft woolens are the best non-conductors, are light and the most effective for the purpose.

A cold is also a fever; or a process of elimination. Why then should we not encourage it by having a more constant and fuller contact with the pure oxygen of the atmosphere, by the lungs and the whole surface of the body, or better methods in the manner and habits of every-day life? Better methods in our living, that the disturbing causes may be removed. We are constantly tempted to indulge in practices which violate every law in nature's decalogue and then lay the blame on the outside influence which arouses her effort to throw it off.—Selected.

BEEF FOR HOT BLOOD.

The idea is beginning to gain vogue with others who have never considered the subject in the light that the vegetarians do, that our diet is altogether too strong in the matter of the more heating meats; so much is this the case that it is maintained that mild wines do really less harm to the general system than flesh that is loaded with red blood. This

strong meat, such, for instance, as beef, the eating of which, it is said, frequently generates too hot blood, gives us our reckless activity, our intensity, and many of our new diseases. White meats, vegetables, oils and fruits, in long-tried use among the ancients, are in this view a safer and wholesomer diet than that which we have so long considered the best to be had.—Harper's Bazar.

THE TRAPPIST MONKS.

THE Trappists rise every morning at 2 o'clock, and remain in prayer at chapel until 6. They go to work then-mostly in the fields-until 12, when they partake of a frugal meal, followed by a siesta of an hour. They return to work after that, and retire to rest at 8. They are not allowed to speak to each other; anything they have to communicate to their brethren has to be conveyed through their superior, the only person whom they may address. Their food consists of bread, fruit and roots, washed down with pure water; those on the sick list may have an egg in addition. Meat or fish they never eat, nor do they ever drink wine, yet notwithstanding this strict diet, these monks look strong and healthy and perform the hardest work. -Selected.

Soap, as a detergent for washing purposes, is of great antiquity. In the ruins of Pompeii a complete soap manufactory was found, and the utensils and some soap were in a tolerable state of preservation. The first distinct mention of soap now extant is by Pliny, who speaks of it as the invention of the Gauls. The Gallic soap, eighteen centuries back, was prepared from fat and wood ashes, particularly the ashes from beechwood, this wood being very common in France as well as in England. Soap is spoken of by writers from the second century down, but the Saracens were the first people to bring it into general use as an external cleansing medium.—Selected.

From the London Lancet we learn that many children of poor parents in Vienna simply receive by way of breakfast nothing more than a glass of spirits, and often appear in the school-room drunk. The Lancet sensibly recommends the introduction of cheap bread, the inculcation of temperance truth, and a more sympathetic interest on the part of the rich in the trials of the poor, as better remedial agents than any legislation.

Disease and its Gauses.

USES OF ADVERSITY.

If none were sick and none were sad, What service could we render? I think if we were always glad We scarcely could be tender.

Did our beloved never need
Our patient ministrations,
Earth would grow cold and miss indeed
Its constant consolations.

If sorrow never claimed the heart
And every wish were granted,
Patience would die and hope depart;
Life would be disenchanted.

-Sacramento Sunday Union.

A LESSON FOR THE TIMES.

BY MRS. E. G. WHITE.

THERE is but one standard of right in the world, and that is God's standard. We are all virtually under equal obligations to meet that high standard; and God holds us alike responsible to him. Society may set up artificial differences and regulations, but the fixed fact remains the same. Men require women to live up to a standard of purity almost equal with that of the angels, while they erect a standard of quite a different character for themselves.

Young men sit down to wine suppers, freely indulge their appetites for intoxicating drink and tobacco, become reckless in their deportment, vulgar and turbulent in their conversation, and frequently seek low and debased society, excusing themselves under the plea of custom and the ways of the world. But should young ladies follow such a course of dissipation they would be utterly and forever disgraced in the eyes of the whole world.

But it is urged, "Oh, young men must sow their wild oats." This is a terrible fallacy. It should be borne in mind that "whatsoever a man soweth, that shall he also reap." Young men who have plunged into dissipation are already reaping what they have sown. They do not have to wait for mature years to come before they realize that they must pay the penalty for every violation of the moral law. Every day we see instances of young men who are debilitated in body and mind, whose

morals are debased, and who are prematurely dying because they have transgressed nature's laws, and fallen victims to the temptations which the fashions of the world hold out to them.

The law of nature is the law of God; and the penalty of its transgression is visited alike upon men and women. It is not customary to hold fathers equally responsible with mothers for the training of their children. How many sermons are preached, and how much is written concerning the mother's responsibility; while the father is apparently-relieved from all the burden. We would appeal to fathers, in the hope of arousing them to a sense of their God-given responsibility in regard to their children. We would say, guard yourselves from cherishing any pernicious habit, which, by its influence, might have a direct or indirect tendency to weaken the moral susceptibilities of your children.

While the mother may be doing her whole duty in educating her children to purity of life, the father too frequently, by his own example, may be opening the door of temptation to his children. His indulgence in wine and tobacco, and other sinful practices, lessen the hideousness of sin in their eyes. In keeping with this immoral course, is the talk that many fathers indulge in before their children, to the effect that the law of God is no longer binding upon man; that it was only for the government of the Israelites; or that it was abrogated at the death of Christ. Intelligent youth are not long in comprehending that where there is no law there is no transgression. The whole fear of breaking the commandments of God grows weaker and weaker in their minds, until the moral perceptions, which have been carefully trained by the mother, grow to be in harmony with the father's sentiments.

If men strictly and conscientiously kept the law of God, there would be no drunkards, no tobacco inebriates, no distress, penury and crime. Liquor saloons would be closed for want of patronage, and nine-tenths of all the misery existing in the world would come to an end. Young men would walk forth with erect and noble forms, free and elastic step, clear eye, and healthy complexions.

When ministers, from their pulpits, make loyalty to the law of God disreputable; when they join with the world in making it unpopular, when these teachers of the people indulge in the social glass, and the defiling narcotic, tobacco,—what depth of vice may not be expected from the youth of this generation? The newspaper records of the day, with their annals of crime, murders, and suicides, give the answer, and point out the terrible dangers of the time.

The signs exist to-day which prophecy predicted would characterize the state of society just prior to the second coming of Christ. You have heard much in regard to the authority and sanctity of the law of ten commandments. God is the author of that law, which is the foundation of his government in Heaven and on earth. All enlightened nations have based their laws upon this grand foundation of all law; yet the legislators and ministers, who are recognized as the leaders and teachers of the people, live in open violation of the principles inculcated in these holy statutes.

Many ministers preach Christ from the pulpit, and then do not hesitate to benumb their senses by wine tippling, or even indulging in brandy and other liquors. The Christian standard says, "Touch not; taste not; handle not;" and the laws of our physical being repeat the solemn injunction with emphasis. It is the duty of every Christian minister to lay this truth plainly before his people, teaching it both by precept and example.

The Bible nowhere teaches the use of intoxicating wine, either as a beverage or as a symbol of the blood of Christ. We appeal to the natural reason whether the blood of Christ is better represented by the pure juice of the grape in its natural state, or after it has been converted into a fermented and intoxicating wine. We maintain that the former is the only symbol properly representing the sacred blood of Christ and a symbol established by himself; and we urge that the latter should never be placed upon the Lord's table.

It has been declared by some that Christ favored the moderate use of fermented wine, in witness whereof they refer to his miracle of changing water into wine. But we protest that Christ never made intoxicating wine; such an act would have been contrary to all the teachings and example of his life. He was the angel who led the children of Israel in the wilderness. He spoke the law from Sinai. He prohibited those who officiated in holy office from using wine; and his reasons for so doing are explicit; viz., that they may have clear judgment to discern between the common and the sacred, to do justice to the fatherless and the widows, to teach his statutes and laws

to Israel, and to accept no bribes. Those who abolish the law of God for the sake of getting rid of the Sabbath, do away with the most solemn restrictions against using liquor.

He who appeared to the wife of Manoah, and told her that she should bear a son, and described his character for strength, and charged her to drink no wine or strong drink, for the child should be a Nazarite from his birth; he who appeared to Zacharias, and gave him directions regarding the unborn John, charging him that the child should drink no wine or strong drink, was not one who would make intoxicating wine and give it to the people on a wedding occasion. The wine which Christ manufactured from water by a miracle of his power, was the pure juice of the grape. And the object of the Saviour, in this miracle, was to bring the perverted taste of the Governor of the feast to a healthy condition, by inducing him to acknowledge that this wine was superior in quality to any he had before tasted.

There are those in our day, who, in order to excuse their own sins; follow the example of the Jews, and charge Christ with being a Sabbath-breaker and wine-bibber, notwithstanding he declared that he kept his Father's commandments, and his whole life was an example of self-denial. Had he been a wine-bibber he could not have been a perfect offering, and the virtue of his blood would have been of no avail. But this charge, as well as the former, is best refuted by the character and teachings of Christ himself.

The Christian church is pronounced to be the salt of the earth, the light of the world. Can we apply this to the churches of to-day, many of whose members are using, not only the defiling narcotic, tobacco, but intoxicating wine, and spirituous liquors, and are placing the wine-cup to their neighbor's lips? The church of Christ should be a school in which the inexperienced youth should be educated to control their appetites from a moral and religious standpoint. They should here be taught how unsafe it is to tamper with temptation, to dally with sin; that there is no such thing as being a moderate and temperate drinker; that the path of the tippler is ever downward. They should be exhorted to "look not upon the wine when it is red," which "at the last biteth like a serpent and stingeth like an adder."

LET your moderation be known to all.

TUBERCULOSIS, ITS CONTAGIOUS NATURE.

SINCE Koch announced to the medical world the discovery of the bacillus tuberculosis, the question as to the contagiousness of phthisis (pulmonary consumption) has been thoroughly argued pro and con, but all the time the profession has been drifting toward the conclusion that it is contagious. Still there are those who insist that the theory is not yet proven, and that the bacillus may be the result and not the cause of the malady. The latest, most conclusive and authoritative opinion upon this much-vexed question issues from Drs. Prudden, Biggs, and Loomis, pathologists to the New York City Board of Health.

These gentlemen were requested some time ago to prepare for general circulation a statement as to the contagiousness or non-contagiousness of tuberculosis. In the report they assert that it has been proven beyond a doubt that the tubercle bacillus is the cause and the only cause of the disease; that the observations of Koch have been so often and so completely proven that to-day they stand as one of the most absolutely demonstrated facts in medicine. These declarations from so eminent a source will have an influence upon American medicine at least, and will tend to place this question in the category of "settled." The conclusion is equally as unassailable as that regarding the etiology of typhoid fever, and its influences upon medicine will be more far-reaching.

The two most serious problems pertaining to disease, ever confronting the profession, are causation and treatment. The pathology, the diagnosis, the clinical history, and other features are more easily arrived at, but causes are too often mysterious and remedies disappointing. Solve either and a great victory is gained. If it is a fact, -and evidence now strongly if not positively indicates it,-that the origin of tuberculosis is revealed, the profession herewith makes the longest step forward it has made in a century. This disease, which, by its ceaseless, relentless march into the ranks of the human family, demands every year more victims than combined wars and pestilence, now yields, partially at least, to our power. We can, to an extent, prevent if we can not cure. We can limit if we can not eradicate. By the discovery of this minute yet great causative agent, we begin to understand how the unfortunate consumptive proves a source of contamination to those around him.

Each mass of expectorated material comes impregnated with the dangerous germs, which, becoming dry, float harmlessly about until lodgment is found in some congenial soil. Hospitals, asylums, prisons, private houses, public health resorts, all places where consumptives are or have been, become centers of contamination. We will soon learn to fear the tubercle of consumption as we now fear the pustule of small-pox.

But, it should be remembered, that the breath of tubercular patients and the moist sputum are not elements of danger. It is the dried, pulverized expectoration that is to be avoided. By destroying all discharges from the body immediately upon their removal, the greatest source of infection be tween man and man is removed, although it is certain that the disease may be contracted from the milk and meat of tuberculous animals. According to this view, consumption becomes a distinctly preventable disease. A sacred duty devolves upon physicians to instruct the people as to the means and methods of prevention.—Pacific Medical Journal.

DIET AND DISEASE.

According to Dr. J. Leslie Foley, diet, at least within the last decade, has become an element of considerable weight in reference to the etiology and treatment of disease. So much so that the scale of medical opinion has shot far up in the high And well it might. For, says this writer, food is a great factor in health and disease. It has made and unmade nations. The energy which food develops in forming muscle, a healthy brain, etc., expends itself equally in deranging or disorganizing a stomach, liver, or kidney. As there is no portion of the body but what feels its beneficial influence, so there is no part which may not be visited by its dire effects. But, as one enters a restaurant, casts the eye over the inviting bill of fare, observes the coaxing dishes, smells the salivaexciting odors, it is sad to think that co-mingling with the jovial conversation and good-natured smiles of the bon vivants is the harassing thought, as we trace the food from the first digestive process, prehension, to the final act of defecation, with all the intervening ones, what evil it may do, are we sowing the seeds of a dyspepsia, or is there, perhaps, looming in the distance, a Bright's disease, skin disease, etc.? The author also says a moderate

meat diet is good, but there is a tendency to take it in excess, far more meat being consumed than is of benefit. This applies more especially to the well-to-do class, meat being a luxury with the poor.—The Canada Medical Record.

CARE OF THE EAR.

In many cases foreign substances may be removed from the ear by fastening lint or a small linen rag to a stick or rod, moistening it with liquid glue or stiff mucilage, and inserting it in the ear so it will come in contact with the intruding substance, and, after a short time, gently withdrawing it and the attached substance. Insects in the ear have been removed by placing the head on a table with the ear to be relieved uppermost, and dropping into it sweet oil till the surface is distinctly visible. In a short time any living insect within will come to the surface, when a little skill will suffice to remove it. Insects breathe through pores or spiracles in various parts of the body, and are suffocated when the spiracles are filled with oil. Hence, in their discomfort they seek the surface for air.

A DOCTOR, prescribing for a baby, was sadly vexed by the officiousness of the child's feminine relatives, who tried all sorts of home remedies for it, saying in apology: "We thought if they did no good they would do no harm, doctor."

At the end of his patience, the doctor one morning called for a bowl, a spoon and some fresh butter, and began stirring the latter round and round with an air of grave importance. The ladies gathered about him inquisitively, but he gave them no attention until at last, curiosity becoming rampant, they cried in chorus: "Oh, doctor, do tell us what you are going to do with the butter?"

Here was his chance. Facing them solemnly he said: "I am going to grease the baby's elbow with it. It may not do any good, but it won't do any harm!"—London Tid-Bits.

UNTIL men are ready to be just when justice is opposed to their own interests, until they are honest when honesty does not seem to be politic, they are not really just, not really honest. This alone is perfect evidence of sincerity in those who advocate a cause or contend for a truth. Then, amid outward destruction and trial, their is inward peace.

SNUFF-TAKING AMONG THE ZULUS.

On the snuff-taking habit among the Zulus, Rev. Josiah Taylor, who has been a missionary in Africa over thirty years, gives the following account:—

"The Zulus make their snuff of tobacco, dry aloes, and ashes, grinding it very fine. It is exceedingly pungent, causing the tears to flow profusely down their cheeks, which they wipe off with a snuff-spoon made of bone or horn, this being their only handkerchief. Old and young of both sexes carry snuff-boxes made of small calabashes tied to a girdle around the waist. Sometimes diminutive reeds full of snuff are inserted in holes in their ears.

"When they meet, after the usual salutation, 'I see you, friend,' the snuff is passed round, each one taking a good pinch. It is a nasty habit, and their nostrils after this operation are generally covered with filth; and it is also injurious to health.

"Zulu men, especially young men, are becoming fearfully addicted to smoking; and I perceive, after thirty-two years' observation, that it makes serious inroads on their constitution. This is one of the unpleasant results of European civilization.

"I am glad to say that so far as my knowledge extends, no American Missionary in South Africa uses tobacco in any form. We shall erelong have anti-tobacco societies in all our missionary stations and shall fight against this vile habit till we lay our armor down."

The following are the heights of the principal monuments, domes, etc., in the world; St. Antoine column at Rome, 135 feet; principal tower of the Smithsonian Institute, Washington, 145; Trajan's column at Rome, 145; Napeleon's column at Paris 150; Washington monument at Baltimore, 180; the great obelisk at Thebes, 200; Bunker Hill Monument at Boston, 223; column of Delhi, 262; Trinity church steeple at New York, 264; the contemplated new dome of the capitol, 300; dome of St. Paul's Cathedral, London, 320; tower of Manlins, 350; tower of the cathedral at Strasburg, 460; dome of St. Peter's Cathedral, Rome, 465; Great Pyramid, 481.

A PURPOSE is always a companion. An earnest purpose is the closest of companions. To fulfill duties is more than to enjoy pleasures—it carries its own reward.—W. R. Alger.

Temperance.

COUNSEL.

WOULDST thou secure the highest health? No flesh then eat—teetotal be. For health is greater far than wealth— Thus tendeth life to purity.

Then richest joy will sure be thine, Restraining self and appetite. The taking of His will for thine Shall make thy life and end be bright.

THE POISON HABIT.

ALL poison habits are progressive. Every time an individual indulges in the use of a stimulant, whether opium, alcohol, cocaine, quinine, etc., the habit gains strength. The dose must be repeated more frequently and increased in quantity. The popular language in which a habit is said to be "growing upon" a person is very expressive. In a very short time the system becomes so habituated to the use of these poisons that any attempt to withdraw them is followed by a tremendous commotion. Have you ever seen the man or woman who is accustomed to drink tea or coffee every morning, placed in circumstances where it was impossible to obtain the accustomed beverage? The physical and mental nature of the person is completely changed. Languid, stupid, sick, irritable, the system will not be satisfied until it has received its accustomed stimulant. And the tea and coffee habit is the mildest to overcome. The poisonous principle of tea is theine, a strong narcotic poison in its concentrated form. Deprive the tea leaves of this poison and no one would drink tea. It would be like so much steeped blades of grass. The poisonous principle of coffee is of much the same nature. But the tea and coffee habits are the mildest of the list.

Thousands, from motives of economy or poverty, or because they believe the habit injurious, will cease the use of these stimulants without much discomfort. But few, however, who have been habit-uated to the use of tea or coffee for years, know how much disturbance is produced in the system when the habit is abandoned—till they have tried it.

But neither economy nor self-preservation will induce the victim of the opium habit to abandon it voluntarily. The same is true in a less degree of the alcohol and tobacco habits. So firmly fixed does the alcohol habit become, says Dr. Rush, that "if a man were sent to hell and kept there for a thousand years as a punishment for drunkenness, and then returned, his first cry would be, 'Give me rum!'"

Convicts have been imprisoned for years, and their first act on regaining their liberty was to get drunk. Physicians, otherwise high-minded and honorable, have wrecked their lives, abandoned an honorable and lucrative practice, and rendered their families miserable because they would not abandon the cocaine or morphine habit.

"People sometimes wonder," says Dr. Jennings, "why such and such men, possessing great intellectual power and firmness of character in other respects, cannot drink moderately and not give themselves up to drunkenness. They become drunkards by law-fixed, immutable law. Let a man with a constitution as perfect as Adam's, undertake to drink alcohol, moderately and perseveringly, with all the caution and deliberate determination that he can command, and if he could live long enough, he would just as certainly become a drunkard-get to a point where he could not refrain from drinking to excess-as he would go over Niagara Falls when placed in a canoe in the river above the falls and left to the natural operation of the current. And proportionately as he descended the stream would his alcoholic attraction for it increase, so that he would find it more and more difficult to get ashore until he reached a point where escape was impossible."

Another point in the poison habit may be noted: the tendency to change a mild stimulant for a stronger. The ranks of opium eaters are recruited from the veteran coffee drinkers.

There is no drug known to science or quackery that will cure the poison habit. An opium or alcohol cure whether administered by a regular physician or the patent medicine vender, is a fraud. As disease cannot be cured by the administration of a poison, neither can the poison habit be overcome by the use of another poison.

In both cases there is but one straight and narrow road to health: obedience to physiological law. The poison habit can only be overcome by complete abandonment of all poisons. Substituting a milder poison has been tried and dismally failed. Substitution will not do. Sin cannot be cast out by letting in Satan. They must all go, big and

little devils alike. The idea of substitution has dominated men's minds for ages, but it must go. No permanent good ever yet resulted (or ever will result) from an evil action, no matter how small or slight it may appear.—H. C. Stickney, M. D., in St. Louis Magazine.

HOW OLD SOL WAS MADE TO SEE HIMSELF.

THERE was not a more hopeless, helpless drunkard in town than old Sol Russell. Everybody had quite given him up in despair; in fact, he had quite given himself up.

"No use to try; I can't help it," he would say when people urged him to give up the drink which had brought not only Sol, but all his family, down to the lowest depths of misery and poverty. And, to do him justice, he really thought that he was quite helpless in the matter.

Alfred Pierson was out in the garden one day, photographing the house from various points with the camera that had been his choicest Christmas gift. He had become quite an expert amateur photographer by this time, and was always on the lookout for good subjects for pictures.

Suddenly his lips pursed up, and he gave a long, low whistle. He put his camera in a good position, and in another moment the sun's bright rays were indelibly imprinting upon the glass, the saddest, most pathetic little picture one could see in real life.

Leaning against the fence just across the street was old Sol, helplessly drunk, as usual, and wavering perilously whenever he let go of the friendly fence. Clinging to one of his arms, and trying with all her childish strength to support and guide her drunken father, was poor little Sue, shivering with the cold wind that penetrated her tattered garments, and begging pitifully in a voice broken with sobs.—

"Please come home, father. Oh! please do try to come home before the boys find you."

Her tearful entreaties did not seem to penetrate the stupefied intelligence of the drunkard, and he held firmly to the fence without making any effort to go home. So at last little Sue gave up her efforts in despair, and stood quietly beside him, holding his arm up as if she could keep him from falling.

She might have been such a pretty little girl if he had been drinking! she had been the child of loving, careful parents; but now she was so sadly neglected that you forgot would not give him work.

to notice the soft blue eyes and long, golden hair that fell in a tangled mass over her shoulders, in your sympathy for the distress that had stained her face with tears, and the ragged, dirty garments that so poorly protected her from the cold.

"Poor little Sue!" thought Alfred, as the child stood beside her father in touching helplessness. He knew what would happen next as well as Sue. Presently old Sol would lose his hold of the fence, and would fall in the snow and mud, to become the helpless victim of any of the mischievous boys who might come that way.

"I say, Sue, what's the matter? Can't you get him home?" he called.

"No; he won't go with me, and I'm so afraid the boys will get after him," Sue answered sadly.

"I'll lend you a hand then," and giving the stupid man a rough shake, and holding him firmly on one side while little Sue clung to his other arm, Alfred helped the drunken man reel unsteadily home to the miserable little cabin at the end of the street, where the sick wife was anxiously awaiting him.

A few days later, in one of his rarely sober moods, Sol started out to look for work; and Alfred's mother, anxious to encourage him in his spasmodic industry, gave him some wood to cut. Sol worked steadily for a time, then, with a sigh of weariness, sat down on the porch to rest. Alfred's window, just above his head was open, and a mischievous little breeze caught up a photograph that was lying there, and dropped it right at Sol's feet. He took it up, and looked at it curiously, not recognizing it at first.

"Poor little gal!" he soliloquized; then looked at the stupid face of the drunken father, and with sudden recognition saw that it was himself and little Sue.

Great tears, not of maudlin emotion, but of real penitence and remorse, filled his eyes, and rolled down his cheeks as he looked at the sad picture.

And that poor miserable drunkard was himself, that tearful, ragged child his little Sue, the daughter he had been so proud of once! It was his own work, this sorrowful picture. He looked at the bloated, stupid face of the drunkard with a shudder of disgust. So that was how he looked when he had been drinking! No wonder people did not want to have anything to do with him, and would not give him work.

Yet he had not always been a drunkard. He could look back and remember when he had a comfortable home, with a happy wife and rosycheeked, neatly-clad children. He might have had it now, if he had not bartered away his manhood for the vile liquor which had dragged him down so low. Could he win all these things back again? There must have been a faint spark of manhood hidden away somewhere in that wretched drunkard's heart, for, springing to his feet, he cried aloud with sudden determination,—

"God helping me, I will!"

It was a hard battle that Sol had to win, but he fought it nobly. Friends came to give him a strong helping hand when they saw that he was trying to free himself from his degrading habit, and he never forgot to entreat divine help in conquering his enemy.

He won at last, and now all that would remind you of old times in the neat comfortable home, where smiling little Sue always greets her father with a loving welcome, is a little picture of a drunkard and his child—the picture which first made old Sol see himself as others saw him.—

Minnie E. Kenney.

MR. DEPEW'S CIGAR.

I was a confirmed smoker, smoking twenty cigars a day, up to about a dozen years ago, when I gave up the habit. I now do not use tobacco. Twelve or fifteen years ago I found myself suffering from indigestion, with wakeful fits at night, nervousness, and inability to submit to such mental strain. I was in the city of Albany one day and bought a twenty-cent Partoga. I was walking up Broadway, and at the corner of State Street I took the cigar out of my mouth and looked at it, I had smoked about an inch of it. A thought struck me, I had been reading a German savant's book on the unhealthfulness of the use of tobacco. I looked at my cigar and said: "You are responsible for this mischief." I threw that Partoga into the gutter and resolved not to smoke again. For six months I suffered the torments of the damned. I wanted to smoke, but resolutely refused.

My appetite meanwhile was improving, my sleep was growing sounder, and I could do more work. I did not smoke up to two or three years ago. After I had worked for seventeen hours continuously one day, late at night I thought I would try

a cigar as a soothing influence. I lit a cigar. It was delicious. I enjoyed the aroma of the smoke and the pleasure of the cigar more than I can say. The next day I smoked four cigars and the next two. I found the use of tobacco was affecting my system and I stopped it entirely, and have not commenced again and probably never shall.—Chauncey M. Depew, in Albany Journal.

HOW BREWERIES HELP A CITY.

THE Milwaukee Sentinel shows how the manufacture of beer has benefited that city as follows:

"At least six new school buildings are immediately necessary, but because there are so many saloons the taxpayers must support police and courts and jails and charitable institutions with their money. There are hundreds of children of school age in the city who are denied school privileges because we cannot afford to put up more school buildings."

Referring to the 3,000 saloons it says: "They render it necessary to sustain a large police force to preserve order in this city. They compel the city and the country to support courts and all the machinery of the law to take care of offenders whose offenses grow out of liquor. They make us support a House of Correction for the seclusion of drunkards and criminals who have been developed by the saloons, at an enormous cost. They lay upon the city and county the burden of supporting almshouses for the care of persons reduced to pauperism by drunkenness; hospitals for the medical treatment of chronic invalids whose disease can be traced to whisky; insane asylums toward the filling of which intemperance contributes a large share. The taxpayers bear the greater part of these burdens rendered necessary by saloons."

A CHICAGO writer tells of a woman who would not call the minister of her church to her deathbed. "Every time during her illness that he who was her pastor entered the room to bring the consolations of the blessed gospel of love, peace, and purity, there came also with him the strong and unmistakable fumes of tobacco. To whisper into her dying ear the words of Jesus the Saviour on the breath of tobacco was more than the dying saint could complacently bear. The words might reach the ear, and so would the breath the nostrils."

ALCOHOL IN EVERYTHING.

We are told by some mighty knowing people, in answer to our contention as to the nature and effects of alcohol, that there is alcohol in everything; as if that negatived what we say about it, and was a sufficient excuse and justification for imbibling it in wine, beer, or brandy. If, say these sapient persons, alcohol comes out of sugar, it must be in it, or it would not come out! So it may be said of vinegar, with a slight difference in taste and effect! How greatly scandalized would be some dignified matron presiding over the household properties, if told that she was in the shocking habit of putting rum in her tea; and as Mrs Lees (wife of Dr. Lees) put it long ago.—

"If, in sugar, rum there be; Should Bishops put it in their tea?"

But, suppose we concede that sugar contains alcohol—that alcohol may be said to be a form of
sugar,—why, then, does it paralyze the nerves,
disturb the brain, confuse the eyes, and paint the
nose? Do men go in search of and lurk about
sugar casks as they do about drink shops, growing
into an overmastering appetite—a growing craving
—a craving for more and more? Do men for
"sugar" barter their character, strip their homes
of every comfort, starve their families, and give
themselves up to every imaginable folly, crime,
and misery? We trow not.

If people could be consistent, and confine themselves to sugar because of the alcohol it is alleged to contain, in lollypops, or abundant treacle, if it so please them, then our agitation would be at an end. The temperance movement would sweetly expire.—W. A. Palliser, in British Temperance Advocate.

TOTAL ABSTINENCE AND HEALTH.

THE British Medical Journal, in a late issue, gives a summary of the annual report of the "United Kingdom Temperance and General Provident Association," from which it appears that of the two classes of members in this association,—total abstainers and moderate drinkers,—the total abstainers outlived their expectancy by twenty-six per cent., and were twenty-four per cent. ahead of the moderate drinkers.—Ex.

BLESSED are the pure in heart. LIVE right in order to live well.

PAPER FOR CIGARETTE MAKING.

"There are three kinds of paper used in making cigarettes," explained a manufacturer of these articles. "They are made from cotton and linen rags, and rice straw. Cotton paper is made chiefly in Trieste, Austria, and the linen and rice paper in Paris. The first, manufactured from the filthy scrappings of the rag pickers, is bought in large quantities by the manufacturers who turn it into pulp and subject it to a bleaching process to make it presentable.

"The lime and other substances used in bleaching have a very harmful influence upon the membranes of the throat and nose. Cotton paper is so cheap that 1,000 cigarettes can be wrapped at a cost of only two cents. Rice paper is rather expensive. Tobacconized paper is manufactured. It is a common paper, saturated with tobacco in such a way as to imitate the veins of the tobacco leaf very neatly. It is used in making tobacco cigarettes. Arsenical preparations are also used in bleaching cigarette papers, and oil of creosote is produced naturally as a result of combustion. This is very injurious to the throat and lungs, and is said to accelerate the development of consumption in anyone predisposed to the disease.-Mail and Express.

ORIGIN OF THE POUND WEIGHT.—It is said that the old English pound was originally derived from the weight of 7,680 grains of wheat, all taken from the middle of the ear and dried. Then came the Troy pound. Henry VIII. introduced the avoirdupois pound, containing 7,000 grains. At one time the pound weight of silver was really a pound of silver divided into 20 shillings. The word "pound" has gradually become separated from its original meaning, and is now used in several different senses, as applied to money as well as weights.

One fifth of all deaths are due to consumption. Errors of diet produce those conditions of the system which facilitate the development of consumption. A diet of white bread, butter, tea, and pickles, prepares the system for the easy invasion of consumption as well as other diseases.

ALWAYS speak truthfully to your children. THE more schools, the fewer jails.

Miscellaneous.

COME YE APART AND REST AWHILE.

BY FANNIE BOLTON.

SOMETIMES, the Master speaks to us, as oft To his disciples when they followed him, "Come ye apart with me;" and suddenly The work drops from our fingers, and the house Is very still. Some sweet one lies asleep. We go reluctantly and sad, for by the way A little grave is mounded, and we weep. Then, as the silence deepens, soft we hear, "Lo, I am with you always, even here."

It is not always death that makes the space When we can go to be apart with him. Sometimes he speaks in time of toil and care When we are weary, and he takes our work From our worn fingers, and in some dark room, With curtained pane, he folds our hands to rest. His touch may seem like pain at first, but hush! Through weary hours his tenderness distills, And in our souls within, we feel it fall, While soft he speaks, "I bear your sicknesses, I know your woes," and so, again, we have A fellowship with him we knew not once.

"Come ye apart and rest." He spake it once
And it is always so. To be with him
Is only rest; for lo! he says, "Come unto me
All ye that labor, and are heavy laden, I
Will give you rest," and so we go,
Leaving the busy cares. O hush your heart
And listen. Oft his voice will bid you come
Apart, and in thy closet, all alone with him,
His hands shall soothe thy care, his love shall ease;
And then a sweet communing flow from him
To thee, and back from thee to him.
You'll learn of him the greatness of his might,
And yet, withal, the gentleness he sheds.

And sometimes 'tis to dark Gethsemane He leads us with him. But it is to know Some depth his soul hath lured us to, to see He was exceeding sorrowful for us, and still Sorrows exceedingly with us; for lo! Touched with the pang of our infirmities, He weeps with us. And when to Calvary We go apart with him, we know he went Alone that road, alone, alone with woe Unspeakable. No angel, friend, or help Was his on that dark hill; for there he cried, "My God, my God, hast thou forsaken me!"

O soon his voice will bid us come apart To be with him forever, in the great days Of everlasting joy at his right hand. Made like to him, we'll have a fellowship Of joy with him. With him we'll be apart Through circles of delight; for suffering with him, So it will be that we shall reign with him In love and bliss and glory evermore,

WHAT SHALL WE EAT?

BY M. G. KELLOGG, M. D.

In considering the question whether a vegetarian or a flesh diet is more conducive to the health of human beings it may be well for us to notice the changes which take place in the food as it is transformed into living tissues; and the changes that take place in the tissues of living beings in the performance of their vital actions. Every activity of living beings, whether it be of nerve or muscle tissue, is performed only at the expense of vitality in some of the cells composing those tissues. Cells are constantly breaking down, becoming waste and effete matter. This breaking down of cells is constantly taking place in every part of every vital organism. It is this waste that causes the demand for food. To supply this demand the digestive apparatus is provided to prepare the material, and the circulatory apparatus to carry it to all parts where needed. This circulatory provision exists in plants as well as animals, but in plants there is no waste to cell life.

In man and all animals this waste material must of necessity clog the circulatory vessels, and thus prevent the proper circulation of food to all parts where needed, unless some provision be made for eradicating it from the living body. Provision for this work is found in the eliminating or depurating organs. In man these organs consist of the skin, the liver, the kidneys, the mucous membrane of the intestinal canal and the lungs. Some, or all, of these depurating organs, or others equivalent to them, are found to exist in every living being, performing in the animal functions precisely similar to those in man; to wit, excreting from among the living tissues and the blood the broken down material and waste of the body. These broken down tissues, if retained in the body, are not harmful simply as clogs to the circulation, but they are actual poison and contain death-dealing properties which must be speedily eradicated or disease and death follow as the inevitable result of their retention.

As stated in a former article every living animal possesses two forms of life; organic life, which is synonymous with cell life, and animal life, by which is meant the conscious life of the animal, and embraces all those activities which are the results of volition or will. In the preparation of animal food the first act, of course, is to slaughter the animal; that is, deprive it of its animal life or consciousness. In the taking of animal life the first effect upon the animal is to cause a cessation of the circulation; the blood ceases to flow, the waste which takes place in the tissues is no longer removed, but all are retained. These wastes, however, do not cease when the animal life becomes extinct. On the other hand, the cells break down much more rapidly after the death of the animal than previous thereto, and the flesh becomes filled with death-dealing properties. When the animal was living the removal of the most deadly of these poisons, the urea, was performed by the kidneys.

Circulation having ceased with the death of the animal, those elements which go to make up the urea, and which result from broken down tissues, are retained in the flesh. Now, if man partakes of animal flesh he takes into his system, in connection with the flesh, all the broken down tissues which it may contain. Now, as these broken down tissues were so detrimental to the health of the animal, and to man, that special organs of depuration have been provided for their elimination, it is evident that flesh food containing broken down tissues cannot be as wholesome as that food which contains no broken down tissues. Those who subsist largely upon flesh diet are aware of the fact that the flesh of animals is not so palatable, nor so tender, nor so juicy, if used soon after the death of the animal as it is after the animal has been dead for a period of time. The reason for this is, the cell-life does not cease with the animal life. Those who are familiar with the slaughter house have often witnessed the quivering of animal flesh, the twitching of muscles hours after the animal has been slaughtered, dressed, and quartered,

When animal life first ceases there is always a greater or less period of time in which the joints of the animal are flexible and the tissues are soft and yielding to pressure. After a time, however, the flesh becomes hard and less yielding, the joints become stiff and immovable. This stiffness is known in medical parlance, as the rigor-mortis. This stiffness is occasioned by the death of the cells. With the cessation of the circulation of the blood (which contains the cell food) the cells could no longer replenish the waste occurring in themselves. Changes

immediately begin to take place in the molecular condition of the cells whch finally result in the coagulation of the cell fluid. This coagulation marks the death of the cell, and it becomes inactive or fixed. When the cells become inactive and fixed the tissues which they compose must be in the same condition, consequently the organs or limbs or other parts of the body become fixed and immovable also.

Before death, molecular changes were constantly going on within the cells; these molecular changes constituting the breaking down of cell tissues. After the coagulation occurs within the cells, the death of the cells, these molecular changes go on much more rapidly. And the cells break down, constituting what is known as decomposition. It is this decomposition which gives to all flesh meats their peculiar flavor, the degree of the flavor depending wholly upon the extent of the decomposition. As the cells break down, the rigor-mortis, that which gives to flesh meats their toughness, rapidly subsides: hence the longer time, within certain limits, which elapses after flesh is slaughtered, and before it is eaten, the more tender it becomes. As this work of decomposition and breaking down of cells goes on, the fluid contents of the cells is poured out among the remaining tissues and the flesh becomes more juicy. Thus it is that the qualities of tenderness, flavor, and juiciness in flesh foods are the results of decomposition; or to speak in plain terms, a decaying process. These statements may appear startling, yet any person can demonstrate their truthfulness by actual experiment.

In vegetable foods, the only circulation which occurs is that of conveying building material to the cells. These cells make use of this food, the only result being growth; growth being the only vital activity in the vegetable kingdom. There is, consequently, no waste occurring in vegetable structures. For this reason vegetable food is a more wholesome diet than animal substances. It is true that decomposition occurs in vegetable foods but there is always a distinct line of demarkation between the broken down, or decomposed portion, and that in which the cells are all living, but there is no contamination of the living cells except where they are in actual contact with the decomposed portion, which may be readily separated from that which is wholesome, as may be seen in a partially decayed apple.

THE USE OF ADJECTIVES.

"Well, here I am at last. I've been an awful time coming, though. Every time I was just ready to get started there was something else to do, and after I was half way down the street Gertie wanted to know where her slate was. Children are a horrid nuisance sometimes," and Bella Townsend fanned herself energetically with her broad straw hat as she rested after her long walk.

"You look most tired to death," said Fannie, sympathetically, as she looked at her friend's heated face. "Isn't it elegant out this morning, though? We've had such windy weather it's just pleasant to have a day like this."

"Indeed it is," agreed Bella. "I was awfully hot before I started, or I wouldn't have minded the sun so much. I was baking a cake, and the kitchen was so hot I was melted before I got out of it."

"Did your cake turn out all right?" asked Fannie.

"Oh, yes; it's just lovely. I made a layer cake and put cocoanut over it, and it's awfully stylishlooking. I hope Etta Grant's won't take the shine off it to-night at the sociable."

"I don't believe it will," returned Fannie, consolingly. "Did you notice what a sweet bonnet she had on yesterday? It was too cute for anything in front. I suppose her aunt brought it to her, for I know she didn't get it made here."

"Her wrap was just magnificent, too," returned Bella. "It's so plain, too. I know the material couldn't have cost much, and the trimmings are cheap, but I suppose its because it fits her that it looks so well."

"She's awfully homely when she isn't fixed up any, but she did look nice yesterday," said Fannie.
"Her mother is horrid-looking. She never has a bit of style, so it's no wonder Etta hasn't got much. She is trying to make up to the new minister, I believe."

"It's no use for her to try," said Bella, scornfully; "he wouldn't look at her. Isn't he lovely, though?"

"He is so, and he preaches awfully pretty sermons. Did you see the sunset last night?"

"No, I didn't notice it. What about it?"

"Oh, it was just lovely; all bright and red. May Harmon said it reminded her of Switzerland."

"I didn't know she was back already. Did she have a nice time?"

"Just elegant, she says. The scenery was awfully lovely, and she had grand fun all the time she was gone."

"It will be horribly dull to settle down at home again after all her travels."

"Yes, it will be just terrible for her. You just ought to see the dresses she's brought home. They're splendid, and then she has lovely bonnets to go with each of them."

"It must be elegant to have so much money. I wish I had some of it."

"But you wouldn't want your grandfather to die to get it?"

"No, of course not. By the way, didn't the minister make a real cute address at little Lottie Miller's funeral the other day?"

"Why, Bella Townsend! I never heard such an awful thing in all my life! To think of calling a funeral address cute!"

"Oh, well, I didn't mean just that. You know what I meant. It was pretty and so appropriate; I didn't mean to call it cute, but you know that's my great word."

"It did sound too funny for anything, though. Have some caramels? They're lovely and fresh. Sometimes Dana has awfully stale ones."

"I'll take some to eat on the way, for I must be going now. I've got a fearful walk before me—up to the store, and then all the way back home. I'll be most dead by the time I get there. Goodby."

An overdrawn conversation, do you say? Not at all. It is a real conversation between two young girls who held enviable places in the graduating class of a seminary, and who are perfectly conversant with the meaning and proper application of all the adjectives they use, or misuse, so freely. Of course they know better, but the habit of misapplying the adjectives they use comes from carelessness.

It is a common fault, even with well-educated people, to fall into the way of using words in ordinary conversation that are not at all applicable in the sense in which they use them. There is no habit more easily formed, or more difficult to break, as you will soon discover if you ever undertake the latter task.

The word "awful," for example, signifies aweinspiring, or full of awe, yet we often hear conversation freely interlarded with it, when its use is, to say the least, senseless. "Awfully lovely," "awfully hot," "awfully tired," are frequent expressions, and are unconsciously used oftentimes.

Girls, if you would speak pure English, look over your store of adjectives, cull out those which are senseless and glaringly inappropriate for ordinary use, and try to use the others with some judgment and sense of the fitness of things.—Christian at Work.

MEAT INSPECTION.

In spite of the hard, steady fighting of Mr. Young, Mr. Douglass and Mr. Wisler, House bill 665 was recommended for passage after several iron-clad amendments had been talked of. The bill as it now stands provides that there shall be local inspection of all meats offered for sale in the cities in which said meats are offered for sale. No meats from an over-heated or wounded animal, nor unsound meat, nor meat of any unclean animal, or flesh of calf or any other animal under four weeks old shall be sold or offered for sale. All slaughtering of animals, the uncured meat of which is sold for human food in cities of the first and second class shall be done in the county in which such cities are located. The main feature of the bill, however, is that requiring local inspection of all animals to be slaughtered on foot.-Manhattan (Kan.) Mercury.

THE ELECTROSCOPE.

THE most astonishing claim yet made in behalf of electricity is that we can see distant persons and places by its aid. There is an apparatus called an electroscope which accomplishes this seemingly supernatural feat.

A public test of this instrument before many scientific men showed a race-course, forty miles distant, plainly projected on a large disk of white burnished metal. Each detail stood out with perfect clearness, and even faces could be distinguished, Think of the possibilities of this invention! In the near future, friends separated by hundreds of miles may not only hear each other's voices by telephone, but also see each other's faces by the electroscope.—Exchange.

The best exercise of memory—remember the door.

THE NEED OF FAT FOODS.

THE idea that fat is necessarily unwholesome is a mischievous one. The proper nourishment of the body requires a certain proportion of fat. The only objection we urge against fats as food, is the manner in which they are taken. In the form of rich cakes, pastry, fried foods, melted fats as used with salads, butter on hot bread or potatoes, and the like, fats are difficult of digestion, and often interfere with the digestion of other foods. Animal fats are, at least in a free state, much less digestible than vegetable fats. Cooking renders most elements of the food more digestible; or, rather, cooking is a sort of partial digestion of most food elements. Fats are, however, an exception to this rule. Cooking greatly increases the indigestibility of fats, which, at the best, are hard to digest in a free state. The most acceptable form in which fats can be introduced into the body is in cream, in grains like corn or oatmeal, in such nuts as almonds and chestnuts, and in the legumes, as peas. beans, and lentils. When taken in this form fats are easily digested, and when assimilated serve to build up the brain and nerves, and encourage the nutrition of other tissues. Butter is not an economical fat. The process of digesting butter is essentially a process of unchurning. The housewife, then, wastes her labor in churning the cream, and the butter-eater his in unchurning it. Besides butter is rarely found in a perfectly sweet condition. As ordinarily made, butter will not keep longer than milk, unless kept on ice. Tainted butter is a most unwholesome article. It sets up a process of decay and fermentation in the stomach, and is wholly unfit to enter a human stomach. The same must be said of cheese. The latter article, if eaten at all, should invariably be first cooked. Heat destroys the germs present in cheese, and decomposes the poisonous compounds which it contains .-Good Health.

CANCER AND VEGETARIANISM.

A GERMAN contemporary calls attention to the rarity of cancer among vegetarians, which is attributed to the predominance of alkaline salts, especially those of potash, in the blood of animals fed exclusively on food derived from the vegetable world. The diminution in the quantity of fibrin and analogous bodies is said to retard the growth of neoplasms by restricting their nutrition.—Medical Press.

Household.

SEPTEMBER

Summer is going! The breezes no longer
Loiter and dance, like young children at play;
The song of the cricket grows shriller and stronger,
And something of gladness has gone from the day.
'Tis the time of fruition—the bloom has departed—
The shy, darling wild flowers have gone from the dell;
And the summer we loved, the blithe, merry-hearted,
Is waiting to bid us a long, long farewell!
—Ninette M. Lowater.

HOME-MAKING.

THE builder constructs the four walls inclosing the home. The decorator and upholsterer may adorn and furnish them with every comfort and luxury; science and art may exhaust themselves in supplying articles of use and beauty; yet when all this is done, no home is made, no home feeling inspired. What were the Parthenon in all its glory without its statue of Minerva wrought by Phidias, of ivory and gold? What were the temple of Diana at Ephesus without the little black image that fell down from Jupiter?—Merely a splendid, empty shell.

The poet who asked, "What is home without a mother?" echoed the conviction of every human heart. It is woman that makes the home; and not so much by what she does as by what she is-a subtle, pervasive, brooding presence, here, there, everywhere, within the precincts of the home. Innumerable little touches reveal her hand. She gives tone, significance, coloring, feeling, to even inanimate objects. Her taste is revealed in the selection and arrangement of the furniture, in the shading of the windows, in the choice of pictures that hang upon the walls; in the orderly disorder which not the most skillful upholsterer can successfully imitate. Home and woman can no more be dissociated from each other than can the nautilus and its shell.

All men affirm that home-making is the highest and most sacred calling of woman. All women admit it. This admission was emphasized at the fifteenth congress of the Association for the Advancement of Women, recently held in this city,—an association composed of representative women of many States. Whatever avenues of industry

and usefulness outside the home may now or hereafter be opened to woman, the brightest of all the crowns she wears will always be that of wife, mother, home-maker.

What are the requisites of making a home?—First of all, a broad and tender charity that covers as with outspread wings every member of the household, brute and human; every interest of every member. All other requisites may be present, yet if this first and greatest be absent, there will be no home. After charity comes cleanliness, order, punctuality, skill, efficiency. We place cleanliness first, for it is next to godliness, because we agree with an eminent English writer on the healthfulness of different climates. He says that man may live in any climate if he will rigidly observe all hygienic laws included under the general head of cleanliness, as ventilation, bathing, sewage.

One can tithe the mint, anise, and cummin of cleanliness, and thus make every member of her family uncomfortable, and at the same time endanger their health by neglecting the weightier matters of the law. So one may be too rigidly systematic and orderly, too painfully punctual. It is not possible to be overcareful, oversolicitous in building the foundation of the home, in having its walls strong and firm, in making its roof tight, and the whole structure symmetrical and commodious. But one may, speaking figuratively, keep plasters and decorators and upholsterers so constantly at work inside as to give the inmates of the habitation no peace of their lives. This can be and should be, avoided.

The atmosphere of the home should be like that which surrounds the earth—elastic, so as to comfortably fit every member of the home without too much looseness here or too much tightness there. The daily, weekly, yearly routine must be flexible, otherwise the home becomes a hotel or boarding-house, and not a home.—N. Y. Christian Advocate.

When I find anything in the papers that I think will be of particular benefit to my children, I lay it aside and read it to them in the evening, as I think "what mother reads aloud" makes the deepest impression.—Aunt Amy.

FOR drunkenness, drink cold water; for health rise early; to be happy, be honest; to please all, mind your own business.—J. Ellen Foster.

BABY HELP.

"'Oo want me, mamma?"

In the early morning the voice rang through the house, full of interest and enterprise. Little Nan was three months short of her third birthday, yet she was overflowing with the delightful sense of helping mamma. Up and down the stairs she toiled on the little make-believe errands that mamma invented; or with a feather duster almost as tall as herself, she dusted furniture already clean; she scrubbed and rubbed and swept, all the time singing at the top of her sweet voice; and if her mother disappeared for a moment, she called out, "'Oo want me, mamma?"

I was interested in this little house-worker, and her mother's way of letting her "help," and all the more, as I had often observed very opposite ways. It is very easy for a mother to make a child feel that she is a bother instead of a help; and very common I think for mothers to treat very little children as if they were little animals, or something less intelligent; scarcely one in a hundred realizing that educations begins almost with birth, and that of all important things, it is most important that a mother should keep in perfect sympathy with her child. When the baby girl wishes to help, she is told to keep away from this, and get out of that; she gets a slap for soiling her pinafore; a scowl for some other innocent accident belonging to the helping; a cross word for nothing at all except for being a child, and being present when the great god, work, is being sacrificed to.

The little tender heart, as really anxious to serve, as full of good-will as any grown-up heart, gets its first experience of discouragement, of ingratitude, of unsympathy—from its mother. Undoubtedly the mother will wonder six, seven, or eight, years hence, why the child is so unfeeling, so careless about helping; never noticing when she is worn out and in need of help.

If you wish a vine to climb over your trellis, and give you blossom and shade, will you persistently push away its tiny, clinging tendrils? In that case it will climb up by some other support, and lavish its young lovely life in the new direction. A mistake of this kind can never be entirely reme died.—Illustrated Christian Weekly.

Too much meat and too much alcohol are wearing out the American heart.

PIN-WORMS.

E. R. J., of Nevada, asks, "How shall I rid myself of pin-worms?" Pin-worms generally breed high up in the large intestine. The small intestine joins the large intestine about three inches from its upper extremity, or commencement. This three inches is the cæcum. Fecal matter is often retained in the cæcum until it becomes decomposed and very foul. Hence the cæcum is the favorite breeding place of the pin-worms, although the worms are found in the rectum and other portions of the intestines. To get rid of them the patient should abstain wholly from flesh, fish, fowl, butter or grease, and sugar in his food. Coarse vegetables should not be eaten in the combination with either milk or fruit. Be careful not to overeat at any time. It would be far better in this condition to eat too little occasionally than to overeat a single time. You can, by using the kind of diet I speak of, starve the worms out of their nest. To get rid of them, use daily, for a while, very large enemeta (one or two quarts) of warm water. or of salt water, or water containing a little turpentine, or a mild infusion of wormseed tea, or quassia. These enemeta can be made to reach the cæcum if taken while lying upon the right side, and a sufficient amount of water is used. In this way the eggs of the worms may be dislodged and removed as well as the worms themselves. Perfect regularity in times of eating should be observed, and but two meals a day taken.

M. G. KELLOGG, M. D.

If the father does not treat the mother with respect, I do not think the children will in one case out of fifty. A woman should insist on being treated with respect from the very beginning of married life. I really think that in a majority of instances, wives are more to blame than the husbands. They spoil the husbands by petting them and waiting upon them too much during the first months of married life. Be sure that you are worthy of respect in all things and you will get it.—August Flower.

A word to the excessive fat. Eat less. You have no idea how much better you will feel. I lived a year on one meal a day, which I took at noon. I lost forty pounds in weight, and had no trouble from that rush of blood to the head so common among fleshy people.

USEFUL RECIPES.

In compliance with the request of a subscriber, we give the following recipes :-

Graham Bread.—Prepare the sponge the same as for white bread. Three pints of warm water and one small teacup of yeast, with flour enough to make a batter thick as for cake without eggs, will make a sponge sufficient for four ordinary loaves. Cover and let remain two hours or until very light. Then gradually work in graham flour until stiff enough to knead. Care should be used, however, not to get too much flour as the bread will be dry and hard. Knead from forty-five minutes to one hour, or until the dough ceases to stick to either the board or hands. Use just as little flour in kneading as will prevent sticking, and practice will enable one to make a little flour go a great way. After the bread is thoroughly kneaded, form into a round mass or large loaf, return to the pan, cover closely, and set to rise in a warm temperature. When risen to twice its original size it is ready to form into loaves. Divide the dough into equal parts, and knead each loaf about five minutes, with quick elastic movements. Let rise until as large again as when moulded, then bake in a moderate oven from three-quarters of an hour to one hour, according to size of the loaves. Some use a little salt, and a tablespoonful of sugar, to every loaf. This, however, is not necessary, but if desired should be put in sponge with the graham flour. To insure perfect satisfaction the yeast must be good, and the sponge must be moulded into dough as soon as it is light, and the dough must be made into loaves as soon as it is risen, and the oven must be ready for the loaves as soon as they are raised.

Another way is to take three pints of water or new milk, into which stir sufficient graham flour to make a batter as thick as one can well stir with a strong iron spoon. To this add two-thirds cup of good yeast. Cover closely and set in a warm place to rise. When light, stir again and vigorously for about ten or fifteen minutes, let it rise the second time. This will make two medium-sized loaves. Put into bread tins, set in a warm place about ten or fifteen minutes, or till it begins to rise the third time. If made just right the bread will be fine grained and spongy.

Steamed Indian Pudding .- Take two teacups sweet milk, two cups of sour milk, one and a half | and a strong one is better off without them.

cups of corn meal, one of graham flour, half cup of fine flour, half cup of sugar, two cups of seeded raisins or choped figs, two level teaspoonfuls of soda, and if desired, a little salt. Mix thoroughly. Put into a pudding dish and steam three hours. Soda should be sifted in the flour. Serve with sweet cream.

Queen of Puddings .- One pint of fine bread or cracker crumbs, one quart of new milk, yolks of four eggs, one-half cup of sugar. Bake until done, but do not allow to become watery. Whip whites of eggs to a froth with four tablespoonfuls of white sugar. Spread on top of the pudding and return to the oven to lightly brown.

Mrs. A. M. Loughborough.

ECONOMY IN COOKERY.

EARLY in life I was taught by a good mother that it was a sin to waste anything that could be made use of, and later on I have had much occasion to be thankful for the lesson so early learned. Some time ago I was visiting at the house of a lady, who was by no means wealthy. At dinner the center of the table was graced by a large roast of beef, and after all had dined, judge of my surprise when the lady opened up her stove, and lifting the platter from the table, scraped roast, gravy, and all into the fire, completely filling the stove. I could not forbear an exclamation of astonishment, but the lady coolly answered, "We never eat cold meat at our house, and cold roast is of no account any way." And yet this woman's husband was only an ordinary workingman, who earned his money by the sweat of his brow, and the consumed roast contained meat enough, if properly prepared, for three or four breakfasts for a small family. To-day that woman is a widow entirely dependent upon her friends and a small monthly fund received from a benevolent society, and I sometimes wonder if it would not have been better had she learned earlier in life that cold roasts make better food than fuel. I trust there are not many of this class but there are still far too many who, through a false and mistaken pride, turn up their noses and hold in supreme contempt all "made over dishes," as they term them, and never send anything to the table a second time. - Cor. Detroit Free Press.

A FEEBLE liver cannot dispose of malt liquors

SOME HOUSEHOLD HINTS.

Sweeping.—There is perhaps no branch of domestic work on which there are so many theories as sweeping, and none which is so often poorly done. Some think a heavy, stiff broom the proper implement, while others wisely prefer a light, limber one. A child or a novice, for some unexplained reason, always pushes the broom and consequently the dirt, instead of drawing it after them. By this means, a great deal of dust is raised, most of which settles back on the furniture. To avoid this, sweep with a short, light stroke, drawing the broom toward the person instead of pushing.

Before Sweeping.—Various things are recommended for sprinkling the floor before sweeping. Among these are moistened bran or sawdust, coffee grounds, salt and tea leaves. In the winter freshly fallen snow scattered over the carpet and swept quickly up before melting, answers the same purpose, which is to absorb the dust and thus render the colors of the carpet brighter.

When there is much litter on the carpet, a help in sweeping is to wet the broom in clear tepid water, shaking off the drops so as to just render the broom moist. When this is done, the broom must be frequently rinsed in clear water.

PREPARATION.—Before proceeding to thoroughly sweep a room, remove all articles of furniture like chairs, stools, and light stands, dusting each article as it is removed. Next pile all light articles, such as vases, books and fancy work, upon the table and cover with large pieces of old calico or cambric, but whatever it is, kept expressly for this purpose.

After sweeping the carpet in the manner indicated, bringing all the dirt toward the center of the room, where it is taken up on the dust-pan, remove these dusters, as they are called, from the furniture. By the way, all large articles, such as easy chairs, sofas, or piano, should be protected in the same way but will require a thorough dusting, nevertheless.

DUSTING.—If there is much carved work on the backs of the chairs or sofa, a soft paint brush will be found convenient; a small bellows is also recommended for blowing the dust out of corners difficult to reach with a cloth. Upholstered furniture should be occasionally taken out of doors and beaten to get the dust out.

Once a week will be sufficient to give any ordi-

nary room a sweeping of this description. A carpet sweeper is a useful and labor-saving article, and a few moments' work with it each morning will keep the room tidy and clean the remainder of the week. If the room has been used for sewing it may require brushing up with a whisk broom and dust-pan, but this is a laborious operation and is seldom necessary if a carpet sweeper is used.

Carpets.—It has been suggested that in choosing a carpet, a thought should be given to the colors, whether they will show the dust easily or not. Small figures and not too dark are the best. Considerable work in sweeping may also be saved by care in keeping crumbs, or litter from cutting, off the carpet. If cutting paper patterns, or anything where scraps of paper are liable to be scattered, have a newspaper spread under the table or in the lap, so that they may all be gathered up at once.

The broom, as has been said, should be soft and limber; large heavy brooms require too much strength in their use.—Farm, Field and Stockman.

Domestic Finance,—"Now," said the bridegroom to the bride, when they returned from the honeymoon trip, "let us have a clear understanding before we settle down to married life; are you to be president or vice-president of this concern?" "I want to be neither president nor vice-president," she answered, "I will be content with a subordinate position." "What is that?" "Controller of the currency."

"My poor man," said the doctor, "you are dangerously ill. Is there any word you want to send to your friends?" "Am I really so ill?" asked the sufferer. "Alas, I can offer you no hope!" "Very well, then," said the sick man to his nurse, "telephone for another doctor."—Ex.

An old farmer friend of the past generation, who looked with alarm upon the introduction of the college agriculturist as a dangerous innovation, said:—
"Oi connot aboide them book farmers. Booklarnin's the ruin on us—they wouldna make bread and cheese if they hadna summut more solider."

It is said that not a professional street beggar can be found who does not chew tobacco.

HE who avoids small sins does not fall into larger ones.

THEY who seek wisdom will surely find her.

Healthrul Dress.

GOOD CHEER.

'Tis a blessed thing as on we tread
In our path from day to day,
We can cheer the heart, or aid the step
That is treading life's toilsome way;
For the soul that gives is the soul that lives,
And in bearing another's load,
We lighten our own, and shorten the way,
And brighten the homeward road.

-Selected.

LOVE OF DRESS.

NOTWITHSTANDING the fact that for most people this world is no paradise, all classes are interested in the subject of "How to prolong life." Scientific men are continually giving out theories thereon, each one differing from the other, "as one star differeth from another in glory." At the same time there are centenarians who upset every theory that was ever promulgated. Often they have lived to their remarkable age, in spite of the fact that they defied all rules supposed to govern longevity.

Recently a French physician announced that comfortable living, in the most complete sense of the word, was the surest and most potent agent in the prolongation of life. This is the most reasonable theory yet advanced, and is a prescription which none will object to taking. Surely uncomfortable living kills out the desire to live, and that itself is a strong factor in prolonging life.

We all know that nothing can play a more important part in one's comfort or discomfort than dress. Ninety women out of every hundred look uncomfortable in their clothes. Laced up in corsets, with artificial excresences on their spines, heavy skirts dragging the life out of them, and tight shoes making wrinkles in their faces, it is not surprising that their death-rate is always higher than that of men. The only wonder is that many of them are alive at all.

One doctor, when asked in regard to their average chances for long life, said: "Women are deteriorating in vitality and longevity, and it is largely due to the nervous strain they are continually under, to their vanity and love for dress and display, no matter how injurious its requirements are to their comfort and well-being; but there is already the dawning of a better intelligence among some of them, and it is to be hoped that it is the beginning of a better era."

We do not think that love of dress is so much the destroying agency, as fashionable, uncomfortable dress. A proper regard for appearance is one of the marks of a lady; but she can be beautifully clothed, without falling down and worshiping the foolish fetich, Fashion. However, as this man of medicine says, "there is already the dawning of a better intelligence among some of them." The existence of this magazine proves that.

The woman who lacks intelligence cannot dress herself beomingly, no matter how much time and money she expends in trying to dress fashionably. Would a really intelligent race of women permit themselves to be the victims of every dreadful device of fashion that energetic money-getters could invent? A revolt against such oppression and confidence in their own powers of invention indicate, truly, the "beginning of a better era." We agree with this same doctor when he says that "comfort, cheerfulness and hopefulness are the best promoters of existence."—Dress.

NEED OF DRESS REFORM.

I AM not one of the reformers that believe in pantaloons and boots, but I hold my hand up high and long for a reform. For nearly fifteen years I have read, thought, studied, and acted upon this reform question, and I am convinced of the principle that to be well we must cramp no organ, no cord, no muscle. When I cannot move my limbs, cannot take a full, deep breath without meeting with some tight pressure, something needs attention. I believe in union flannels, combination underwear, stockings supported from the shoulders, corsets with shoulder straps and elastic cords—the last I dispensed with entirely, until I began to gain in flesh to the extent that I lost my waist line. I admit I have some pride in a good form, but never allow it to cramp my movements or interfere with my comfort.

All skirts should be buttoned onto waists or held by skirt supporters. My rule when dressed properly is to be able to swing my body inside my clothing, and to shrug or lift my shoulders, and feel all the clothing give to the movement. I wear stockings supported from the shoulders. One pair of supporters having given out, and wishing to wash the other remaining pair, I took an old pair of side elastics and buttoned on at the waist and went about my washing.

Things did not seem just right; I soon felt tired. Was the tub too high or too low? It was as it had ever been. My back began to ache, I felt nervous; was I going to be sick-I, who had called myself perfectly well? I began to think I was overworking, was not after all so strong, but was beginning to break down. In my younger days when a scholar and teacher my back had been my very weak point; but since my change of dress and occupation from the school room to the home with plenty of air and exercise, I had forgotten that I had a back. In that time I have borne three children with as little pain and inconvenience as one can expect; and now, after all these years, that old feeling comes creeping on. I will not yield to it! You know the old theory-"think you do not ache and you will not." Well I am not converted to that, though I think there is much truth in it. I tried to put myself in that frame of mind, but still that heavy, tired, dragging feeling clung to me. I will not give up till my task is done if possible; so I went on till my washing was on the lines, but how tired I was! How bad my head felt! What was the cause? I pitied every invalid sister I knew or had read of, and did not blame them for seeing the dark side, for feeling life a burden. I had thought if they could be roused to action they would feel better. Ah-now I knew it must seem next to impossible for them to "be up and doing with a heart for any fate." I, in those few hours had had a wee morsel from their full loaf. and I pitied them.

But I must know the cause; yesterday I was well-to-day

ailing. Investigation showed me that the buttons to which I had attached my elastics were so placed, that the waist drew very tightly across the small of my back when I stood in a stooping position. That constant strain all that forenoon had caused a pain that lasted me all the rest of that day and the next, after the pressure had been removed. Remove the pressures, and if you do not feel immediate relief, bear in mind how long the pressure has been there, and wait that same length of time for perfect freedom and use. But you will soon begin to feel better, and say you feel like a different woman.

We need not make ourselves conspicuous by the change; few, if any, need know of the change of dress except by the return of the glow of health, the sparkle to the eye, and the elasticity to the step. Sisters, awake—those not yet persuaded, think and act; every house is doing its work in one way or another. Lend your hand in the work of reconstruction. Let the world know that women can be the oak and not the clinging ivy; can be equal to what may be before her.—Selected.

CHILDREN'S DRESS.

HERE is a hint for some one who is interested in the literature of dress and wants to write a book. J. Ashby-Sterry, in the Book Buyer for February, says: "It is extraordinary that among the countless works on costume the dress of children has never yet had proper attention paid to it. In olden times, as a general rule, the children were simply miniature copies of their elders. An interesting correspondence on this subject has recently been going on in Notes and Queries. Many of the letters therein printed show how very little is really known about the matter. As early, I believe, as 1780 children began to have fashions of their own. Mrs. Merrifield in her 'Dress as a Fine Art,' published in 1854, says: 'Since the commencement of the present century, at least, children may be said to have had a costume peculiar to themselves, modified, however, by the prevailing fashions. They have had short and long waists, long and short dresses; at one time they had trousers reaching to the heels, at another the drawers were kept out of sight and the legs encased in long white stockings. These again gave way to socks and the legs were left bare to the knee.' The American little girls if my picture books do not misinform me, had a costume as different from the English lasses as that of the English lasses was from the French, Since 1854, when Mrs. Merrifield wrote, the changes in children's fashions have been infinite. From 1860 to 1870 was a very ugly period in children's dress. It began to improve with the introduction of short petticoats, snowy frills, and sable hose in, I think, about 1874. Since then it has gradually advanced, and was probably never more sensible and tasteful than it is at the present moment. Any one desirous of adding to our large library of books on costume would find a good subject, of which apparently little is known, in the dress of children."-Dress.

PLEASURES, like summer, may please, but only trials, like winter, may best develop us.

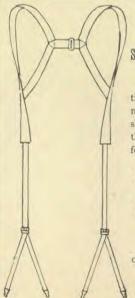
STRIFE for truth is a kind of praise to God,

WOOLENS FOR SUMMER.

A PHYSICIAN who has for six months tested Dr. Jäger's plan of wearing nothing but wool day and night, writes to the Lancet: "The result has been complete immunity from colds and a very marked increase in my capacity for work. I have not put on a great-coat night or day, have slept with an open window in my bed-room, and have been able to enjoy the luxury of an open cab instead of a close brougham, Instead of alternate feelings of heat and cold, there has been a uniform and most agreeable glow of warmth. I have, without any alteration of diet or regimen, lost seven pounds in weight, and (which will, I believe, tax the credulity of some) have witnessed the disappearance of a lipoma of the nape of the neck, which had existed for some years, and had suggested the necessity for an operation. These latter facts powerfully illustrate the truth of Dr. Jäger's contention that the complete and continuous action of the skin drains the organism of water and superfluous fat. I would say, further, that the feeling induced of perfect health is not the least of recommendations to adopt the system. I may mention that of the many who have, more or less, fully addicted themselves to it from my example or advice, I have not known one who has been disappointed. Lastly I would add a word on the need there is, if the full benefit to be derived is wished for, that nothing but pure wool should enter either into dress or bedding."

JAPANESE ladies are more in consonance with the dress reform movement than American and European girls. No corset is worn, a long silk sash supplying the place of steel and whalebone. Some of the ultra fashionable girls of Tokio try to make their waists look slender by wearing a belt.

NATURE never intrudes, never mocks, and harmonizes with every mood.



Shoulderbrace and Hose Supporter

By this simple and substantial device the stockings are nicely supported from the shoulder. These are sold at the Rural Health Retreat, as follows:—

No. 7, Ladies' 60 cents

No. 8, Misses' 50 cents

No. 9, Children's .. 40 cents

No. 10, for Children

age 3 to 5 years .. 35 cents

Sent, post-paid, on receipt of price.

Bublishers' Department.

A NEW PROCESS OF TRAETMENT.

On visiting the Retreat I learn that there are several persons there suffering with spinal difficulties and locomotor atoxia, who are being treated by the new method recently adopted in Paris and New York hospitals, that of stretching the spinal cord by suspending the patient from one to three minutes daily. The person mentioned in the letter below was treated in this manner. He came to the institution perfectly helpless. He was treated for sixty-five days only. He took no medicine whatever, but received daily bath-room treatment, massage, and electricity, and a carefully selected diet. He was a boy of the age of sixteen. At the expiration of the time above specified he was sent home alone on the steamer from San Francisco, cured of that difficulty. His father writes the letter below, in acknowledgment of his safe arrival at home. J. N. L.

CORVALLIS, OREGON, July 16, 1889.

Physicians at Rural Health Retreat, St. Helena, Cal: Percival returned to us on Saturday, and is now with his mother and the rest of our family at our hill ranch. He appears to us like any convalescent after severe illness, and shows no traces of the malady from which he was so seriously affected—needing good air, simple food, moderate exercise, and good care to secure a complete recovery—for this we are deeply thankful unto God. We feel that this is chiefly due to the good medical care and skill, and the generally excellent treatment the lad recieved at the Rural Health Retreat. To the physicians, and to all interested with you in the management of the institution, we are grateful.

Yours very truly,

WALLIS NASH.

LECTURES.

THE parlor lectures which are given several times each week to the patients and helpers at the Retreat, on various topics pertaining to health and disease, proper food, care for the sick, etc., are largely appreciated by the guests of the house. The helpers are availing themselves of this rare chance to perfect themselves in these lines of instruction pertaining directly to their work. Sometimes it is a lecture only, and sometimes the time is spent partly as a quis on what has been brought out before. Thus testing how fully the ideas have been mastered, as well as giving an opportunity to obtain information on points which may not have been fully understood. Thus may light on hygiene be advanced, is our ardent desire.

Among the improvements at the Retreat, during the last month, we notice that a new, ten-foot, cooking range has been placed in the kitchen. This adds greatly to its facilities. So large a family, and so many patients requiring such varying qualities and kinds of food to meet their various conditions, creates a demand for much more heating surface than would be required to cook food for the like number of hearty, well persons. Our cook and his assistants must be happy now as their facilities this direction are so ample.

STINSON AND TRUE.

Some parties have written to us finding fault because we have inserted in our JOURNAL the advertisements of Messrs. Stinson and True, charging us with being accessories to an awful "swindle." Before we ever inserted the notice we took very particular pains to inquire of parties who had dealt with Mr. Stinson, as to his reliability as a dealer. These parties, with whom we are intimately acquainted, informed us that they had ever found Mr. Stinson to be an honorable dealer, always doing with them just as he agreed. Mr. Stinson has done by us all he agreed to in the insertion of the advertisement.

I fear some who have been so hasty to make the charges against these gentlemen have not taken pains to read the adds carefully, but have jumped at conclusions, supposing they were to receive an \$85 gold watch or \$93 sewing machine, and various other articles, for a two-cent postage stamp and the trouble of writing a letter; and because it did not come promptly by return express they suppose themselves to be greatly swindled. It might be well for such to remember a little lesson taught us by a good old aunt once forty years ago. She said, "When people come to you proposing to give you a great amount for nothing, you tell them that the people who did that kind of a thing all died a good many years ago."

Now we do not understand Messrs. Stinson and True to even intimate that they propose to send these articles to everybody who may ask for them. They say to "one person in each locality." We suppose they have the right to choose from the numerous applicants the one whom they would wish to represent their business in that locality. I am quite confident that, as business men, they would not choose some of those who have written to us, if they wrote in a similar style to them. We fail to see where the great swindle has come in, on those who have made application for the goods and have not received them. They have not been called upon to invest any money. If they feel so badly because they did not get all these articles for a two-cent stamp and the trouble of writing a letter, if they will write us, enclosing a stamp for return, we will send them a good new two-cent stamp and a clean sheet of note paper.

We fail to see anything dishonorable in Messrs. Stinson and True in their mode of advertising for applicants from whom to make their own selection of agents, and we would not wish to intimate that any of our readers would stoop to so mean an act as to think of coveting so large an amount of property as offered without returning something of an equivalent, such a course would look too much like gambling.

J. N. L.

THE POLITICAL PROHIBITIONIST FOR 1889.

SUCH is the title of a pamphlet of 146 pages just received through the courtesy of the publishers, Funk & Wagnalls, Nos. 18 and 20 Astor Place, New York. It is a wonderful compendium of facts, arranged with an index, and is in a ready form for reference by all temperance workers, or any who wish to learn of the progress and present standing of the prohibition cause. It gives a general review of the situation; Presidential campaign of 1888; the platforms of

eight national parties in the field; strange methods of the great rival parties; startling facts and incidents; ballot-box bribery; counting out Prohibition votes; present attitude of the old parties, gathered from the platforms adopted in every State; an abstract of the temperance laws of each State and Territory, brought down to April 20, 1889; the benefits of Prohibition, as shown by indisputable facts, figures, and testimonies; the stupendous failure of High License, in the light of abundant, specific, and reliable evidence; recent votes on Constitutional Prohibition; national developments and decisions; remarkable expressions on the liquor question; utterances of the General Conference and of 36 Annual Conferences of the Methodist Episcopal Church on License and Prohibition in 1888; directories of the various temperance organizations; national organization of the Prohibition party, with all the State Committees; the liquor traffic in Great Britain, etc. It may be obtained by addressing the publishers as above, Single copies, 50 cents; twelve copies, \$4.25.

APPETITE runs, while reason lags behind.

INK has been called the black slave that waits upon the

WASTE of wealth may be retrieved; waste of health rarely; waste of time never.

VICE is infamous though in a prince, and virtue is honorable though in a peasant.

THE FIRESIDE TEACHER.

A 32-PAGE MONTHLY.

NEAT, CLEAN, PURE, ENTERTAINING, INSTRUCTIVE.

THE object of this journal is to create and encourage a love for learning; to promote correct habits of thought, and a truer appreciation of the things which the Creator has made and placed all around us for our instruction; to cultivate a pure and refined taste in literature. It also affords a most valuable help to all who are engaged in literary study. It contains general articles on Plant Life, Animal Life, Natural Scenery, Oceanic Wonders, Strange Peoples and Countries, Literature, the World's Really Great Men, and among other Useful as well as Interesting Topics,

TRUE PRINCIPLES AND METHODS OF EDUCATION.

The School Room Department contains thorough Instruction on several important studies, such as Grammar, Arithmetic, and Rhetoric.

The whole work is elegantly illustrated with fine engrayings. As a literary and educational journal it has no equal for its size. It is neat in execution; entertaining, instructive, and moral in its character. It is highly appreciated by all lovers of good literature.

AF EXTRAORDINARY OFFER. - For \$1.50 we will send to the address of anyone in the United States or Canada, who is not already a subscriber for the magazine, the Fireside Teacher, and the Pacific Health Journal, monthly, for one year. Single subscription price for Fireside Teacher alone, \$1.00.

THE AMERICAN SENTINEL is an eight-page we ckly journal devoted to the defense of American Institutions, and the preservation of the United States Constitution as it is. For \$1.50 we will send you both the American Sentinel and Fireside Teacher one year, post-paid.

THE FIRESIDE TEACHER CO., Address.

71 College Ave., Battle Creek, Mich.

OUR GENERAL AGENTS.

Arkansas Tract Society—Lock box 249, Little Rock, Ark. Australia—Echo Publishing House, North Fitzroy, Victoria. Canada—S. Edith Pierce, Melbourne, Quebec; and G. W. Morse, 62 Spadina Ave., Toronto, Ontario. China and Japan—A. La Rue, International Tract Society, Queens Road, 219, Horstone, China, China

Road 219, Hongkong, China.
Colorado Tract Society—S. E. Whiteis, Sec., S12 Nineteenth Ave.
Denver, Col.

Dakota Tract Society-A. H. Beaumont, Sec., Vilas, Miner Co., Dakota.

Dakota.

England—Wm. Saunders, 451 Holloway Road, London, N. Eng.
Georgia and Florida—Charles F. Curtis, cor. S. Boulevard and
Bryan Sts., Atlanta, Ga.
Germany—L. R. Conradi, Sophienstr, 41 St. Pauli, Hamburg.
Illinois Tract Society—Lillie E. Froom, Sec., 28 College Place, Chi-

cago. Indiana Tract Society—J. W. Moore, Sec., 175 Central Ave., Indian

Iowa Tract Society-Leroy T. Nicola, Sec., 603 East 12th St., Des Moines, Iowa

Kansas Tract Society-L. Dyo Chambers, Sec., No. 821 West Fifth St., Topeka, Kan. Louisiana—A. F. Harrison, 534 Hope St., Shreveport, La.

Maine Tract Society-M. Russell, Sec., No. 110 State St., Bangor, Me

Michigan Tract Society-Hattie House, Sec., Review and Herald Office, Battle Creek, Mich.

Minnesota Tract Society—C. N. Woodward, Sec., 336 East Lake St., Minneapolis, Minn., P. O. Box 1058.

Missouri Tract Society-J. Klostermyer, Sec., 606 Ohio St. Sedalia, Mo.

Nebraska Tract Society-Eliza Burleigh, Sec., 1505 E St., Lincoln Neb.

New England-N. E. Tract Society, Mrs. E. T. Palmer, Sec., South Lancaster, Mass.

New Jersey, New York City, and Brooklyn, N. Y .- T. A. Kilgore-No. 43 Bond St. New York.

New York State-J. V. Willson, Sec., N. Y. Tract Society, 317 West Bloomfield, St., Rome, N. Y.
New Zealand—International Tract Society, Turner St., off Upper

Queen St., Auckland, N. Z.

North Carolina-N. B. England, Newton, Catawba Co., N. C. North Pacific-Charles A. Wyman, Sec., Box B 2, East Portland,

Norway-Sundhedsbladet, 74 Akersgaden, Christiania, Nor. Ohio Tract Society-L. T. Dysert, Sec., 1103 Case Ave., Cleveland

Pennsylvania Tract Society—L. C. Chadwick, Sec., Cor. Hepburn and Flith Sts., Williamsport, Penn., Box 2716. South Africa—International Tract Society, Somerset House, Roe, land St., Cape Town.

Switzerland-Imprimerie Polyglotte, 48 Weiherweg, Basel. Tennessee - J. H. Dortch, Springville, Henry Co., Tenn.
Texas Tract Society—T. T. Stevenson, Sec., Denton, Texas.
Upper Columbia Tract Society—Mrs. L. A. Fero, Sec., Box 523,

Walla Walla, Wash. Vancouver Island-E. A. Guyton, 14 Third St., Victoria, B. C. Vermont-Lizzie A. Stone, Lock box 237, Essex Junction, Vt.

Virginia—Amy A. Neff, Quicksburg, Shenandoah Co., Va. West Virginia—Mrs. Nelia M. Stone, Clarksburg, W. Va. Wisconsin Tract Society-S. D. Hartwell, Sec., 1029 Jenifer St.

Madison, Wis.

\$93 Sewing-Machine once as tablish in all parts, by an energy of the machine parts, by an energy of the machine parts, by an energy in the machine made in the machine made in the machine made in ordi, with all the attachments, will also send free a complete of our costly and valuable art cless. In return we sak that you what we send, to those who call at your home, and after \$2\$ calls and the all the machine machi on so that we send, to the sail at your home, and after a sail at your home, and after the Singer patents, the have run out; before patents in out itsold for S93, with the fachments, and now sells for 150. Best, strongest, most use machine in the world. All 1. No capital required. Plais who write to us at once can semantine in the world, and U more than the sail and the sail an TRUE & CO., Box 740, Augusta, Maine.

HEALTHFUL FOODS.

HAVING at our Health Retreat a revolving oven, and firstclass cracker machinery, we are prepared to furnish the foods advertised below, at their respective prices. These foods are not only adapted to those suffering from digestive ailments, but are also excellent for all persons who wish food free from lard and all other deleterious shortening. None but the purest and best articles are used in the manufacture of these foods.

Medium Oatmeal Crackers.—Made about the same as the above, only they are not fermented; per lb.....10 cts.

No. 2. Graham Crackers.—Shortened, but not sweetened. Very palatable; per lb.......10 cts.

Fruit Crackers.—The best varieties of foreign and domestic dried and preserved fruits are used in the preparation of these crackers. They are exceedingly wholesome for those Granola.—This is a preparation from various grains, and combines all the qualities of the preceding preparation. There is no farinaceous preparation in the market that will compare with granola. This is the verdict of those who have given it a fair and impartial trial; per lb......12 cts.

Some of the goods here offered may be higher priced than those shortened with lard, etc., but you may rest assured of securing, in these foods, pure, healthful articles, conscientiously prepared.

For fifty cents you may receive, post-paid, a sample package of these foods, and thus decide what to order in larger quantities. Give them a trial. Address,

RURAL HEALTH RETREAT, St. Helena, Cal.



The Largest Sanitarium in the

HIS Institution, one of the buildings of which is shown in the cut, STANDS WITHOUT A RIVAL in the perfection and completeness of its appointments. The following are a few of the methods employed:-

Turkish, Russian, Roman, Thermo-Electric, Electro-Vapor, Electro-Hydric, Electro-Chemical, Hot Air, Vapor, and Every Form of Water Bath; Electricity in Every Form; Swedish Movements - Manual and Mechanical - Massage, Pneumatic

Treatment, Vacuum Treatment, Sun Baths. All other agents of known curative value employed.

A SALUBRIOUS SUMMER CLIMATE.

A Lakeside Resort, Steamers, Sail Boats, Row Boats, Bathing, etc.

SPECIAL DEPARTMENTS for the Treatment of Diseases of the EYE, EAR, NOSE, THROAT, LUNGS, and DISEASES OF WOMEN. Special Advantages afforded Surgical Cases. Good Water, Perfect Ventilation, Steam Heating, Perfect Sewerage.

The managers have permission to refer to leading members of the medical profession. For circu-MEDICAL AND SURGICAL SANITARIUM, Battle Creek, Mich. lars, with particulars, address,

THE SANITARIUM TRAINING SCHOOL FOR NURSES.

THE managers of the above Institution have had for several years, in successful operation, an extensive Training School for Nurses, which is carried on in connection with the Sanitarium. The course of training in this school is the most thorough and comprehensive of any in this country, and the graduates of this school readily find good and lucrative employment,

Terms are such as to place the excellent opportunities afforded by this school within the reach of all properly qualified persons who may wish to avail themselves of its advantages. For circulars, address

No. 3,

SANITARIUM TRAINING SCHOOL FOR NURSES, Battle Creek, Mich.

HEALTH GOODS.

AT the Rural Health Retreat there are kept constantly on hand the following valuable articles, which may be obtained, post-paid, at the prices affixed:-

post pand, at the prices amacu.		- 1	
Hygienic Corset	\$2	00	_
" Peerless Corded	2	50	
Emancipation Waist	I	50	
Form (Bosom)		50	
Dr. Gray's Abdominal Supporter	2	50	
Dr. Gray's " with Hose Supporte	r		
(extra large)	3	00	
No. 1. Hygienic Supporter	2	50	
No. 2. " "	3	00	
School-girl Shoulder Braces		50	
Skirt Supporters		35	
" Silk Stripe		50	
Shoulder Brace Skirt Supporter (Ladies')		60	
" " (Misses')		50	
" " and Hose Supporter	1	00	-
Skirt and Hose Supporter		75	
No. 90 Hose Supporter, Daisy Clasp (Ladies') -		30	
No. 80 " " " (Misses') -		25	
No. 70 " " (Children's)		20	
No. 60 " " " " "		15	
No. 17 " Shoulder Brace, Button (L.	a-		
dies')	-	50	١,
No. 18 Hose Supporter, Daisy Clasp (Misses') -	-	40	Ġ
No. 19 " " (Children's)		35	
No. 7 " Shoulder, Button (Ladies'		60	6
No. 8 " (Misses'		50	
No. 9 " " (Children	1'5)	40	
No. 10 " " " "		35	1
Corset Hose Supporters (especially for Hygienic Cor	set)	35	1
Hygienic Safety Supporter (monthly bandage) -		50	1
Skirt Supporting Hooks, double set of four -		25	
" Swivel, set of four		20	
Corset Laces (Elastic)		10	
Clasps for Supporters		05	1
Combination Suit Patterns	8	40	1
(No. 1		2 00	1
Fountain Syringe, Glass Tubes No. 2	2, 2	2 25	1
No.			4

" " 3 quarts 2 quarts	Rubber			I quart -	-		,			1	50
" " 3 quarts 2 (11	10	2 quarts	-	4				İ	75
" " 4 quarts 2 :	44	4.6	**	3 quarts	-		-				00
	46	44	10		-				-		100
Address, KUNAL HEALTH KETKEAT,	Address,		R		EALT	H	RI	ETR	EA'		-3



DIPHTHERIA:

ITS CAUSES, PREVENTION, AND PROPER TREATMENT.

BY J. II. LELLOGG, M. D.

The increasing prevalence of this devastating disease, and its alarming fatality in so many cases, renders the subject of its Nature and Treatment one of the greatest importance.

This work gives a concise account of the Nature, Cause and Modes of Prevention, and also

THE MOST SUCCESSFUL METHODS OF TREATMENT

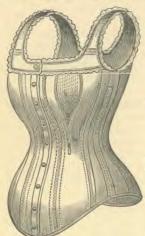
Of this prevalent and fatal malady. It should be in every household, as its instructions, if faithfully carried out, will save many a precious life. Price, in board covers, 25 cents. Address, PACIFIC PRESS, Oakland, Cal.

WHO CHANGED THE SABBATH?

A TRACT of 24 pages, which fully answers this question, and hows how Sunday displaced the Bible Sabbath. Extracts riven from Catholic writers. Price, 3 cents.

Address. PACIFIC PRESS, Oakland, Cal.

MADAME SALISBURY'S PEERLESS HYGIENIC CORSET WAIST.



UNEQUALED FOR ELEGANCE

AND

PERFECTION OF FIT.

§

GRACEFUL, HEALTHFUL, PERFECT-FITTING.

COMBINING

HEALTH, COMFORT, BEAUTY and DURABILITY

WITH

ELEGANCE OF FORM

SEVERAL years' experience has led to great improvements in Hygienic Corsets and Waists, and we feel that we can now offer, with great confidence, the new waist which may be justly called the most **Perfect-fitting and Healthful** waist in the market.

In modeling the different parts, great care has been taken to blend together the curves of the bust, waist, and hips in such a manner as to give an easy, graceful, and beautiful shape, **perfect in fit**, and yet it does not bind or draw in any part. We claim absolute perfection of comfort and beauty.

With these new improvements, the entire weight of the skirts and stockings is transferred to that part of the shoulders best adapted to sustain their weight, and supporting them almost without the wearer's consciousness, and without the least inconvenience, thereby relieving the back and hips from all superfluous weight of the clothing that drags so heavily and increases the pressure brought upon the delicate organs of the pelvis.

Beautifully made in fine, soft-finished English Silesia, in white and golden brown, with patent button front. The buttons are of finely-finished pearl, secured with a patent tape fastening—with patent cord-edge button holes; under the buttons is a flexible steel, which may be worn or taken out at pleasure. Cords are used to give the necessary stiffness, also flexible side and back steels (in patent pockets); by removing them, you have absolutely the very best Health Waist made. Sizes, 19 to 32. Mailed on receipt of waist measure and \$2.50. Sizes 33 to 36, \$2.75. In stating size, deduct one inch from a snug measure taken at the waist line over the dress.

RURAL HEALTH RETREAT,

ST. HELENA, CAL.

CHRIST AND THE SABBATH: Or Christ in the Old Testament and the Sabbatt in the New, by Elder James White. Paper covers, fifty-six pages, sent post-paid for ten cents. Address, PACIFIC PRESS, Oakland, Cal.

THE HYGIENIC Abdominal and Back Supporter.



Vo.	1	30 to 35 in	ches
	2	35 to 40	66
	3	40 to 45	86
	4	45 to 50	66
Le	rger Sizes to order	so ets.ext	ra.

These Supporters are made of selected material, and support the abdomen in the most comfortable manner. They are secured by elastic bands at front and back, which, combined with the stiff sections, give the desired support, and may be adjusted to any style of form by lacing both front and back. The buckles and slides being made of brass cannot rust, and being nickel-plated are not liable to corrode.

This Supporter may be worn with or without a Corset

Price Complete, With Hose Supporter, \$3.00.

Send measure taken **very snug**, next the skin, over the full part of the abdomen.

Address,

RURAL HEALTH RETREAT.

ST. HELENA, CAL.

ASK FOR IT!

THE SELF-THREADING

ELDREDGE

"B"

In it are combined the finest mechanical skill the most useful and practical elements, and II known advantages that make a sewing machine desirable to sell or use.



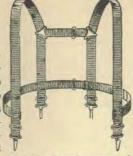
ELDREDGE MFG. CO.

Factory and Wholesale Office, Belvidere, Ill.

271 Wabash Ave., Chicago. 39 Broad Street, New York.

A SHOULDER BRACE AND SKIRT SUPPORTER

To which the skirts can be hooked, may be obtained for 60 cents; misses' size, 50 cents, post-paid. Those who have been using these articles could not be induced to dispense with them. Their practical utility must be apparent



to all who give them even a careful look and a moment's thought.

Either of the above articles may be obtained, post-paid, for their respective prices, by addressing

RURAL HEALTH RETREAT,

ST. HELENA, CAL.



The New Home Sewing Machine Company, Pacific Department, Distributing Office: 725 Market Street, History Building, San Francisco, Cal. Write for a copy of our beautiful new Waltz Song, "Rockaby Dolly," mailed Free to any address, also a lithographed banner, a fine set of chromo cards, and illustrated catalogues. Mention this paper if you want a quick response.

HEALDSBURG COLLEGE,

HEALDSBURG, CAL.

A MODEL EDUCATIONAL INSTITUTION, ESTABLISHED IN 1882.

SEVEN YEARS OF GREAT PROSPERITY BECAUSE FOUNDED ON SOUND PRINCIPLES. LABOR COMBINED WITH STUDY.

Four courses of instruction, classical, scientific, biblical, and normal; also preparatory instruction given in a primary and a grammar course.

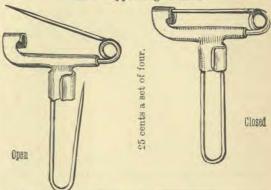
Instruction thorough and practical, not only in the collegiate courses but especially so in the preparatory courses.

Discipline rigid, yet parental, combined with strong moral and religious influences.

Expenses moderate. The whole cost to the student for tuition, board, lodging, lights, washing,—all expenses except for books and clothes, from \$18 to \$20 per month of four weeks.

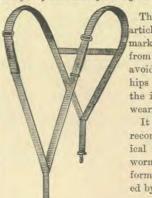
Spring term begins Monday December 31, 1888. For descriptive catalogue and further information address the principal,
W. C. Grainger, Healdsburg, Cal.

Skirt Supporting Hooks.



The Ladies' Hygienic Safety Supporter.

For firmly and securely holding in place the periodical bandage.



This useful and much desired article, unlike all others in the market, supports the bandage from the shoulders, thereby avoiding all pressure upon the hips and abdomen, and avoids the injurious effect caused by wearing belts.

It has received the highest recommendations from the medical faculty, is approved and worn by the Ladies' Dress Reform Committee, and commended by every lady at sight.

Mailed on receipt of 50 cents.

For any of the above articles, address

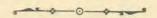
RURAL HEALTH RETREAT,

ST. HELENA, NAPA CO., CAL,

No man can avoid his own company, so he had best make it as good as possible.

NOW READY.

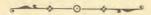
The National Sunday Law.



We do not mean that a National Sunday Law is now ready, but that a treatise under this name, prepared

BY ALONZO T. JONES,

IS NOW READY FOR CIRCULATION.



This pamphlet contains the arguments in behalf of the rights of American citizens and in opposition to the Blair Sunday Rest Bill, which Mr. Jones presented before the Senate Committee on Education and Labor, December 13, 1888.

Dr. Wilbur F. Crafts has pronounced the report as published

"Mighty Interesting Reading,"

And Mr. Jones's comments make it more so. His argument is enlarged to what it would have been without Senator Blair's one hundred and sixty-nine interruptions, objections, and counter-arguments, in ninety minutes, and is accompanied with answers to all these.

As the Sunday question is now a living issue, this treatise will be interesting to all classes, especially legislators, lawyers, judges, and other public men. The argument is

Based on Scripture and History, Constitution and Law,

Showing the limits of the civil power, the unconstitutionality of the Sunday Bill, an analysis of the Sunday laws and other religious legislation of the different States, the Sunday-law movement of the fourth century, the Sunday-law movement of the nineteenth century, the methods used in securing indorsements to the petition for the Blair Bill, and the workings of such Sunday laws as are proposed for the United States.

Address, AMERICAN SENTINEL, 1059 Castro Street, Oakland, Cal.;
43 Bond Street, New York.

The work contains 192 pages. Price, 25 cents.