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THERE are 3,000,000 men who follow the sea for a living.

THE Bank of England commenced operations January 1, 1695.

THE best brain work Dr. Felix Oswald declares can be done in a cool room.

IT is a great defect in men to wish to rule everything except themselves.—*Bossuet.*

THE price of good health is the wise use of those means which promote it.—*Sel.*

RAVENOUS birds are quickest sighted, so are the worst people the greatest fault-finders.

THE children of faith, and they only, are lords of the world and conquerors of death.

THE first sure symptom of a mind in health is rest at heart and pleasure felt at home.

IT takes two men two hours to wind the large clock in the steeple of Trinity Church, New York City.

AN unkind word or an unloving act may cause many bitter regrets, but whoever heard of the opposite having such an effect? Let us indulge in saying kind words and in performing loving acts.—*Sel.*

MEDICINES. NO. 3.

(*Editorial.*)

MANY times the physician does much harm in encouraging the use of patent medicines. The practice of giving calomel and quinine for every ill has led the public to self-prescribing, even to the taking of these two medicines. The patient, learning that the physician he consulted will prescribe these medicines, goes to the drug store and gets the amount he wants and saves the bill for consultation. Soon the patient feels something more than these are needed, and flies to the patent medicines; whereas, if his physician had given him the proper advice as to living, and had needed medicine been properly prescribed, the resort to these filthy nostrums would have been avoided.

All this shows the ignorance of the patient, and also shows the ignorance, laziness, and stupidity of the physician. There are too many who know but little else about medicine other than calomel, ipecac, quinine, and the hypodermic syringe of morphia. Those who do not know better, and have no definite ideas of disease and its cure, should go and learn from someone who does. All should know that all that can be done by medication is to supply the environments demanded by nature.

Our observation proves to us that the results of the continued use of most medicines demand their discontinuance, and also demand that the intelligent physician relieve the patient of their harmful influences. The patient who has been weakened by dissipation, excess, or other improprieties, has sought relief from the consequences of transgressing nature's laws in tonic or other medicines, forgetting that nature is unrelenting, and for every transgression she demands retributive justice with interest, in the way of aches and pains of body and mind.

So long as people will persist in midnight revelry, debauchery, large and late suppers; so long as they continue to eat things which disagree with the stomach merely to gratify a perverted palate; so long as they continue eating and drinking to excess, causing painful stomachs, heavy heads, and languid bodies, and then try to counteract the inevitable results of such a course by physics and tonics, just so long will they be sick. This sickness is only a harvest of seed previously sown. The harvest shows what kind of seed was sown. It is a fiat throughout nature and revelation that "whatsoever a man soweth, that shall he also reap."

Let us reflect for a moment on the fact that a degree of moral sequences always follows physiological disturbances. Notice around you, and see the doleful moral wrecks from taking "tonics." These so-called tonics tend to obscure and pervert moral perception, and countervail moral distinction, always in accordance with the extent of the indulgence and the temperament of the individual. Suppose you desire to exalt or depress the functions of brain and nerve, or to influence the digestive organs, or the circulation, by taking these so-called tonics, it is certain in each case that some change in the *feelings* and *sensations* is included. These effects reach the moral sense. Observe the dyspeptics, the nervous, irritable persons, and the miserable of both sexes, who are continually buying tonics, or some celebrated cure in the shape of "mineral waters." These have but little perception of good in any cause, other than those preceding the reaction in *their feelings*.

The druggist has a large share in the responsibility for the extensive use of patent tonics. The compounder of patent medicines and the druggist take advantage of the eye of him who is weak in mind and body, giving symptoms which are common to most sick people, and give such a good description of the trouble that the invalid thinks surely his medicine must be just the one, and he must try this much-vaunted mixture; but only to fail. We see clearly that the unscientific physician, the people, the druggist, and the maker of patent medicines, are the responsible parties for the outlay of so much money each year in the purchase of these nostrums, and for the suffering occasioned by their use.

This is not all; we are all responsible for preserving to the utmost our bodies in good order, especially our nervous systems, because so intimately

connected with our moral being. Each of us has duties, has obligations to those with whom we associate, which we cannot set aside without moral culpability. We cannot allow the sensorial and emotional faculties to over-ride the physical harmonies of the body without moral wrong. B.

FOODS. NO. 9.

(Editorial.)

BOTH old and young should choose such foods during the heated term as will prove cooling to the blood, such as watery fruits and vegetables, with a fair amount of grains. These should be well selected, tender, and crisp.

Fertilizers not well rotted should not be used on the soil which grows fruits and vegetables; it causes decay in great degree, especially in potatoes and other roots. Sour, undrained soils must also answer for much of the decay we see in vegetables and fruits. The unoxidized waste from cities and towns should not be spread on soil where food products grow. It is charged with typhoid fever and diphtheritic filth, virulent acids and gases, to poison and change to a great extent the food in the soil. These develop poisons and alkaloids in fruits and vegetables, instead of the normal refreshing juices. The relation existing between fertilizers and vegetable production is intimate, while the relation between the diseased vegetables and many diseases of the human body is much more so. Diseased products of the soil—fungus of crops and insect pests—furnish an interesting subject to those who desire to see improvement in the health of the general public.

In hot weather avoid flesh, fat, and sugar, if you would enjoy the high heat and be free from the needless thirst from which most people suffer during the heated term. The proper quantity of food should be eaten, not too much nor too little. Experiment with your own stomach *how much* food to take, and don't forget to observe the effect of it on the bowels, liver, and kidneys, and govern the quantity accordingly. Yes, go still further and note the effect of foods upon the whole body and mind, and see that all is well, for health is a normal working of every organ in the body.

Our eating, drinking, and, breathing sustain the stomach, intestines, liver, kidneys, heart, lungs, and every other part of the body, even to the brain, which is the organ that functions mind and thought. If

thought is a function of the brain, just as digestion is a function of the stomach, then we ought to be careful how we form the brain. There are many bad people now who might have been otherwise had it not been for their habits of eating and drinking, and the character of the atmosphere which they have breathed. Had the food, drink, and air been different, many criminals would not have been led to commit the crimes for which they are now imprisoned. Many who have been hung on the gallows for murder would not have come to such an end had it not been for errors in eating which induced an appetite for strong drink. These errors resulted in irritability, petulance, and ill temper. The relation of physical ills to crime is very plainly marked, as may be seen by any close observer.

Man has long gone wrong in eating, drinking, and breathing—neglect of the laws of health—until there are but few, if any, who are free from disease, and this neglect forces him into ways immoral. A great sin of all of us is found in the neglect of God's health laws. We are by this long disobedience forced into a way which affects both mind and moral sense. Our minds become clouded, moral sense dwarfed, and wills weakened, and we are now traveling in this downward road at railway speed. We advocate a change in physical habits, throwing off these seeds of vice, and by this means hope for a better state of morals.

B.

A MOOTED QUESTION.

THE votes on the Bacon-Shakespeare controversy are hardly more evenly divided than the pros and cons of learned verdicts on the possibility of a flying machine. The prophet of Mount Carmel, Illinois, is still at work on his aluminum balloons. Professor Henzen, of Boerlan, admits no strangers to his laboratory, but hints that bats rather than birds should be chosen as the model of a successful machine, and the inventor of the Maxim gun proposes to solve the problem of ages by a combination of rotary fans and aero-plane kites. His flying dragons will carry passengers, but serve the additional purpose of dropping keepsakes of dynamite on forts and hostile armies, or running a blockading armada—if the aerial torpedo cruiser should not, in its turn, be ruined by a seaward gale. That "if," Professor Le Comte holds, will always remain the stumbling-block of aerial naviga-

tion, or, rather, one horn of an unavoidable dilemma—unwieldy heaviness or storm-tossed lightness.—*Felix L. Oswald.*

THE AIR WE BREATHE.

BY J. F. COOPER, M. D.

AN atmosphere is necessary to maintain life. Without an atmosphere of proper composition the entire animal creation not dependent upon water as its source of life-sustaining elements would perish and hasten to decay. Its elements and their proportions are so admirably adjusted to the wants and well being of all animal life above water, that when in proper hygienic condition the most perfect health and development are seen. Without it man and the inferior animal creation dependent upon it would be in vain.

From the elements that enter into and become important parts in vegetable growth, an atmosphere properly constructed seems as necessary for their health and development as for man. At any point where animal and vegetable life is maintained in any degree of perfection, there is a uniformity in atmospheric proportions that testifies of design and of the skill of a creating power. The difference in the elements of our atmosphere on sea or land, on plain or mountain top, is so small that it would seem almost impossible to have it adjusted so nearly alike in every place, but such is the fact; and where no disturbing influence is seen, a healthy growth and perfect development are a natural consequence. The atmosphere surrounding our earth is evidently of considerable height, variously estimated at from one hundred to two hundred miles. At the ocean level it has a weight of fifteen pounds to the square inch. A column of air the whole height of the atmosphere is equal to a column of water of the same thickness and thirty-four feet in height. The atmospheric pressure decreases in just proportion in weight and density as an ascent is made from ocean to uplands and high mountains. So far as known, a uniformity exists in the proportion and admixture of its elements. Two primary gases form the greatest proportions of its bulk. And two other gases are found in small proportions more or less constantly forming a part of its volume. Nitrogen constitutes the largest element, and in a hundred parts by measure claims seventy-eight and ninety-nine hundredths parts as its proportions.

Oxygen, the real life-sustaining element, is measured at twenty and ninety-nine hundredths parts. Carbonic acid is represented by three-hundredths or four-hundredths of one per cent, fluctuating more or less in accord with the changes in the proportion of oxygen. Ozone, another not very constant nor an abundant element, is found in the atmosphere most at night and after storms with lightning. It is supposed to be composed of three measures of oxygen pressed into two. It is said to be a powerful oxidizer, corroding both organic and inorganic substances, and quick in showing its power. When inhaled in concentrated form, it is said to irritate to a high degree the mucous surfaces with which it comes in contact, and in certain catarrhal affections, when in excess in the atmosphere, may be a direct exciting cause of diseases of that character. It is said that a full atmosphere of oxygen charged with one two hundred and fortieth part of its bulk of ozone, becomes rapidly fatal to animal life, from congestion of the right side of the heart and lungs. The cardiac action becomes feeble, the respiration slower than normal, and the blood in the heart and lungs gives evidence of supercarbonization having been the cause of death. Animal life and the maintenance of animal heat are so completely dependent upon taking into the circulation of the blood through the lungs a given quantity of oxygen, that the slightest diminution of the volume of air taken in, or a less proportion of oxygen, is felt almost immediately. Either deep breaths, or rapid breathing, if the lungs have become congested, are required to make amends for the deficiency. Even a very slight change in the proportion of oxygen in the atmosphere of a room or locality is readily felt by the average individual. A sighing respiration, or involuntary raising the arms above the head when asleep, are indications that the individual needs more oxygen than he or she is getting from the atmosphere.

The burning of a candle in an atmosphere to be tested as to its safety, is considered a safe practice. Life will be maintained for a short time in an atmosphere that will not maintain a candle flame. A candle will go out in an atmosphere of twenty and one-half to the hundred, while life may be maintained for a few minutes in an atmosphere of seventeen and one-fifth. The sponge diver, by rapid, deep breathing, super-oxygenates his blood, so that at times he can remain under water, and

without breathing, for three minutes, where the unpracticed individual could scarcely remain one minute at a time. In growth, development, and even in decay, oxygen is ever in demand. Its affinities are almost universal and almost unlimited, but the supply is equal to the demand. From the changing and decomposing vapors of ocean and stream, from every plant that grows, from the grass-covered hill and plain, from every leaf and stalk that develops, and from every flower that blooms, a due proportion is contributed to keep up the great supply. This all-pervading element is constantly entering into new combinations, hastening development by contributing its share, or, in the event of death, hastening change and decay. Its affinities for the flinty rock, for steel and iron, for gold, silver, and platinum, and, in fact, almost everything in nature but the diamond, enables man to control and use it in manufactures and commerce, as well as in the field of hygiene. —*The Evolutionist.*

BACTERIA.

A Chapter in the Life History of a Minute Organism.

BY DR. T. M. PRUDEN.

FAR down in the scale of plant life is a certain great group whose individuals are spoken of, in a general way, as micro-organisms, or microbes, or germs. One great family of the group of micro-organisms is called "yeasts." The commercial value of the single yeast plant may be estimated from the fact that the cake of yeast, costing the consumer one cent, contains many million plants. When these yeast plants, well distributed through the dough, are set in a warm place, they begin to grow, and in order to grow they must consume food. Now, the flour and salt and water in the dough are very choice viands for these little plants; they assimilate some elements, and set free, among other things, carbonic-acid gas. This occupies much more space than the carbon and oxygen occupied in the flour, and the gas, as it expands, "rises" the dough, rendering it light and porous. At the right moment off goes the whole mass to the oven, where the lives of the myriad budding plants are soon extinguished; and when we eat bread, we eat the yeast cells, along with the fragments of the cells of the wheat or rye of the flour.

Another familiar group of micro-organisms are

the molds, and still another group of lowliest, tiniest plants, closely allied to the fungi, are the bacteria—elemental organisms so simple in structure as to be almost completely represented by lines and dots, but endowed with such limitless powers of reproduction as almost to shame the multiplication table. Under the most powerful lenses, they are seen to consist of a minute mass of granular protoplasm, surrounded by a thin, structureless membrane. When we put them under favorable conditions of growth, and give them food enough, they may be seen to divide across the middle, each portion soon becoming larger and again dividing, so that it has been calculated that a single germ under favorable conditions might at the end of two days have added to the world's living beings 281,500,000,000 new individual bacteria. Indeed, if this sort of thing were to go on for a few weeks unhindered, pretty much all the oxygen, carbon, hydrogen, and nitrogen available for life purposes would be used up, there would be a corner in life stuff, and even the master, man, would be forced to the wall. But numerous causes arrest their spread, and the bacteria in the long run are held closely within bounds, the world over.

Indeed, life goes hard with many forms, and but for a curious provision for their preservation under adverse circumstances, it is likely that many species would soon die out. It is found that, when the conditions become too unfavorable for the continuance of life in some bacteria, a portion of the protoplasm sequesters itself in one end of the germ, and surrounds itself with a dense resistant envelope. This is called a spore. The old shell falls away, and this spore is now capable of resisting vicissitudes of temperature such as would have destroyed it in its form. Restore the spore, however, to favorable surroundings, and it bursts its protecting shell, and emerges, a thin-skinned and vulnerable, but an active, and perhaps a triumphant germ. All of the bacteria, so far as we know, have the power, in nourishing themselves, of tearing asunder other forms of matter, assimilating a part of it in new combinations in their own bodies, and setting free the rest. These chemical substances, which are set free by living, growing bacteria, are the most diverse characters. They may be acid or alkaline, aromatic or bad smelling, harmless or very injurious to man. The soil forms the great living and lurking place of the more common forms, and from this they are spread far

and wide, into the air as part of the dust, or are washed off into the surface and other waters.

The life history of many of these species of bacteria is well known to us, while whole groups are almost wholly unstudied. This much has been well established, that there are some species which are quite indispensable to the higher forms of life in this world, because it is they which tear dead organic matter to pieces, and fit it to be taken up by plants and worked over into food for men and animals. A piece of meat, or any other organic matter, would remain unchanged indefinitely, if shut up so that no living bacteria could come in contact with it. Under ordinary conditions, however, the bacteria do gain access to all dead organic matter, and then ensues putrefaction, and finally a total destruction, that is, a total change into other forms of matter. The bacteria are thus the great scavengers of the earth. Others are injurious to man.

It has been learned within the past few years that several of the most serious diseases known are caused by particular species of bacteria. Among the forms which thus originate are tuberculosis, Asiatic cholera, erysipelas, and some forms of blood poisoning, tetanus or lockjaw, some forms of pneumonia, typhoid fever, and diphtheria. We know the germs which are concerned in the causation of these diseases, and can grow them in tubes in the laboratory, and work out their life history. Vast numbers of bacteria are taken into our system with a great variety of uncooked foods, and with water and milk; and of those which multiply in our bodies, the great majority are innocuous, but a small proportion of them produce substances which act like poisons. These substances are called ptomaines. It is difficult to conceive that all these curious doings, all these far-reaching accomplishments, should be carried on by organisms so small that a thousand of them mustered abreast could pass through the hole pierced in a paper by a fine sewing needle, and never touch the sides; yet so it is.—*Harper's Magazine*.

WE must taste the gall if we would taste the glory. If justified in faith, we must suffer tribulation. When God saves a soul, he tries it. Some believers are much surprised when they are called upon to suffer. They thought they would do some great thing for God, but all he permits them to do is to suffer for his sake.—*McCheyne*.

DAN'S WIFE.

UP in early morning light,
Sweeping, dusting, "setting right,"
Oiling all the household springs,
Sewing buttons, tying strings,
Telling Bridget what to do,
Mending rips in Johnnie's shoe,
Running up and down the stair,
Tying baby in his chair,
Cutting meat and spreading bread,
Dishing out so much per head,
Eating as she can, by chance,
Giving husband kindly glance,
Toiling, working, busy life,
"Smart woman,
Dan's wife."

Dan comes home at fall of night,
Home so cheerful, neat, and bright.
Children meet him at the door,
Pull him in and look him o'er;
Wife asks how the work has gone;
"Busy times with us at home!"
Supper done, Dan reads at ease—
Happy Dan, but one to please!
Children must be put to bed—
All their little prayers are said;
Little shoes are placed in rows,
Bedclothes tucked o'er little toes.
Busy, noisy, wearing life,
Tired woman,
Dan's wife.

Dan reads on, and falls asleep—
See the woman softly creep;
Baby rests at last—poor dear,
Not a word her heart to cheer!
Mending basket full to top—
Stockings, shirts, and little frock—
Tired eyes and weary brain,
Side with darting, ugly pain—
"Never mind, 'twill pass away;"
She must work, but never play;
Closed piano, unused books,
Done the walks to cozy nooks,
Brightness faded out of life,
Saddened woman,
Dan's wife.

Upstairs, tossing to and fro,
Fever holds the woman low;
Children wander, free to play
When and where they will to-day;
Bridget loiters—dinner's cold;
Dan looks anxious, cross, and old;
Household screws are out of place,
Lacking one dear, patient face;
Steady hands—so weak, but true—
Hands that knew just what to do,
Never knowing rest or play,
Folded now—and laid away.

Work of six, in one short life,
Shattered woman,
Dan's wife.
—Mrs. Kate Tannat Woods.

DISEASE AND ITS CAUSES.

BY MRS. E. G. WHITE.

SHUNNING physical labor has proved a great injury to many. The do nothing system is a dangerous one. The idea of the necessity for amusement in order to occupy the mind is a fallacy. When certain amusements are substituted for light, useful employments, there is a decided mistake. Some amusements, so called, excite the brain much more than useful employment, requiring light, physical labor, would.

Physical exercise and labor combined have a happy influence upon the mind, strengthen the muscles, improve the circulation, and give the invalid the satisfaction of knowing his own power of endurance; whereas if he be restricted from physical labor and healthful exercise, his attention is turned to himself. He is in constant danger of thinking himself worse than he really is and of having established within him a diseased imagination which causes him to continually fear that he is overtaxing his powers of endurance. As a general thing, if he should engage in some well-directed labor, using his strength and not abusing it, he would find that physical exercise would prove a more powerful and effective agent in his recovery than even the water treatment he is receiving.

The inactivity of the mental and physical powers, as far as useful labor is concerned, is that which keeps many invalids in a condition of feebleness, which they feel powerless to rise above. It also gives them a greater opportunity to indulge in impure imagination, which indulgence has brought many of them where they are in point of feebleness. They are told they have expended too much vitality in hard labor, when, in nine cases out of ten, the labor they performed was the only redeeming thing in their lives, and has been the means of saving them from utter ruin. While their minds were thus engaged, they could not have as favorable an opportunity to debase their bodies and complete the work of destroying themselves. To have all such persons cease to labor with brain and muscle is to give them an ample opportunity to be taken captive by the temptations of Satan.

Close application to severe labor is injurious to the growing frames of the young; but where hundreds have broken down their constitution by overwork alone, inactivity, overeating, and delicate idleness have sown the seeds of disease in the systems of thousands that are hurrying to swift and sure decay.

Why the youth have so little strength of brain and muscle is because they do so little in the line of useful labor. "Behold, this was the iniquity of thy sister Sodom, pride, fullness of bread, and abundance of idleness was in her and in her daughters, neither did she strengthen the hand of the poor and needy. And they were haughty, and committed abomination before me; therefore I took them away as I saw good." Eze. 16: 49, 50.

There are but few of the youth of this degenerate age who can even endure the study necessary to obtain a common education. Why is this? Why do the children complain of dizziness, headache, bleeding at the nose, palpitation, and a sense of lassitude and general weakness? Should this be attributed mainly to their close study? Fond, indulgent parents will sympathize with their children because they fancy their lessons are too great a task, and that their close application to study is ruining their health. True, it is not advisable to crowd the minds of the young with too many and too difficult studies. But, parents, have you looked no deeper into this matter than merely to adopt the idea suggested by your children? Have you not given too ready credence to the apparent reason for their indisposition? It becomes parents and guardians to look beneath the surface for the cause of this evil.

In ninety-nine cases out of one hundred the cause, searched out and revealed to you, would open your understanding to see that it was not the taxation of study alone that was doing the work of injury to your children, but their own wrong habits were sapping the brain and the entire body of its vital energy. The nervous system has become shattered by being often excited, and thus has been laid the foundation for premature and certain decay. Solitary vice is killing thousands and tens of thousands.

Children should have occupation for their time. Proper mental labor and physical outdoor exercise will not break the constitution of your boys. Useful labor and an acquaintance with the mysteries of housework will be beneficial to your girls, and

some outdoor employment is positively necessary to their constitution and health. Children should be taught to labor. Industry is the greatest blessing that men and children can have.

Parents have erred in the education of their children. They have been too indulgent. They have favored them and excused them from labor until with some of them it is positively distasteful. Inactivity, lack of well-regulated employment, has injured them greatly. Temptations are on every side ready to ruin the youth for this world and the next. The path of obedience is the only path of safety.

Parents have been blind to the power the enemy is having over their children. Household labor, even to weariness, would not have hurt them one-fiftieth part as much as indolent habits have. They would have escaped many dangers had they been instructed at an earlier period to occupy their time in useful labor. They would not have contracted such a restless disposition for change and for society; they would have escaped many temptations to indulge in vanity and to engage in unprofitable amusements, light reading, idle talking, and nonsense. Their time would have passed more to their satisfaction and without so great temptation to seek the society of the opposite sex, and to excuse themselves in an evil way. Vanity and affectation, uselessness and positive sin, have been the result of this indolence.

EARACHE.

TAKE five parts of camphorated chloral, thirty parts of glycerine, and ten of sweet almonds. A piece of cotton is saturated and introduced well into the ear, and it is also rubbed behind the ear. The pain is relieved as if by magic, and, if there is inflammation, it often subsides quickly.—*Sel.*

INDUSTRIAL ignorance is the mother of idleness, the grandmother of destitution, and the great-grandmother of socialism and nihilistic discontent. A good deal of what we call our goodness is only another name for methods of behaving that we have had drilled into us till they have become habits.—*Sel.*

ALL the licensed cigar dealers in Cape May City, N. J., have signed a contract, under a forfeiture of fifty dollars, not to sell another cigarette to either man or boy during the present winter.—*Ex.*

Mothers' Corner.

"But one upon earth is more beautiful and better than the wife—that is the mother."

FLO'S LETTER.

A SWEET little baby brother
Had come to live with Flo,
And she wanted it brought to the table,
That it might eat and grow.
"It must wait for a while," said grandma,
In answer to her plea,
"For a little thing that hasn't teeth
Can't eat like you and me."
"Why, hasn't it got teeth, grandma?"
Asked Flo, in great surprise.
"O my, but isn't it funny?—
No teeth, but nose and eyes!
I guess," after thinking gravely,
"They must have been forgot.
Can't we buy him some like grandpa's?
I'd like to know why not."
That afternoon to the corner,
With paper and pen and ink,
Went Flo, saying: "Don't talk to me;
If you do it will 'sturb my think.
I'm writing a letter, grandma,
To send away to-night,
An' 'cause it's very 'portant,
I want to get it right."
At last the letter was finished,
A wonderful thing to see,
And directed to "God, in heaven."
"Please read it over to me,"
Said little Flo to her grandma,
"To see if it's right, you know."
And here is the letter written
To God by little Flo:
"Dear God: The baby you brought us
Is awful nice and sweet,
But 'cause you forgot his toofoes
The poor little thing can't eat.
That's why I'm writing this letter,
A purpose to let you know.
Please come and finish the baby.
That's all. From
Little Flo."

—Eben E. Rexford.

THIS DEPARTMENT.

ONE writer has truly said, "Children are what their mothers are." Upon no individual of the family rests a greater or more sacred responsibility than upon the mother. The father's influence is im-

portant, but as regards the training of the children, it is by most fathers exerted through the mother, rather than directly upon the children. He is with his children so much less than is the mother. Many fathers see their children by daylight and awake only one day in the week. The father leaves home before the little ones are awake for the day and returns after they have retired. At the best, he sees them but a small portion of his time.

But not so with the mother. In the first place, her intimate relation to the child both before and after birth has endeared and bound it to her with stronger bonds than are known by any other relations of earth. Again, she is with her child most of the time. From the moment the bright, wondering eyes open upon a new world till of larger growth the child goes out from home to school, to work, to try the world alone, its development is watched by the anxious, loving mother. And during this period the mother has been day by day moulding the character of the child. Her precept and example have been constantly exerted—a current which has borne her child along.

The difference between the father and the mother may be illustrated by the action of the wind and current on the water. Other things being equal, the mother's influence may be likened to the current, steady, constant, onflowing out into the great sea before, while the influence of the father is like that of the wind, rippling and ruffling the surface of the water, but not steady and constant in its force. If with the current, it is well; but if against it, it only seems to turn the water back; the current flows on the same if impelled by a faithful, devoted, earnest mother.

The history of many lives in the past bear out the above. How important it is, then, that this influence be exerted aright; that the foundation for permanent character which mothers are laying in their first years be well laid! How important that mothers realize the precious opportunity which the earliest infancy, aye, the period even before its birth, offers as the time to shape the disposition and character of the child; for as the years go by she will find that the impress of her influence grows less and less vivid and more and more evanescent. The wax becomes harder, the impression of the die less distinct.

Much, indeed, would we like to say more, but we leave it till some future time. The object of

this department will be to help the mothers among our readers (and we hope the circle may be greatly extended) in the training of their little ones, physically, mentally, morally. We ask their attention and help; we wish to co-operate with you in making stronger, better, purer, brighter boys and girls.

w.

BABY'S FIRSTS.

BY MARY A. ALLEN, M. D.

I. THE FIRST BATH.

"We came crying hither;
Thou knowest the first time we smell the air
We wail and cry."—*Shakespeare.*

PROBABLY NO moment in a woman's life is so full of absolute satisfaction as that moment in which the first cry of her child announces that it has drawn its first breath and begun an independent existence. Is it not strange that the dawning of a life on this earth, where sin, sorrow, and suffering are the portion of all, where the possibilities of wreck and ruin are so great, should be an incident so fraught with joy to those who listen to the wail with which the new being receives this gift of earthly existence? . . . How selfish are we in our joys and sorrows! The infant lives, therefore it weeps. It weeps, therefore all who are around it smile because it has accepted life even though with protestations.

The connection between the first breath and the first cry is so intimate, and the moment so fleeting, that under normal conditions there is no need of giving them any special thought. Nature is amply able to take care of them herself. We will therefore turn our attention to the consideration of the first bath.

When and how the first bath shall be given is a matter of serious importance, for upon it may depend not only the health, but even the life, of the infant. If we remember his previous condition, we shall have some guide as to the method of procedure. Up to the moment when he takes up the burden of an individual existence, he has lived in a state of equable warmth, at a temperature of 98° Fahr. He has been subject to no vicissitudes. He is now introduced to a temperature several degrees colder than this, and varying perhaps several degrees in a few hours. Into this atmosphere he comes unprotected by clothing, exhausted, it may be, and radiating vital heat with great rapidity from

every square inch of his bodily surface. Upon the retention of vital heat depends his life. The first thing to be done, then, is to wrap him warmly in flannel to protect him from loss of heat. As soon as the nurse is at liberty to give him special attention, she should take him to the fire and with a woolen cloth dipped in warm olive oil wipe him carefully, paying particular attention to the scalp, ears, and all folds and creases in the skin. Then, wrapping the body warmly, she can wash the hands and face with a soft linen cloth and warm water. This is all the bath that should be given for twenty-four hours, or, with very delicate infants, we may say for forty-eight hours.

Do not be alarmed at the idea of leaving him so long without an ablution. In the mania for cleanliness which has possessed us in the past, many lives have been sacrificed. The important thought is to keep up the warmth. If the babe is warmly wrapped in soft woolen, it can be expected now to sleep and rest after its arduous passage into life, and it need not be disturbed even to be dressed. Fond and anxious parents and friends would like to see the little stranger adorned in the beautiful garments love has prepared, but pride and vanity should be made to yield to plain common sense.

After the twenty-four or forty-eight hours of quiet, warm repose, the first bath may be given. In preparation for this the temperature of the room should be brought up to eighty. If a full bath is to be given, the water should be about ninety-eight, that is, blood heat. The nurse should wear a woolen apron, and should place the bath-tub on a level with her lap as she sits with the infant upon it. A piece of old blanket spread in the tub and hanging over the edges is a desirable addition to the paraphernalia, as it prevents the child touching the hard sides of the tub. It is worth our while to consider how we may avoid shocking the delicate nerves of the infant. Many children receive such a shock in the first bath that they never recover from it, but ever after shrink from the bath. A bath towel wrapped around the child before it is lowered into the water relieves from the unpleasant sensation experienced by being lifted in a nude state through the air.

Before lowering into the tub the face and eyes should be carefully washed with a soft linen cloth, kept especially for that purpose. Diseases of the eyes often result from carelessness in this respect. The scalp, ears, and other particular places may be

cleansed with a sponge or soft woolen cloth, sweet oil, and a pure white soap. Immersed in the water, the head of the child should be supported by the left hand of the nurse, while the right hand is used in rubbing.

One or two minutes ought to suffice for the bath, then the child should be lifted to the lap, wrapped in the woolen apron worn by the nurse, and each part of the body carefully patted dry, while the rest of the body remains covered. The whole body should be rubbed by the hand until it is thoroughly dry and warm, after which the babe should be again wrapped in its flannel blankets and left to rest instead of being at once dressed.

If the child is delicate or feeble, a full bath should not be given, but it may be sponged off while lying on the nurse's lap, a part at a time, the rest of the body being kept covered. There may be children so delicate that they cannot bear a complete sponge bath at one time, but should have a part of the body washed to-day and another part to-morrow, and so on. My experience leads me to believe that much of the "crossness," colic, jaundice, and other ailments of infants, is due to injudicious bathing. I have often found that babies who are fretful under the daily bath became quiet and amiable if bathed less frequently. There is certainly need of great care in cleanliness of particular parts, but I see no more need of a daily bath for all infants than for all adults. The frequency of the bath should be determined by the vigor of the child and the effects of the bath. No absolute rule can be laid down, but each child's régime determined by a watchful care of its own idiosyncrasies.—*The Advance*.

A MOTHER'S DUTY.

BY MRS. E. G. WHITE.

THE tenderest earthly tie is that between the mother and her child. The child is more readily impressed by the life and example of the mother than by that of the father; for a stronger and more tender bond of union unites them. Mothers have a heavy responsibility. If I could impress upon them the work which they can do in moulding the minds of their children, I should be happy.

If parents themselves would obtain knowledge, and feel the importance of putting it to a practical use in the education of their dear children, we

should see a different order of things among youth and children. The children need to be instructed in regard to their own bodies. There are but few youth who have any definite knowledge of the mysteries of human life. They know but little about the living machinery. Says David, "I will praise Thee, for I am fearfully and wonderfully made." Teach your children to study from cause and effect; show them that if they violate the laws of their being, they must pay the penalty by suffering disease. If in your effort you can see no special improvement, be not discouraged; patiently instruct, line upon line, precept upon precept, here a little and there a little. If by this means you have succeeded in forgetting yourself, you have taken one step in the right direction. Press on until the victory is gained. Continue to teach your children in regard to their own bodies, and how to take care of them. Recklessness in regard to bodily health tends to recklessness in moral character.

TO KEEP THE BABY HEALTHY.

BY ELIZABETH ROBINSON SCOVIL.

THE BABY'S second summer is always the most trying. It is cutting its teeth, and the irritation combined with the heat makes life no easy matter for the poor little thing. It must be carefully watched and its ailments rationally treated if it is to be carried successfully through this dangerous season.

A baby in the country, with all the advantages of fresh air and good milk, is under the best conditions possible to resist the effects of the heat. Yet the country, like everything else, has its counterbalancing disadvantages and often one of these is the distance from a doctor. Before leaving town the mother should ask her family physician for a few powders of pepsin and bismuth, or any simple remedy he may wish to prescribe for indigestion, with full directions for its use. She should take with her a bottle of lime water and another of pancreatin, or one of the other preparations for peptonizing milk, so that she may be prepared for emergencies.

The purity of milk, even in the best surroundings, is always open to question, because it absorbs germs so readily. That used for food for a baby should be sterilized to make it perfectly safe. This can be done in the morning and evening by putting the milk, fresh from the cow, in bottles of a size

to hold enough for one meal each. Place these in a saucepan filled with cold water, and set it on the stove where it will heat gradually. After the water boils for a short time, cork the bottles and let them remain in it for half an hour. Remove from the stove, and when the water is cool take out the bottles. If no ice is to be had, stand them in a stone jar containing water, and wrap the jar in flannel or put in a brook in a shady place. When a bottle is opened and all the milk is not used, throw away the remainder.

If, in spite of care in feeding, the bowels become disordered, boil rice until very soft, steam the liquid from it and add the same quantity of sterilized milk. Sometimes one tablespoonful of lime water to six of milk will correct the difficulty.

Keep the baby in the open air as much as possible, but do not have it out in the evening when the dew is falling. If a hammock is slung in the shade, it will sleep better there during the day, covered with a mosquito net, than it will in a hot room.

Dress it loosely, with a gauze flannel shirt next the skin, and no tight bands.—*Ladies' Home Journal*.

FORMATIVE INFLUENCES.

BY HON. LAFE YOUNG.

It is a wise providence enabling lives, starting under circumstances the most doubtful and discouraging, to attain heights of enjoyment and prosperity; that provides for the fullest final development of those whose early existence is blighted and hindered. The old adage, "Blood will tell," must not be wholly trusted under all conditions. We find from the finest families there emanates, oftentimes, the vilest natures, while from the hovel known as the drunkard's home occasionally come beautiful examples of Christian manhood. The important thing in all lives is not so much birth or parentage as early influences and education. Heredity may have fixed laws, but hereditary effects are always unknown quantities, not to be depended upon. It is a conceded fact that the transmission of personal characteristics may be traced to the third or fifth generation back as surely as the first. It is never known what traits will appear. A child's parent may be a felon, but the child may inherit the peculiar characteristics of his grandparent, who was a devout saint. It is a rich inheritance for any

child to be born of parents who will instill into the young mind and heart habits of industry, sterling honesty, and unfaltering truthfulness, stamping the impressible young natures with noble traits that will strengthen as years pass by and prove a bulwark against the most severe temptations.

The early training of boys in morals and manners should not be neglected. Every child has a right to be cultivated in this respect, and no person has a right to neglect the little politenesses of life, that, if neglected, become such great defects. Every woman having the care of children should see that they are carefully instructed in truly genteel manners. In the case of boys this should be emphasized, because they are the ones who usually suffer from neglect. This should be done, not to save the mother from distressing embarrassment when company is in the house, but for the good of the man who will succeed the boy. Above all things, they should be trained to habits of neatness and personal cleanliness, and to take a pride in appearing well at home as well as in public places.

The boy may grow restive under the training, and wish all rules of etiquette were consigned to oblivion. But, if he lives to outgrow the hoodlum period, he will heartily thank you and be proud of the wise mother who so carefully provided for his future. It is not wisdom to overdo these matters that seem so trivial, and yet, in the long run, are so momentous. Do not be continually finding fault with the lad, nor reproving him in the presence of others. Rather instill in his mind the value of these graces of habit, and inspire him with the thought that in every American boy's life there is the possibility of the highest attainment. Every boy is an uncrowned king. If, in the palaces of kings, the young princes receive thorough training for their future thrones of influence, that they may not disgrace themselves by a breach of good manners, it should be equally important that the young sovereigns in this country be carefully prepared for the stations of honor and trust they may be called to occupy.—*Selected*.

It vashn't der man in der grocery so mooch as der people who trade mit him dot vhas responsible. All of us know what he vill say to us when we ask him if dot box holds a quart of strawberries.

A LONDON omnibus travels about eighty miles a day.

Temperance.

FALSE PRIDE.

ASHAMED to own your labor
 To earn your daily bread,
 Ashamed to carry a parcel,
 Lest "something" might be said;
 Ashamed of humble neighbors,
 Ashamed of kith and kin,
 Ashamed to wear your last year's coat,
 Yet not ashamed to sin!

Ashamed to save the dollar
 By laying up the dime,
 Yet not ashamed to borrow,
 Or waste God's precious time;
 Ashamed to learn of good men,
 Ashamed to take advice,
 Yet not ashamed to take strong drink,
 And not ashamed of dice!

Ashamed to shun temptation,
 Ashamed to answer, "No!"
 Yet not ashamed to loiter
 On "corners" as you go;
 Ashamed before you venture
 To nobly count the cost,
 Yet not ashamed to boast how much
 At stakes you've "won" or "lost"!

Poor human nature needeth
 Foundation like a rock,
 And strong supports and braces,
 To guard against life's shock;
 But of all the "helps" to aid her,
 And all the "props" beside,
 That keep her dignity alive,
 The weakest is false pride!

—Selected.

WHERE SHOULD GENTLEMEN SMOKE?

OF course some men who smoke are gentlemen, although so many smokers do not seem to care how disagreeable their smoking is to others. But there is one rule that every smoker who is a gentleman will always try to observe, and that is, to never let his smoking be disagreeable to others. Whether in the house or outdoors, he will be careful to see that his smoke does not go into the faces of others for them to inhale, nor make the air about them so thick with smoke that it would be disagreeable to them, even if they were too polite to say so.

Yet there is one mistake or oversight which both smokers and others everywhere make. As they walk along the street, they never look back to see

whether the smoke they leave behind them is in the way of somebody else who might be walking near them. And when they ride in wagon, carriage, or car, they are sure to take a forward seat or car, or to stand or sit with the driver, instead of taking the back seat or the hind car (as they always should), and then puff away entirely unmindful of the fact that their smoke is whiffed back for the passengers in the rear to breathe, whether they like it or not. Such ungentlemanly smokers ought to be required to carry along with them wherever they go some sort of an adjustable smokestack, which could be elongated so as to reach from five to ten feet above their heads, and into which they should be required to puff their smoke, and thus have it carried so high that it would be out of the way of the eyes and nose of their fellow-passengers.—*St. Louis Magazine.*

THE PHYSIOLOGICAL RELATIONS OF ALCOHOL TO FOOD.

BY ELISHA CHENERY, M. D.

EVIDENCES are abundant that alcohol is not the tree of life, with healing leaves and foodful fruit. The four winds of heaven are against it. Clergymen, philanthropists, women, lay hold on its top and exert themselves to pull it out of the earth. Economists dig about it and loosen the surface roots. Scientists are putting in their work. They dig down and strike at the taproot—the old, hard-grown, and many-branched taproot—of its supposed necessity.

An eminent manufacturing chemist has already severed the branch which runs down into his business, asserting that manufacturers do not need it—that the world will lose nothing by losing it. To this work now come the physicians from every direction, ax in hand. Would that they all came, like Hiawatha from his visit to Minnehaha, measuring a mile at every step. Most of them who have carefully considered the subject, accept that liquor is not an essential to the sick room; rather, that the practitioner who leaves it alone has best success and is more safely trusted.

It is my privilege to-day to call your attention to that branch of this taproot which runs down into food and drink. And, while I make no pretension to novelty of matter, I will try to present what we have so as to make you see that we proceed with reason when we chop this root clean off.

All living beings—animal, vegetable—eat, drink, breathe, sleep.

The grass pushes its blades into the sun-lit atmosphere. Trees unfold their leaves to light, wind, and storm, while their roots hold them in place, and their countless absorbing points drink in the moisture and eat the nourishment in the soil beneath.

In making animals, the Creator worked on the same plan, only with higher art. He employed two thousand square feet of the leaf surface, rolling it into little cells, and put them into the human chest; and then, not to depend on uncertain skies or run the risk of calms, he provided that there should go down upon them warm, moist breezes day and night; and, that his creature might go to and fro in the earth, he discarded the tree roots, but made use of the millions of absorbing points, distributing them up and down the alimentary canal—a canal thirty feet long and of variable width—supplying them with concentrated food already elaborated for them to take up.

Now, I had an uncle who made a fortune from an apple orchard. He never poured cider on the roots of the trees, though that cider originated from the apples, and might be rich in albumen from the wormy ones. But he did dress the trees with manure, and gave them water as they needed. For such reasonable care he was rewarded with abundant fruit.

Has anyone a plant, valued almost as an only son, who is foolish enough to break bottles of beer, wine, or whisky about it? Should this be done, the fig tree by the wayside, with the curse upon it, would illustrate the mistake. Why, then, wet down this higher organism with such unnatural fluid? Can it quench thirst or dissolve nutritious substances better than water? Nay, verily, water—water with the acids and alkalies of the body—is the universal solvent of the body. There is nothing alcohol can do but oppose and hinder, since it is in direct antagonism to the various elaborating ferments. Therefore, as a fluid for the body it is not needed; its use is positively harmful.

Now as to its food relations to the semi-solids and solids of the body. Long since we accepted the idea that the body is material, and is built up and repaired by material of a similar kind, like any other material structure. Hence, to know what is required to nourish the body we must take

it to pieces and ascertain what it is composed of. So we put it into the crucible.

In doing so we must first get the fact that animal or physiological chemistry has to do very little with ultimate chemical simples. It deals, rather, with certain of their combinations or what are called proximate principles. It is the special office of the plant world to work on and select the elementary simples, and organize them into these proximate principles, ready for the animal's use. Thus we have the philosophy of the order of nature in creating the vegetable kingdom first.

On looking into the crucible we see some fourteen different proximate principles, all of which exhibit the following characteristics, which absolutely differentiate them from anything in the shape of alcohol.

They contain nitrogen, alcohol has none.

They rotate the polarized ray to the left.

They cannot be crystallized.

They can be coagulated, after which they cannot be restored.

They differ in consistency in the different parts where they are found.

They excite catalysis—a special chemical change—among themselves, and with other similar substances.

They putrify, and, in so doing, set up fermentation in all other substances containing sugar and water.

Moreover, the body cannot be sustained by non-nitrogenous compounds; the appetite will clog; what is eaten will not digest, and starvation follows.

There is, therefore, no difficulty in comprehending that alcohol cannot supply the place of any of these proximate principles, and in relation to them must be absolutely excluded as a food, as having no nutritive qualities.

The crucible contains various mineral compounds. But does anyone require that? I stand here and urge that alcohol is not lime, or soda, or potassa, or magnesia, or iron, or any of their compounds, and, therefore, cannot be fed as their substitutes? Yet the mistake has been frequently made of feeding it to childbearing women, who were weak, and whose teeth were being taken down to supply bony material for their growing children, instead of giving these mothers real bone-making food.

Once more, in the crucibles there are two substances corresponding with alcohol in that they contain carbon, though they differ from it in all other particulars. They are the fats and sugars. With them I put starch; for, though it is not, as such, a principle of the human organism, it is intended for use by the provision made for its rapid conversion into sugar in the alimentary tract. Starch is the storage form of food in the plant world, composing, as it does, the larger part of the bulk of grains, and is converted into sugar at the check to feed the developing germ. It would not answer for storage food in the animal. Here fat, having five times its potentiality, takes its place.

I will not afflict you with an attempt to show what are the complex evolutions of fats in the body. I will, rather, make a few statements touching this whole class of the carbonaceous, non-nitrogenous compounds.

Taken into the body they are broken up.

They lose their characters and disappear in the tissues, and finally reappear in other forms.

Through all their course they perform their work without injury and without disturbance to the organism, and their products can be recovered.

Not so with alcohol. It irritates and deranges the whole body. It diffuses everywhere as alcohol, remaining unchanged for several days—a hundred and twenty-six hours, Parkes and Wollowicz—escaping as alcohol from every possible outlet. No change is known to take place in it. But about two-thirds of the amount taken eludes our present means for its recovery. But to assume that this lost portion, simply because it is lost, is converted and serves any useful end in the body, is as irrational as it would be for me, because I have lost my knife, to assume that any one of you has stolen it, notwithstanding there is a hole in my pocket. In my book, "Alcohol Inside Out," I have shown, by many evidences, the great probability that it escapes by exhalation, as ether and like substances do.

That it escaped unchanged and in totality came to be the belief of Lallemand and his able associates, a belief not yet shown to be false. They entered upon their experiments under the common notion that it was oxidized. They sought for the products of this oxidation, but did not find them.

Now, it may be remembered that alcohol is the first degree of oxidation of the radical, ethyl; that

aldehyde is the second, and acetic acid the third, beyond which there is only decomposition.

Distrusting their tests in not detecting the aldehyde or the vinegar, these Frenchmen introduced these substances into the system, and found no trouble in detecting them. This led them to conclude that alcohol is not changed in the body.

There is another mode of oxidation alcohol might undergo,—suddenly passing into carbonic acid and water. This would develop much carbonic acid and much heat. As a matter of fact, both the carbonic acid and the temperature are diminished, and the more, the more is taken.

This, then, makes a clean cut of this root. Do I hear someone say, "There is a little bark yet holding?" It is the theory that alcohol conserves the tissues and so acts, indirectly, the purpose of food. Now this theory entirely overlooks the functions of the blood corpuscles and the action of alcohol on them. Attention right here will show the absolute absurdity of such a chimerical notion. Alcohol simply obstructs the elimination of the waste.

But there is another way to apply the ax to this root. It is as follows: The body may be regarded, as in fact it is, as a mass of cells, some of which have seen their day, gone through their changes, filled with solid matter, and gone to rest. They constitute the solid part of the body and are practically dead. The rest are either forming cells or protoplasm, and exist as soft, shapeless, albuminous masses, endowed with life and activity, and are characterized by containing nitrogen. Here ply the shuttles that weave the tissues. If we adopt the adage, "Without nitrogen, no nourishment," then alcohol cannot act as food here; it opposes albumen, shrinks the cells, hardens the protoplasm, and arrests the vital phenomena. A lecturer threw upon the screen the micro-organisms in a drop of water to the astonishment of his audience. Then, on the slide, he put a minute portion of whisky. Instantly it put its quietus on all that swarming life. About to make his point, a voice from the rear shouted out, "I'll never take another drink of water without a drop of whisky in it." Just so it puts its quietus on the swarming life at the fountain head of the tissues and shuts down their various looms. So gin, daily given to a pup from its birth till the period of growth is over, results in a dot of a dog. Here is the fountain of bad heredity. Here is the slaughter of embryonic innocence

and stunted infantile life. Here is given the Circian touch. Here spring the degenerations of manhood. Here the young toper's tissues become dry, hard, inelastic, and creak with the decrepitude of age. In every sense—in nature and in action—alcohol is foreign and inimical to the human frame.

Such a food—such nourishment—we do not want. Hence we cut and free this root, and shout to the friends at the top, *Pull away!*—*Times and Register.*

EFFECTS OF TOBACCO.

DR. COPELAND, an eminent English physician, in speaking of the injurious effects of smoking, makes the following remarks: "The habit of smoking tobacco has given rise to the following ill effects, which have in numerous instances come under my observation, and that of other medical men with whom I am acquainted:—

"Smoking prevents a healthy nutrition of the several structures of the body. Hence comes, especially in young persons, an arrest of the growth of the body, low stature, a pallid and sallow hue of the surface, an unhealthy supply of the blood, and weak bodily powers.

"Smoking creates thirst and vital depression; and to remove these, the use of liquors is often resorted to. Thus two of the most debasing habits and vices are indulged in, to the injury of the individual, and to the injury and ruin of his offspring, if he becomes a father.

"Smoking weakens the nervous powers; favors a dreamy, imaginary, and imbecile state of existence; produces indolence, and incapability of manly or continued exertion, and sinks its votary into a state of careless or maudlin inactivity, and selfish enjoyment of vice."

And yet the men and the boys will go on smoking, no matter what the eminent physicians say about its effects. Was it Horace Greeley who declared that the use of tobacco in this country would continue, or, rather, that it would not cease, until its deleterious effect had threatened the very existence of the people? Perhaps Horace Greeley was right. Most people are like the little boy who wanted to do a certain thing which one of his seniors assured him was not for the best; he listened patiently to the arguments as they were advanced, one by one. He even admitted the force of each of them; then he straightened himself up and said, "Yes, aunt, but then the trouble

of it is, I want to." This last was an argument that had not been considered, and the little fellow thought it more important than all the others.

And so it is with those who have contracted the habit of smoking; the arguments against it may be sound enough, but they are not to be compared with that weightier argument, "I want to."—*St. Louis Magazine.*

COFFEE DRUNKENNESS.

CASES of drunkenness resulting from the use of tea and coffee have been frequently reported, and several have been mentioned in medical journals, in which the victims of tea and coffee inebriety had suffered from delirium tremens as the result of their pernicious practice. Dr. Mendel, of Berlin, has been making a clinical study of coffee inebriety. His studies were carried on chiefly among the women of the laboring classes in Essen and vicinity. He recently published a brief account of his researches. The victim of coffee inebriety is one of the most miserable of human beings. He is low-spirited, sleepless, suffers frequent attacks of headache, which are relieved by coffee, but speedily return. His muscles are weak, his hands tremble, he has inability and aversion for work, his heart action is feeble, he suffers from palpitation and great pain in the region of the heart. The complexion is sallow, hands and feet are cold, the face wears an anxious and pained expression. The patient suffers from a great variety of dyspeptic symptoms, from inflammations of various sorts, and often acquires the red nose which is generally considered characteristic of alcoholic inebriety, and hence called the rum blossom.

Many of these distressing symptoms are temporarily relieved by stronger doses of coffee, only to return when the effect of the stimulant wears off. Dr. Crothers, in referring to these researches, calls attention to the fact that coffee drunkenness is increasing in this country, and that "the coffee drinker, after a time, turns to alcohol, and becomes a constant drinker. In other cases, opium is taken as a substitute. Coffee inebriates are more common among the neurasthenics, and are more concealed because the effects of excessive doses of coffee are obscure and largely unknown. Many opium and alcoholic cases have an early history of excessive use of coffee, and are always more degenerate and difficult to treat."—*Good Health.*

DOES SMOKING INTERFERE WITH PHYSICAL DEVELOPMENT?

ANYTHING which relates to the habit of smoking is naturally calculated to interest the large community of devotees to the nicotian weed. We gather from an American contemporary that the latest investigation which has been attempted in regard to the habit is that relating to its influence upon physical development. It seems that from some records made of the senior classes of Yale College during the past eight years, the non-smokers are proved to have decidedly gained over the smokers in height, weight, and lung capacity. Moreover, all the candidates for the crews and other athletic sports were non-smokers. The non-smokers, also, we are told, were twenty per cent better than the smokers, twenty-five per cent heavier, and possessed sixty-six per cent more lung capacity. Again from inquiry with respect to another class of students the information is forthcoming that those not using tobacco gained in weight twenty-four per cent over those using the "weed," and in height thirty-seven per cent, in chest girth forty-two per cent, while they had a greater lung capacity by 8.36 cubic inches. All those, doubtless, are disturbing facts for those who delight in smoking. But it should be recollected that the results were obtained from an examination of growing lads, whose immature manhood is always calculated to be deleteriously affected by habits which do not predispose to physical exertion.—*Medical Press and Circ.*

EFFECT OF ALCOHOL UPON THE BRAIN.

ALCOHOL seems to have a special affinity for the brain. This organ absorbs more than any other, and its delicate structure is correspondingly affected. The "vascular enlargement" here reaches its height. The tiny vessels become clogged with blood that is unfitted to nourish, because loaded with carbonic acid, and deprived of the usual quantity of the life-giving oxygen. The brain is, in the language of the physiologist, malfunctioned.

The mind but slowly rallies from the stupor of the fourth stage of drunkenness, and a sense of dullness and depression remains to show with what difficulty the fatigued organ recovers its normal condition. So marked is the effect of the narcotic poison that some authorities hold that "*a once thoroughly intoxicated brain never fully becomes what it was before.*"

In time the free use of liquor hardens and thickens the membrane enveloping the nervous matter; the nerve corpuscles undergo a "fatty degeneration;" the blood vessels lose their elasticity, and the vital fluid, flowing less freely through the obstructed channels, fails to afford the old-time nourishment. The consequent deterioration of the nervous substance—the organ of thought—shows itself in the weakened mind that we so often notice in a person accustomed to drink, and at last lays the foundation of nervous disorders—epilepsy, paralysis, and insanity. The law of heredity here again asserts itself, and the inebriate's children often *inherit the disease which he has escaped.*

Chief among the consequences of this perverted and imperfect nutrition of the brain is that intermediate state between intoxication and insanity; well known as delirium tremens. It is characterized by a low, restless activity of the cerebrum, manifesting itself in muttering delirium, with occasional paroxysms of greater violence. The victim almost always apprehends some direful calamity; he imagines his bed to be crowded with loathsome reptiles; he sees the walls of his apartment crowded with foul specters; and he imagines his friends and attendants to be fiends come to drag him down to a fiery abyss beneath.—*Dr. Carpenter.*

ANGELS DON'T CHEW TOBACCO.

THE following is said to be true: A preacher "out West," Mr. H., was a good man, but very rough in his way, and very much given to chewing tobacco. One time he was riding on horseback through the country, when there came up a shower. Riding up to a cabin, he hastily hitched his horse, and knocked at the door. A sharp-looking old lady answered the summons. The preacher asked for shelter.

"I don't take in strangers—I don't know you," replied the old lady suspiciously.

"But you know what the Bible says," said the preacher, "'Be not forgetful to entertain strangers, for thereby some have entertained angels unawares.'"

"You needn't quote Bible," said the old lady quickly; "no angel would come down from heaven with a quid of tobacco in his mouth, as you have!"

The door was shut, and the preacher unhitched his horse and rode away in the rain.—*Sel.*

Miscellaneous.

HARVEST SONG.

A SONG for the plenteous harvest,
For the golden-garnered grain,
For autumn the open-handed,
Who poureth her gifts like rain.

The breath of spring is dainty,
And the summer's smile is bright,
And there is a joy that tires not
In the winter's fireside light.

But of all earth's pleasant seasons
The richest in every clime
Is that which is shedding around us
The joy of the harvest-time.

But autumn, the glorious autumn,
She sitteth a throned queen,
Dispensing right royal largess
To her children mighty and mean.

Then sing for the plenteous harvest,
For the golden-garnered grain,
For autumn the open-handed,
That showereth her gifts like rain—

A song for the Lord of the harvest.
Oh, gather, ye children of men,
Bend lowly in grateful adoring,
And tell of his goodness again!

—*Bud and Blossom.*

"THOU SHALT NOT KILL." NO. 1.

THEY were talking of keeping the commandments, at Mr. Beltzer's, and Aunt Mattie declared that there must be something wrong in the Christian world or there would be a great deal more health and happiness than could be seen at the present day.

"Why, doesn't the Lord say, 'Blessed are they that keep his commandments'?' and 'blessed means happy. We were made to keep right in the channel of God's laws of love, and when we get out of the channel, of course misery and sorrow are bound to come.'"

"Oh, everyone will grant that, but we've 'all sinned and come short of the glory of God!'" said Esther with a yawn, pushing her breakfast aside, and Ethel looked out of the window, and sipped her coffee indifferently.

"Why don't you eat your breakfast, girls?" asked Aunt Mattie.

"Oh, we never care much for breakfast; in-

deed, I scarcely ever take anything for breakfast but a cup of coffee; it seems to be all I can manage!"

Aunt Mattie sighed, but said nothing. Her nieces were fashionable young ladies. Their forms were after the model of the approved corset shape one sees in the dry goods stores, and their waists, though so much more slender than nature intended them to be, were hung with heavy draperies. They had little to do through the day. Ethel drummed on the piano now and then, and Esther did fancy work. They made calls, and entertained company, and read magazine stories and novels, and life would have seemed very humdrum indeed but that almost every evening they were out to some party or entertainment. They came home late from these scenes of amusement, tired, nervous, worn out, and woke late next morning, languid and exhausted. They thought they were worthily fulfilling their mission in life. The sense of the emptiness of life that occasionally swept over them they attributed to every reason but selfishness, for they saw not the opportunities that were all around them for earnest work and loyal love.

"Well," exclaimed Ethel, after some hours had passed, "there's one commandment that I have never broken."

"What one is that?" asked Aunt Mattie.

"'Thou shalt not kill.' I've never murdered anyone, and I can't remember that I was ever angry with anyone without a cause. Of course there are plenty of people that are not congenial to me, but I have never broken that commandment.

Aunt Mattie gave her a queer glance and said, "Are you sure?"

"Why, yes."

"But you know it is love that is the fulfilling of the law. I suppose the commandment requires great and noble service from us to all others from motives of love. Isaiah says we are to clothe the naked, feed the hungry, and bring in the poor that are cast out, and draw out our soul to the afflicted soul, and you know that Jesus commended those who did this, saying, 'Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me.' But Paul declares that all these works are mere sounding brass and tinkling cymbals unless genuine love is the motive that prompts our work. The commandment, 'Thou shalt not kill,' is exceeding broad, and

means that we shall prolong and comfort life all that is possible.

"Why, auntie, do you really think it means all that?"

"Indeed I do. Love is the fulfilling of the law. He that loveth is born of God, and knoweth God, and Jesus said the sum of the commandments was contained in these words, 'Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy strength, and with all thy mind; and thy neighbor as thyself.' And again, 'This is my commandment, That ye love one another, as I have loved you.'"

"But, Aunt Mattie, I am not strong enough to wait on the poor in this style, nor have I heart to do it. If there's anything I detest it is going in the poor portion of the city, for all one sees is misery. I just can't bear it," said Ethel. "It makes me so unhappy. You know it's all either Esther or I can do to drag through our duties to society."

"Then do you think God has required something from you that it is impossible for you to do? You ought to be stronger. You ought to have good health."

"Well, but we're not strong," said Ethel petulantly, and the quick tears sprang to her eyes. "The wash woman and the hired girl are as robust as can be; but it seems to be a special dispensation of providence that ladies shall be delicate. I suppose one can't have everything in this life."

"But you ought to be strong," insisted Aunt Mattie. "And I know that you might be much stronger. The commandment, 'Thou shalt not kill,' involves our treatment of ourselves as well as our treatment of others. What commandment does the man break who cuts his own throat or dashes himself into the river?"

"Oh, such a man is insane, Aunt Mattie, and I don't see what that has to do with our being strong!"

"There are a great many people who are killing themselves by a slow, tortuous process, but it is just as much breaking the commandment as if they were killing themselves in some more precipitous way. You call a man insane who takes his life, and I cannot say that he is not. In fact, I think sin itself is an insanity. It certainly is the most inexcusable, unreasonable thing in the world, and springs from a disorganized condition of the soul."

"Now, Aunt Mattie, do come to the point. Do you think we are committing a slow suicide?"

"Yes," said Aunt Mattie, "to be plain, that is just my opinion."

"Well, how?"

"Wait a moment," said Aunt Mattie; "I want to show you my manikin." Aunt Mattie soon came back with a model of the human form, and the girls roused up from their languidness to a real interest. Aunt Mattie showed them how wonderfully and fearfully we were made. How each organ was placed in the body so as best to minister to the needs of life, and promote health and happiness.

"But the vital organs, the heart, the lungs, the stomach, the kidneys, must have room to do their proper work, or all will suffer in consequence. If they all have their proper places, and are in healthful condition, the blood will be sent in beautiful currents to brighten your eyes, bloom in your cheeks, and round out your form. But if they are compressed as yours are," tapping the corseted waist of her niece, "they cannot do their work, and poor health is bound to result. No doubt your poor stomach is cramped and suffering, and pressed out of place. Your kidneys may be almost cut in two, and the organs of the lower abdomen are probably displaced. This is the internal picture I look upon whenever I see a woman in corsets; it does not give me a feeling of pleasure to see a small waist, for I know that corset wearing brings on many of the frightful weaknesses that many seem to think inevitable."

FANNIE BOLTON.

GAMBLING.

GAMBLING is decried by all right-minded people, and yet how inconsistent is the average critic. They will wage the most fierce war against the lottery or the game at cards, while our wheat gambling and horse-race betting receives no word of condemnation. In our mind the pool room is a far greater temptation than all the others combined. We read of daily defalcations caused by the pool-room's fascinations. First their own money goes, then a very little of their employer's, then, to recoup and make good their shortage, more is risked; and then the desperate effort to try to win it back is resorted to, with the almost certain result of total loss and consequent wreck. It is with no

little pride the average citizen points to our magnificent structures known as the Chambers of Commerce, while in reality they should be marked as danger spots and avoided as one would a leper.—*Ex.*

HEALTH AND WEALTH.

BY PROF. J. M. CONSLEY.

THE philosophers of all ages have told us that a man's moral and intellectual nature is, more or less, the creature of his surroundings. Especially is this applied to his moral view of life. Much has been said and written to prove that man is not entirely a "free agent" in this particular, but that he is more or less the creature of circumstance. The discussion of the moral side of the question may very safely be left with theologians and legislators; but the question we wish to consider now is one on which neither theologians nor legislators, as a class, have much to say. Nevertheless, it is a question of vital importance to all lovers of our race.

What effect has station in life upon the development of a strong, healthy, intelligent race? When we look in upon the wretchedness, squalor, and disease of the hovels of abject poverty, we are wont to cry out: "Oh, if these people only had wealth!" And we vainly imagine that an abundant supply of this world's goods would obliterate all traces of their diseased and suffering condition. And many would-be charitable persons attempt to relieve their condition by princely gifts. But does it have the desired effect?—Ah, no! Nine times out of ten the family are more injured than benefited. This has so often been proven that we need not bring forth examples to substantiate our statement.

Handling money is like handling edge tools; bungling hands make sad work. All values are measured by their cost, and no one can properly handle values who has never earned them. We must assist them to help themselves. Then their earnings may be enjoyed in full measure. As they emerge from their impoverished condition and become enabled to supply themselves and those dependent upon them with the necessities of life, disease will become more rare, and their social standing will begin to improve. For, knowing that their own personal efforts are bearing fruit, they will become imbued with a spirit of independence. Their dignity will not be trammled by any thoughts of being objects of charity, and they will begin to feel that they are men and women, and

that they amount to something in this busy world.

But does the condition of mankind continue to improve indefinitely through the various stages in the transition from poverty to wealth? Let us look for a moment at the other extreme, and see. A fine carriage is coming down the street. Are all the occupants in the full bloom of health?—Perhaps so. So was that ragged little urchin that you saw playing in the garbage barrel in the back alley this morning. But, more than likely, one or more occupants of the carriage will show unmistakable signs of physical decay. Only look on every side of you at the children of the very wealthy. What do you see?—The same large percentage of scrawny, dwarfed specimens of humanity that are to be found in the streets and rickety tenements, with this difference: The former are beautifully attired, while the latter are in rags.

Thus in the mad race for wealth the overly-greedy financier destroys the health and happiness of one class of people by depriving them of the necessary comforts of life, while at the same time the overabundance of these same comforts of life are sapping the fountain of health and happiness of those who are his own flesh and blood.

What will be the effect on future generations? It is time for all intelligent, thinking people to pause and ponder the question well. From the two standpoints we have taken, the degeneracy of the human race seems inevitable. But is there nothing to counterbalance these evils which are so appalling to every lover of a strong, noble race? Let us take another glance at life. Whose healthy, rosy-cheeked children are those playing in the park? Ten to one they are from a home where plenty abounds, but no great wealth, where the boys have to bring the wood and water and kindle the fires, while the girls sweep and arrange the house. The boys are ready at a moment's call to run any errand, and the girls are not strangers to pots, kettles, and dishcloths. Ask any college president who his best students are, and you will find they were not reared in the lap of luxury. They are those who have enough money, perhaps, to pay their tuition, buy their books, and pay for plain board, but no extra ten-dollar bills lying around loose.

Look for the brains that run the great business enterprises of the country, and you will find that they are in the heads of men who were not born with silver spoons in their mouths. If we look

over the list of those who hold high positions in the various professions, we find the same state of affairs. The best positions are filled by men who in their boyhood days were neither half starved nor fed on poundcake. By this we can see that there is a station in life which is conducive to the development of a strong, healthy manhood, both physical and mental; a manhood which will not only bless its own generation, but will tend toward the improvement of generations yet unborn.

God speed the day when all mankind shall cry out, "Give me neither riches nor poverty."—*Southern Health Journal*.

LIFE LENGTHENED.

1. CULTIVATE an equable temper; many a man has fallen dead in a fit of passion.
2. Eat regularly, not over three times a day, and nothing between meals.
3. Go to bed at regular hours. Get up as soon as you wake of yourself, and do not sleep in daytime, at least not more than ten minutes before noon.
4. Work always by the day, and not by the job
5. Stop working before you are very much tired, "fagged out."
6. Cultivate a generous and accommodating temper.
7. Never cross a bridge before you come to it; this will save you half the trouble of life.
8. Never eat when you are not hungry, nor drink when you are not thirsty.
9. Let your appetite always come uninvited.
10. Cool off in a place greatly warmer than the one in which you have been exercising. This simple rule would prevent incalculable sickness and save millions of lives every year.
11. Never resist a call of nature for a single moment.
12. Never permit yourself to be chilled "through and through;" it is this which destroys so many every year, in a few days' sickness from pneumonia, called by some lung fever, or inflammation of the lungs.
13. Whoever drinks no liquids at all will add years of pleasurable existence to his life. Drinking at meals induces people to eat more than they otherwise would, as anyone can verify by experi-

ment, and it is excess in eating that devastates the land with sickness, suffering, and death.

14. After fifty years of age, if not a day laborer, and sedentary persons after forty, should eat but twice a day, in the morning and about four in the afternoon. Persons can soon accustom themselves to a seven hours' interval between eating, thus giving the stomach rest; for every organ, without adequate rest, will "give out" prematurely.

15. Begin early to live under the benign influence of the Christian religion, for it "has the promise of life which now is, and of that which is to come."—*Journal of Health*.

WHAT AILS THE MODERN GIRL?

A WRITER in *Harper's Bazaar* makes a pretty close diagnosis for a layman, as to what ails the modern girl, at least a good many of her. It is well deserving of record as an *indicatio causalis* in the disease which is so often the despair of the doctor.

"The modern girl hardly knows what she wants, whether it is the higher education, an æsthetic wardrobe, love, or fame. She plays tennis and progressive euchre and flirts and does Kensington work and reads Herbert Spencer and very often writes; she dabbles in music and talks theosophy, and if there are more things in heaven and earth than are dreamed of in her philosophy, one questions what they can be. Withal, she is as restless as the wind. She does not love the quiet of home; she lives on excitement; she goes to Europe, to the springs, the mountains, the theaters, the receptions, if she can get there, or to the modiste; she can always fall back upon clothes as a diversion, and, when everything else fails, she has nervous prostration and a trained nurse. In fact, the chief trouble with the modern girl, be she rich or poor, is that she either does too much, keeps her nerves on the strain, and by and by goes to the other extreme and does literally nothing but consume drugs, talk of her ills, and consult the Christian Scientists; or she has no real interests, fritters away her time in shallow pursuits, becomes pessimistic and dyspeptic, dissatisfied with herself and all the world; cries and questions if life is worth living, and feels especially blue on holidays.

"The remedy for all this is, perhaps, an object in life; those who are well and unselfishly occupied

do not question if life is worth living; they know it is; and whether they are busy in the shoe factory, behind a counter, at the fireside, in the kitchen or the dining-room, so long as they are busy and not shirking or reaching forward for something more congenial and neglecting present duty, their minds are at rest and uninvaded by despondency. One of the best remedies for depression of spirits is the effort to bestow happiness; it has been known to prove effectual when all other methods have failed,—when novels and new gowns and cod-liver oil and bovine and bromide, when admiration and flattery are no more serviceable than an abracadabra or any heathen spell. Melancholy or other ills of this nature are the direct result of a too strong egotism, and an absorbing interest in others is a safe and agreeable medicine, and is usually the last thing a modern girl tries.”—*Boston Medical and Surgical Journal*.

AN ARISTOCRACY OF HEALTH.

THE tendency of mankind is to separate, according to natural affinities, into clans and classes. We have had, from time immemorial, aristocracies of military glory, of political power, of landed estates, of wealth, of illustrious ancestry, of empty titles, of “old families,” and of many other distinctive claims. Even the most rural localities are not altogether free from persons who have pretentious aspirations to aristocratic exclusiveness and privileges. To say that this is all wrong would be, perhaps, to make an attack upon human nature, as no doubt most of us rather like just this sort of a thing. We only want to point out not only a harmless, but vastly beneficent, channel into which this tendency of our nature may be diverted. We wish to propose the establishment of an aristocracy of health. What a grand thing it is to be well born—to come into this world with a sound physique and an unclouded intellect! What a splendid ambition it is to live so that the integrity of the body may remain unimpaired, and the power of the mind may increase until advanced age!

Imagine in the distant future the account of a marriage in “one of the most select circles.” The perfect symmetry and exquisite complexion of the bride and the manly strength and bearing of the groom sustain their claims to descent from families that for many generations have been free from the slightest taint of syphilis, scrofula, tuberculosis, in-

sanity, nervous debility, rheumatism, and all organic weaknesses or constitutional tendencies to disease, but the members of which always died of old age; families whose rosy-cheeked women never wore corsets or tight shoes, never suffered imprudent exposure at the menstrual epoch, nor indulged in unwholesome forms of social dissipations; whose men never weakened their nerves with tobacco, fired their tissues with alcohol, or clogged their systems by gormandizing or indolence; whose husbands and wives did not spend their physical capital faster than it accumulated, but reserved their vital forces to contribute to more perfect health and higher and nobler forms of mental activity.

What a blessed promise such a union gives! Who would not like to marry into such an aristocracy! Who would not be proud to be a descendant from it! What a power such a race would have among their fellows—far beyond that conferred by wealth!

And yet such a desirable condition of things is not at all impossible or even difficult of attainment. Simply a little intelligent study and daily attention to plain laws of health will accomplish the object. Each husband and wife may begin now, and resolve that henceforth their daily lives will contribute to this glorious cause. Each young person may prepare to become a partner in establishing an illustrious family in this wonderful new aristocracy. And each victim of incurable disease may at least resolve to spare himself the pain of seeing a group of sickly children around his hearthstone.

By joining in this movement you do not stint and deny yourselves, like the miser, to leave an inheritance for your heirs to fight over and squander after your death; you enjoy the full and rich benefit of it yourself and leave them a wealth that no man can take from them.

Then all hail and all hasten the glorious new order—the aristocracy of health, whose escutcheon shall be the erect, athletic form, the blooming cheeks and ruby lips, the pearly teeth and gleaming eyes of a happy race of healthy men and women.—*Medical World*.

SMOKING two pipes of tobacco on an empty stomach caused the death of a man at Aston.—*Sel.*

SOME people are lost by the lean road, and others mind to go to hell by the fat one.

Household.

HOUSEWORK.

WASHING, mopping, baking, churning;

Next day ironing must be done,
And the busy housewife findeth
Little rest till set of sun.

Then the knitting and the sewing,
With the buttonholes to make;
Oh, the patching and the darning,
How they make our fingers ache!

But of all the varied duties
That we busy housewives find,
I do think that washing dishes
Is the most provoking kind.
Why, the times they must be handled,
O'er and o'er, day after day,
Almost makes me wish the china
Were in bits for children's play.

Now don't tell me I am wicked—
I know that as well as you;
But somehow when I am weary,
Dishes make me feel so blue,
And the only cure I've found yet
Is a paper or a book,
When my family are settled,
Each in his own cozy nook.

I know well that very many
Have obtained the needed grace,
With a patient, cheerful spirit,
All life's petty ills to face.
Oh, that I were of that number!
Then, with heart for any fate,
I might, with a cheerful spirit,
"Learn to labor and to wait."

—Selected.

QUERIES.

"A SUBSCRIBER" wishes to know: 1. "What effect does coffee, taken to excess, have on the system? 2. How does tea affect the system? and have they any direct effect on the liver?"

We answer: 1. Coffee in excess excites the nervous system, with many produces sleeplessness, when taken late in the evening, since it excites the heart's action, preventing that fall necessary at night to sound sleep. Coffee lessens tissue change and decreases the vaporizing action of the skin, therefore dries it, and roughness follows. Coffee, by diminishing the action of the skin, increases the normal heat of the body, so the heart's action increases, the pulse becomes full, and the mucous membranes excited. We will add further that coffee

is a powerful excitant to the function of respiration. 2. Excessive use of strong tea excites the cerebral part of the brain; the reaction of course is exhaustion. It greatly excites respiration, and on this account, as well as brain excitement, the person cannot sleep, shortly after taking a strong cup of tea, because a fall in respiration is necessary to healthful sleep. Tea, unlike coffee, gives a moist skin, thereby lessening body heat. One, ever so weary, after drinking a cup of tea feels "fine," chippery, and entertaining. Tea is stimulating, and spurs on to more toil. Here it gives false strength, and the reaction gives headache, a penalty that follows overwrought vitality. Coffee or tea have no direct effect on the liver known to us.

Mrs. J. R. Phillips wishes answers to the following: "1. Does it make any difference on which side a patient lies in taking an enema? 2. Am I troubled with itching of palms of hands and bottoms of feet; there is no eruption or unusual appearance. Can you tell the cause and a remedy? 3. Does inflammation of the lining of the uterus call for an operation? 4. Would that condition cause sleeplessness and nervousness? 5. Would it cause great heat in the stomach and abdominal cavity?"

We answer: 1. The *left* is the better side, as the bowel (sigmoid flexure) here empties into the rectum, and when the left arm is thrown to the back, chest resting on the couch, and right leg thrown forward to rest on the same, the water will ascend higher up the bowel than in any other position except the knee-chest posture. 2. Is doubtless due to nerve trouble; its cause should be sought for and removed. Itching is simply a degree of pain. 3. Yes, either curetting or by electrolysis, if it be catarrhal. 4. Yes. 5. Yes.

We could not suggest remedies for above troubles without examination. Would advise patient to consult a competent specialist on diseases of women.

COOKING RECIPES FOR OCTOBER.

CONTRIBUTED BY MRS. F. L. M'CLURE.

1. "CORNSTARCH BLANCMANGE WITH CHOCOLATE SAUCE.—One quart of fresh milk, two table-spoonfuls of sugar, a pinch of salt, four level table-spoonfuls of cornstarch, the whites of three eggs, a few drops of rose extract. Make like simple cornstarch. When you take it from the fire, stir in lightly with a fork the whites of three eggs beaten stiff, and flavor. Pour into wet molds.

When firm, turn into a platter and pour around it the following sauce: One pint of milk put on in a double boiler, one small tablespoonful of cornstarch stirred into the milk when it boils. Grate one stick of chocolate, break on a plate the whites of two eggs, whipping them very light with a knife. Beat into this a fourth of a cup of sugar, add a fourth of a cup of sugar to the grated chocolate, with half a cup of hot water. Put it into a sauce pan and melt until it is glossy, stirring all the time. Then add it to the milk and cornstarch. Now add the yolks of the two eggs to the beaten whites, whipping them all well together, and turn into the cornstarch when it is done."

2. "AN EXCELLENT WAY TO COOK RICE.—To boil a pint of rice, heat half a pint of water to boiling, then add the rice. Boil over a slow fire until the water disappears. Then cover the dish closely and set it over a kettle of boiling water; steam slowly until tender. Do not stir the rice until after it has been steamed some time, and then only a very little. If salt is considered indispensable, add a trifle to the water before adding the rice. Cooked in this way, rice will be thoroughly tender yet whole."

3. "GRAHAM DESSERT WITH DATES.—To one quart of boiling water add a pinch of salt. Into this stir one pint of graham flour, sprinkling in carefully and stirring the top of the liquid rapidly so that no lumps will form. Cook one-half hour, not too fast, without further stirring. Add one cup of stoned dates as you remove the pudding from the stove, stirring as little as possible, as it makes it heavy if stirred very much. This is nice served with whipped cream."

4. "SWEDISH ROLLS.—Seven cups of white flour, one pint of milk scalded and cooled, two tablespoonfuls of sugar, one tablespoonful of butter, one teaspoonful of salt, two eggs, whites only, one-half cake compressed yeast. Melt the butter in the milk, and when cool, add it to the egg beaten very stiff, sugar, and salt. To this add four cups of the flour. Cream the yeast with one teaspoonful of sugar, add that, and mix all together. Beat the sponge five minutes. Sprinkle flour over the top, cover with a cloth, and keep in a warm place until morning. In the morning take the remaining flour and work it up just as you would in making bread. Knead for a quarter of an hour on your board. Put back into the bowl, and set it to

rise until twice its original size. Mold in fancy shapes or plain just as you prefer. Form in the shape of the figure eight or crescent or cottage shape. When molded, let it rise to twice the original size, and then bake ten or fifteen minutes. When just done, brush over with one tablespoonful of sugar mixed with two of milk, and return to the oven for a moment. These can be varied by adding English currants. Served with a sauce they make a very nice dessert."

5. "STEWED TOMATOES.—Use either canned or fresh. One quart of tomatoes strained through a sieve or colander; put into a granite double boiler and bring to the boiling point. Then stir in three level tablespoonfuls of cornstarch wet in a little water. Add one-half teaspoonful of salt, one teaspoonful of sugar. Boil until the cornstarch is thoroughly cooked. Cream one tablespoonful of butter and add just before serving."

6. "FRENCH LEMONADE.—Juice of one-half lemon and sugar to taste. Fill the glass up with ice water or with crushed ice and water. Break in a fresh egg and shake with a lemonade shaker about three minutes, when it will be all in a foam. Then it is ready to drink."

CANNING AND PRESERVING FRUITS.

We give another installment of the article found in our last, taken from the *Home Magazine*. There are hints which we believe housekeepers will find useful:—

JAM.

What is properly known as "jam" is always made of berries; if larger fruits are used, it is "marmalade." Prepare the fruit nicely and weigh. For each pound allow three-fourths of a pound of sugar.

A porcelain-lined kettle is preferable to agate, as the fruit is less apt to burn. Close attention must be given it during the entire process, almost constant stirring being necessary. Use an agate spoon for the latter, and thoroughly go over the entire bottom of the kettle, as it very quickly grows worse if allowed to adhere, and ruins the delicate flavor.

Put the fruit in the kettle alone, and as it gradually heats, mash it with a potato masher.

Put the sugar in the oven to heat; add a pint of water for each five pounds of fruit, and boil twenty

minutes, stirring constantly. Then add the hot sugar and boil fifteen minutes longer.

Do not put in large crocks, as our mothers did, but in the same jars used for canning. Stand the jar on a wet folded towel, and fill to overflowing (a funnel with a short, large tube is excellent for this purpose). Tighten, test, and set away as recommended for canned fruit.

JELLY MAKING.

The change from preserving to canning is scarcely greater than the difference between the present methods of making jelly and those formerly employed. We no longer boil the fruit, and then, perhaps by the aid of a "presser," extract all the juice and pulp possible, and then, putting this thick, muddy liquid and the sugar into a *tin pan* place it over the fire to boil, with no definite idea of when it will "come," and many doubts if, indeed, it ever "jellies."

We now select fruit that is large, and under rather than over ripe; prepare it carefully and boil slowly, closely covered, in a porcelain-lined kettle, until it can easily be crushed. While the fruit is cooking, perfect some arrangement whereby the jelly bag can be suspended to drip, and not be subject to a draft of cold air. When the fruit is sufficiently cooked, wring out the jelly bag (which is made of coarse brown linen crash, and has been asoak in warm water), and, placing it in an earthen bowl, turn in the fruit, tie the top securely, and hang it up.

Occasionally move the contents of the bag about, or press the sides with two agate spoons, but never squeeze it with the hands.

When it no longer drips, measure and allow one pound of sugar to each pint of juice. Place the sugar in the oven to heat, and the juice uncovered on the fire, where it will boil gently. At the expiration of twenty minutes add the hot sugar, and let the whole *boil* four minutes. Have the jelly moulds dipped in warm water and fill, then place them in the sun uncovered. At the expiration of twenty-four hours, it should be firm enough to set away, and is nearly certain to be so unless too much water was added to the fruit in cooking. If this is the case, allow it to stand in the sun two or even three days, as reboiling with the sugar destroys its fine flavor and renders it dark colored.

When ready to seal, close in the usual manner,

with a paper pressed close, then cover with another paper pasted around the outside. Set in a cool, dry place.

FIRST-CLASS PASTE.

TAKE a quart of water and dissolve in it a teaspoonful of pure powdered alum. Stir into this enough of flour to make a thick cream. Break up every little lump of flour until the mixture is smooth. Stir in next a teaspoonful of powdered resin. Now pour in a cupful of *boiling* water. Stir it all well. For your nosegay mix in a few drops of oil of cloves, or wintergreen, or sassafras, as you prefer. When the mixture has thickened from cooking by the boiling water, pour into an earthen vessel—not a tin can. Cover it up and keep it in a cool place. Whenever you want to use any portion of it, take what you need and soften it with a little warm water.

This will give you a perfect paste, clean, wholesome, and lasting. You will be surprised how little waste you will have. Should you need larger quantities, increase the proportions in proper ratio, doubling or trebling each ingredient, according to the magnitude of the business requiring it.—*American Art Printer.*

A WONDERFUL CLOCK.

ANOTHER marvelous piece of mechanism has recently been exhibited in Paris. It is an eight-day clock, which chimes the quarters, plays sixteen tunes, playing three tunes every hour, or at any interval required by simply touching a spring. The hands go as follows: One once a minute, one once an hour, one once a week, one once a month, and one once a year. It shows the moon's age, rising and setting of the sun, the time of high and low tide, besides showing half ebb and half flood. A curious device represents the water, showing ships at high-water tide as if they were in motion; and, as it recedes, leaves them high and dry on the sands. The clock shows the hour of the day, the day of the week, the day of the month, and the month of the year. The mechanism is so arranged as to make its own provisions for long and short months. It also shows the signs of the zodiac, and the difference between sun and railroad time for every day in the year.—*New York Tribune.*

Healthful Dress.

THE FARMER'S WIFE.

THE farmer, they say, is a happy man,
And leads a pleasant life.
Perhaps 'tis so; believe if you can,
But pity the farmer's wife.

She rises ere the break of day,
And soft is the morning breeze;
She longs for a breath of the pure, sweet air,
But the kitchen is all she sees.

She used to spring from her bed at dawn,
With a smile on her lips so tender,
Now she sighs, as a hurried glance she casts
At the clouds in their eastern splendor.

She pauses to listen to robin's song,
But instead hears the shrieks of Freddy;
While her husband is calling in hurried tones,
"Come, wife, isn't breakfast ready?"

And so it is through the busy day,
The dishes, milking, and churning,
The sweeping, dusting, and pigs to "slop,"
While the bread in the oven is burning.

Again cooking and dishes at noon and eve,
Besides sewing and scrubbing the floor;
She at last sinks to rest at half-past ten,
To rise in the morning at four.

Some day she will sink to her long, long rest,
And the children will weep for "mother,"
But her grief-stricken lord in a week or two
Will be looking around for another.

In my humble home I'm content to dwell,
Away from all worry and strife,
Thanking my stars that I'm an old maid
Instead of a farmer's wife.

—Selected.

DRESS.

THE subject of dress is of so much importance in the education of children that it deserves special notice. It is a factor not always recognized and seldom fully appreciated. Some parents seem to think that it makes little difference how they clothe their children so they are comfortable. Anything will do, whether it be old or new, of fashionable pattern or unfashionable, neat-fitting or ill-fitting. They argue that the children do not know the difference in quality, pattern, or fit, therefore the cheapest is the most economical.

There are others who seem to have a morbid dread that their children will become vain, and hence they purposely and studiously dress them in plain and homely attire. Such parents are honest and well meaning. They are disgusted with the pride and vanities of the world, and desire above all things that their children shall grow up free from these

vices. The intention is commendable, but the means used to attain it are not the best. There is not infrequently as much pride and vanity in those who dress ill as those who dress well.

There are those who seem to regard their children as they do their other possessions, that is, as things by which the owner's taste and judgment may be gauged by the neighbors. They dress up their children for show just as they do their houses or lawns. They love beautiful appointments about their homes, and ill-dressed, tawdry children present an appearance that is disagreeable to their refined and sensitive tastes. Such parents act, then, without much, if any, regard for the children, but largely, if not wholly, for the effect objectively considered.

All of these conceptions are wrong. Children should be clothed with their own good in view. Their dress operates in two ways (in their education)—upon their bodies and upon their minds. The one is no less important than the other. The whole matter of dress should be viewed from this dual standpoint. What others may think of the appearance of their children should be a comparatively insignificant consideration. What effect the child's dress may have on the parents' taste is equally so. The child is to be dressed for its own sake, not for the sake of others. It happens, however, that when it is best dressed for its own sake, it presents the happiest effect on others. But this is merely incidental.

First of all, the clothing should be a protection to the child's body. This is a primary object. The body should be kept comfortable—warm in winter, cool in summer, so far as clothing can do this. It should be comfortable in another sense. It should feel easy and pleasant to the child. To reach this end it would not do to have the clothing unequally distributed over the body, thicker and warmer in some places than in others. This is often the case with little girls. They are warmly clad about the chest and abdomen, while their limbs are exposed to the cold. The effect of this is to drive the blood from the extremities. Directly, this is injurious; remotely, it tends to an unequal development of the parts. The circulation in the extremities is impeded until it fails to recuperate the continual waste of tissue. This is part of the reason why so many girls grow up with fairly-developed busts but scrawny and ill-shaped legs and arms.

The clothing should be adapted to the functional operations of the body; circulation and respiration must not be interfered with by bands and compresses. The dress may be trim without being tight to obstructiveness. The blood must be allowed unimpeded movement through the veins and arteries. The further the part is removed from the circulation the weaker is the movement and hence the greater care should be given that no obstacle in the way of tight waist bands, shoes, etc., be permitted. The same may be said of respiration. It is very important that the dress permit unhindered movement of the muscles concerned in breathing. The dress should further be constructed with a view to perfect ease and freedom of movement of all the parts of the body. The nature of the material used has much to do with the attainment of this end. It is not an uncommon thing to see children so dressed that when they remain in a certain position their clothing hangs gracefully;

but the texture or the manner of its construction will not permit taking certain other positions. Children are keen sighted and sensitive. A boy of even eight years of age, when he discerns that he cannot sit down without drawing his dress out of neat fit, will not and cannot sit gracefully and comfortably in the presence of others. The dress should allow the arms, legs, shoulders, and body generally to be moved freely without a feeling of discomfort or a consciousness of disorder in appearance.—*Maidenhood and Motherhood.*

IMPROPER METHODS OF DRESS.

BY T. E. ENLÖE, M. D.

LET us consider for a moment the dress of the child from infancy to the age of twelve or thirteen years, that we may contrast the great difference between its dress and the dress of the young or middle-aged woman. The dress of the child is adopted with an eye to health and comfort. The underclothing is of woolen material in winter, which is the best protection against cold, damp, or changeable weather. The outer garments are of suitable material and make. They are loose around the waist and suspended from the shoulders as they should be. No tight bands about the waist or other parts of the body. She has the free use of all her limbs, and no organ is cramped or interfered with in its proper development or functions. Her feet are protected by warm, comfortable stockings and sensible, broad-bottomed, low-heeled shoes. In short, she is comfortably and sensibly dressed.

As she approaches the age of young womanhood, note the change in the manner of her dress. Her clothing, heretofore suspended from the shoulders, is now suspended from the hips. Her chest and lungs are incased in a corset, so that the respiration is materially interfered with and lung development prevented. The pressure exerted by the skirt bands and corset crowds the abdominal organs downward on the now rapidly-developing reproductive organs, displacing and preventing their proper development. The underclothing is often insufficient in quantity and quality.

Instead of the sensible shoes of the child, she is allowed or encouraged to wear the abominable "French heels," which are the cause of more backaches in women than any other one thing in my knowledge. Can folly further go in the manner of dressing young girls and women? It is not only foolish, it is almost criminal. The future health and happiness of the woman and that of her offspring depend in a great measure upon the proper development of the reproductive system, and everything that can be done to secure that object should receive the earnest co-operation of every parent.

It is an established fact that with each properly-performed respiratory act all the abdominal and pelvic organs are drawn upward toward the chest. This shows what an important part the act of respiration plays in the healthful working of not only the lungs, but the abdominal and pelvic organs also. It can readily be seen that corsets and skirt bands, constricting the chest and abdomen, prevent the organs situated below the waist line from taking any part in this important act. They are fixed in their positions by these unwise and hurtful methods of dress.

Comparisons have been made between the women of our race and the North American Indian women of the part which these organs take in the respiratory act, and it has been demonstrated that in the former abdominal breathing is scarcely to be found, while in the latter it is the rule. We also find diseases peculiar to women among the former well-nigh universal, while among the latter they are exceptional.

What is the lesson to be learned from these facts? If women prefer health to disease, let them dress in such a manner as not to interfere with nature in the performance of her functions for their good. Let them consider health first and appearances afterward.

The modern dress reform is to be highly commended as an evidence of a return to sensible methods. Healthful dress does not necessarily mean unbecoming dress. Comfort and beauty are not incompatible. Let us hope that the day will soon come when to say a woman is beautifully dressed is to say she is comfortably and healthfully dressed.—*South-ern Health Journal.*

"THE death line," said Miss Frances Willard, recently, drawing in the air with her finger the outline of a woman's waist squeezed into the shape of a sand hour-glass, "has filled more graves than whisky," and then added that she did not believe that "any woman with the constrained waist, the flaring hat, and the high-heeled shoes will be allowed by the heavenly powers to invent anything." But they have already invented some of the slowest and most terrible and most prolific ways of destroying life ever known. The corset and French-heel shoes are worthy to be hung by the side of the knout, the stocks, and the scavenger's daughter; and had they been used as instruments of torture, they would now be among the relics of a barbarous age.

"OH, I am not laced tight!" says a modern young lady; "see how loose my dress is, and I can put both hands under my corset." And this may possibly be true. One can constrict the waist, or "draw herself in," by the muscles for a moment so that the waist is very small, but only for a moment. But the physiologist's eye does not need such evidence. The contour, or shape, of the natural waist is that of an irregular oval, longer from side to side than from front to back. A constricted waist is round. That is nature's form for putting the most material in the least space. A round waist is tightly laced; that is true, whatever is claimed to the contrary.

KATE FIELD has been examining some statistics furnished her by the Chicago Board of Pharmacy, and finds, to her horror, that American women spend \$62,000,000 a year for cosmetics, most of which are made of zinc oxide, mercury, and other poisons. This leads her to ask this pertinent question: "How can women vain enough to paint and dye their hair bring forth children stalwart enough to resist temptations that lead to all manner of vice?"—*American Analyst.*

THE price of good health is the wise use of those means which promote it.

Publishers' Department.

It will be noticed that we have dropped one department, "Disease and Its Causes," and added another, "Mothers' Corner." We do the first because the department is in no way distinctive, other departments dealing with the same subjects. The practical articles of Mrs. White will still continue. We open the "Mothers' Corner" to help especially the mothers in many things which do not, perhaps, so strictly pertain to the household.

THE death rate of Oakland is much lower than that of last year, according to the annual report, just completed by Secretary Schafer, of the Board of Health. During the year ending June 30, 1891, there were 762 deaths, as against 787 births, a clean gain of 25 in population. Ten were killed by the railroad, and 70 died from consumption. Of the deceased persons, 163 were one year old or under, and one was over 100.

As mosquito bites are very poisonous to some who experience them, the following simple remedy is worth trying: "A German writer says that ordinary soap is a good remedy. He always carries a small piece with him on his country excursions, and in case of a bite makes a lather over the affected part, and allows it to dry on. The burning is at once relieved, and all pain soon disappears. Should it return, as sometimes happens, it is only necessary to repeat the application."

THE daughter of Charles D. Richards, the tea broker of San Francisco, was for some time a sufferer from that dread disease, the leprosy. She was in the habit of eating the tea without cooking, and it is thought she may have taken the disease into her system in that way. It is said that she has lately recovered, through immersion in oxygen gas diluted with air. She was made to breathe the gas through a tube. The *Examiner* states that she was kept in the oxygen bath for about a month, and when she was taken out, her skin was as white as snow. "This case goes on the record as the first one of leprosy that has been cured, and Doctor Debevoise has been asked to explain his treatment to the County Medical Society." The permanency of the cure has yet to be established. It is thought that the oxygen burned to death the microbes of the leprosy. Doctor Debevoise had endeavored to cure the leprosy by injecting the bacilli of cancer, which is claimed to be a deadly enemy to the bacilli of leprosy, but it did not prove successful. It is thought that the oxygen cure will revolutionize the treatment of this terrible disease.

A GREAT dress-reform movement is about to be inaugurated in the United States. It will endeavor to be concise and comprehensive, and will embrace all the schools, from the most conservative to the most radical. The crusade against the prevailing fashions, which was begun at Chautauqua, a short time since, shows that the women reformers really mean business. The great trouble, up to the present time, with the ladies has been to get a leader, a sort of Martin Luther, as

it were, who could precipitate a great reformation in the fashion world with some degree of energy, enthusiasm, and enterprise. This leader has just been found in the person of Mrs. Frank Stuart Parker, of Chicago. She has defended her position and ideas in a way that has attracted the widest attention all over the country. The women interested have just selected as a central committee the following prominent women: Mrs. Frank Stuart Parker, Chicago, Ill.; Mrs. Frances E. Russell, St. Paul, Minn.; Annie Jenness Miller, New York; Elizabeth Stuart Phelps Ward, Anna C. Brackett, Dr. Mary Putnam Jacobi, Miss Grace Dodge, and Margaret Sangster. Mrs. Parker, the Chicago champion and cultured propagandist of the new order of things, is one of the most charming of persons, and is the wife of Col. Francis Parker, the principal of the Chautauqua Teachers' Retreat, and president of the Cook County Normal School in Chicago. And when a decent, sensible, healthful style of dress becomes fashionable, almost every woman will adopt it, and call it "nice," "lovely," "delightful," and take great credit to themselves for connecting with the reform. The credit belongs to those who have advocated this needed reform when its followers were true. The PACIFIC HEALTH JOURNAL has done this from the first.

A DISPATCH from Berlin dated September 3, states that Dr. S. L. Sleich, of that city, while conducting experiments with a view to determining how weak a solution of cocaine would prove efficacious as a local anesthetic in minor surgical operations, stumbled upon the fact that simple water injected under the skin with a syringe renders the flesh at that point insensible to pain. The method of procedure is very simple. The skin at the point where the injection is to be made is first made perfectly aseptic. Then the point of a Pravaz syringe filled with distilled water is inserted. The syringe is slowly emptied and a blister appears similar to that caused by a gnat sting. The size of the swelling will depend upon the amount of water used. Half a minute after the syringe is withdrawn, the space marked by the blister is insensible. The pain caused by the insertion of the syringe can at once be allayed by spraying with ether. Dr. Sleich made use of his discovery in the case of a carbuncle on the upper thigh. He laid the carbuncle open by cross incisions eight centimeters in length and scooped out the dead tissue, the patient declaring that the operation gave slight pain. This treatment has no ill effect on the healing of the wound. The cuts at once reunited and healed perfectly. Water is one of nature's remedies.

DR. J. F. DAUTER, of Toronto, Canada, as a representative of the American Health Resort Association, is searching in New Mexico to ascertain the probable effect of its climate on pulmonary diseases. He says the "fact that the climatic boast has been worn threadbare, as it were, by speculators, town-lot boomers, and irresponsible medical quacks from time immemorial, misleading thousands of physicians and causing hundreds of invalids to seek localities where death only awaits them, has prompted physicians to make this move for their protection. The result of their research will be published in pamphlet form for distribution in consumption-breeding districts in New England." And this is all true.

Better seek a locality known to be healthful and physicians known to be men of principle and experience. Such a place is the Rural Health Retreat, St. Helena, Cal.

SCHOOL.—All intending to enter the Nurses' Course at the Rural Health Retreat must do so soon. The present term began September 1, 1891, and will continue one year. For particulars address Rural Health Retreat, St. Helena, California.

ANOTHER new journal is the *Apothecary*, published by the Illinois College of Pharmacy, Isaac Oldberg, editor. It is devoted to just what its name implies, and the first number speaks well for the magazine. Price, \$1.00 a year. Address, *The Apothecary*, Chicago.

THE San Francisco Polyclinic treated 3,452 cases during the year ending March 16, 1891, and these patients made to the various clinics 13,305 visits. With one exception—catarrh of the ear—dyspepsia, a preventive disease, and the probable cause of many others, leads with ninety cases. The dread syphilis presents seventy-two; eczema has eighty three; neuralgia reaches forty-one, and constipation, thirty-five. Healthful living and pure morals would have prevented most of these diseases. Why will not people learn till too late?

PATRONAGE.

THE patronage at the Retreat during the summer has been large. Much good has been done and the work continues. Many have found relief from their sufferings; some have been cured, and a few have not been benefited at all, so far as we were able to observe. Lectures have been delivered occasionally on hygiene and the higher life, and many have left the Retreat determined to rise above sensuality through reform in habits of life, especially by eating and drinking those things which tend upward instead of downward.

We invite any who desire to learn more of nature's laws and her better ways, to dwell with us a short time at our hillside home, and store the mind with knowledge that may prove a blessing to themselves and to those with whom they may associate in after life.

BEATTY'S ORGANS AND PIANOS.

ATTENTION is called to the advertisement of Daniel F. Beatty, Washington, New Jersey. Read it, and send for his latest illustrated catalogue.

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HAVING at our Health Retreat a revolving oven, and first-class 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.

Oatmeal Biscuit.—These are about twice the thickness of an ordinary cracker, are slightly sweetened and shortened, and made light by yeast, exceedingly palatable. They are recommended for constipation, if the person is not troubled with acidity or flatulence; per lb. 12 cts.

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

Plain Oatmeal Crackers.—These are neither fermented, shortened, nor sweetened. They have an agreeable, nutty flavor, and are crisp and nice; per lb. 10 cts.

No. 1. Graham Crackers.—Slightly sweetened, and shortened. Just the thing for persons with fair digestive powers and inactive bowels; per lb. 10 cts.

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

Plain Graham (Dyspeptic) Crackers.—These crackers contain nothing but the best graham flour and soft water, yet by the peculiar preparation of the dough they are as crisp as though shortened. If by exposure to dampness they lose their crispness it may be restored by placing them in a hot oven for ten or fifteen minutes; per lb. 10 cts.

White Crackers.—These are made of the best patent flour shortened. But they are not mixed with lard or any other deleterious substance; per lb. 10 cts.

Whole Wheat Wafers.—Composed of flour and water. Made especially for dyspeptics, and those of weak digestion; per lb. 10 cts.

Gluten Wafers.—Especially good for those troubled with acid or flatulent dyspepsia, or those suffering with nervous exhaustion, and who wish to restore nerve power speedily. Such as have to live largely on meat, because they cannot digest vegetable food, will find in these wafers a valuable substitute; per lb. 30 cts.

Anti-Constipation Wafers.—Composed of rye-meal and whole wheat flour. Crisp and palatable. Persons suffering with painful dyspepsia, or tenderness at the pit of the stomach, should use whole wheat crackers in preference to these. For all other forms of dyspepsia or constipation, these are just the thing; per lb. 12 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

of normal stomachs, but are not recommended for confirmed dyspeptics; per lb. 20 cts.

Carbon Crackers.—These are especially intended for cases of dyspepsia in which there is acidity of the stomach, heart-burn, and flatulence of stomach or bowels. The black color of the cracker is due to the presence of pulverized carbon, which acts as a preventative of fermentation, and is an absorbent of irritating gases resulting from indigestion; per lb. 15 cts.

Wheatena.—This is a preparation of wheat which is subjected to a process by means of which it is partly digested, and rendered readily soluble in the digestive juices. Good for persons suffering with slow digestion and constipation; per lb. 12 cts.

Avenola.—This is some like the preceding in the mode of its preparation, except that it has also the finest oatmeal with the wheat in its combination. It contains a large proportion of bone, muscle, and nerve-forming material. It is a good food for infants, and for all invalids of weak digestion; per lb. 13 cts.

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.

Diabetic or Gluten Food.—This is a form of bread deprived of its starchy and saccharine elements, but retaining all the other palatable and nourishing elements of the flour. By the use of this food and the observance of careful dietetic rules, this obstinate disease (diabetes) may be kept at bay for many years, and cured in cases where a cure is possible. It is prepared with great care, and has been thoroughly tested. It is a perfect substitute for animal food in cases of nervous debility, and is to be used in the same cases as those for which the gluten wafer is recommended; per lb. 30 cts.

Infants' Food.—Most of the food offered in the market as infants' food contains too much starch for the digestive powers of the infantile stomach. The article here offered will often be digested when other articles of food cannot be eaten without producing serious derangement of digestion; per lb. 30 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.

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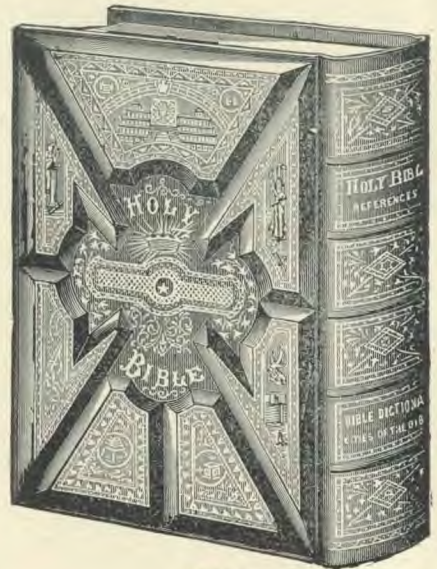
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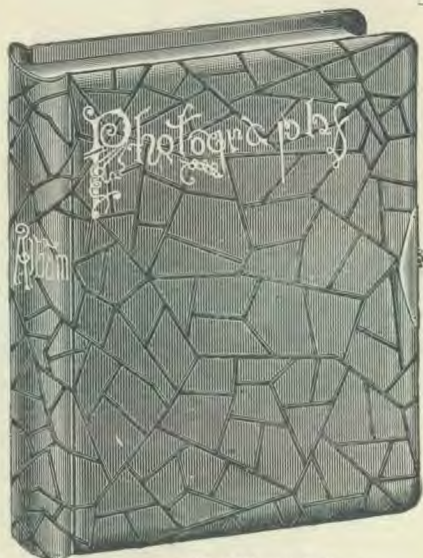
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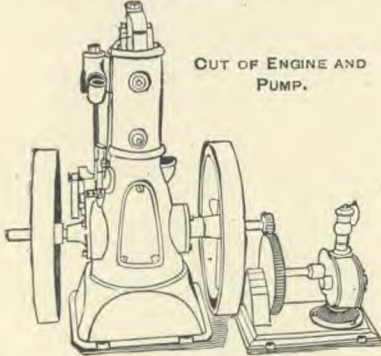
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