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BE patient and be cheerful. Cheerfulness is to every nerve what sunshine is to the plant.

WITH this number we begin volume 14 in the history of the PACIFIC HEALTH JOURNAL. It will be the earnest endeavor of the editors to make it the most successful one that has ever been published. Considerable effort has been put forth to get able contributors, and among the subjects which will be discussed in the JOURNAL during the present year will be illustrated articles on physiology and hygiene; the mind, its normal action and its relation to the cause and cure of disease; the study of food and diet. Others will contribute on home making and training of children.

BE calm and quiet. The restless temper tells of a weak, nervous condition, while calmness and quietness speak of a nature strong and full of vitality. A great stream carries a navy quietly on its bosom, while the brook runs noisily over its pebbly bed.

IT was Thackeray's friend who said, "He could have done better work with his head if he had worked equally well with his hands and his heels."

THE great need of a more thorough acquaintance with the laws of hygiene, and the greater practical understanding of sanitary science, can be appreciated as we read the results of sickness among the soldiers that has occurred in the different armies the past two years. It is reported that in the late Spanish-American war there were ten deaths from disease in the army where there was one killed in actual fighting. During the war between Greece and Turkey in 1897 the loss is given at twenty-seven soldiers dying of disease to one killed by the enemy.

While the massing of a large number of people together in armies under unfavorable surroundings gives rise to a high death rate, yet the bad sanitation is no doubt the cause of much preventable sickness. While great advance has been made in the study of this science in the last few years, the public mind may be said as yet to be comparatively ignorant of the great importance of these laws.

EVERY man and woman should exercise four or five hours a day if they wish to keep well. The man who creeps out of bed and goes to his office to sit still all day, then creeps home at night, reads his paper, and creeps to bed, will surely be a nervous, irritable, broken-down man at fifty. The nerve force must be sent dancing and tingling all over the body to the tips of the fingers and toes to keep the organs in a healthful condition.

NERVE HABITS.

MAN is the result of his education, and his education is only the sum of his habits, or those things which he has most habitually or repeatedly done. In a certain sense the old Jewish idea of education which alone came through the instrumentality of the heads of the family is founded on correct principles—"Line upon line; precept upon precept." Repetition continued until the result was, that which was taught so frequently became a part of the child. This is true not only in an intellectual and moral sense, but is even more true in our physical nature. The sum of healthy exercise will make a healthy muscular system. The spasmodic, irregular, and unwholesome exercises can only result in a lack of formation of muscular strength and muscular habits. What a man is tells the story of what his habits have been, and what his habits are determines what he is to be.

This is true with all the voluntary functions of the body, and is indirectly true with the involuntary functions. The reason for these tendencies of the body can be readily understood when we study the physical structure, especially of the nervous system. The nerve structures are made up of gray matter, or the nerve centers, and white matter, or nerve fibers. The gray matter is found in the largest quantity upon the surface of the brain, and it is gathered in small masses called ganglia in the brain substance, especially toward the base. The same gray matter is found along the center of the spinal cord, and there are a large number of small ganglia connected with the sympathetic system in different portions of the body. All of these lower nerve ganglia are what are known as reflex and automatic centers. They have no intelligence to originate impression or motion, but as they are taught through the higher organ-

ization of the nervous system they become accustomed to automatic action, and perform their function without reference to the voluntary thought or conscious direction of the mind. Thus, throughout the body whatever ways or impulses are continually followed become habits to the extent to which they are repeated.

The physical tendencies of childhood and youth are rarely ever changed throughout life; and even later, we are constantly falling into ways which follow us in all our future career. Not only are physical habits thus established, but the operation of the mind has the same tendency. We think a thought and it is considered trifling, but it returns, and sometimes suggests itself a third time to us. In this way the same thought recurs over and over in the nerve centers, and without our willing it we find it present in the passive portions of the mental system until it finally becomes a habit of the mind. And too often these mental habits are morbid in their nature, and consequently cast a like influence upon the physical system over which they rule. Especially is this true when our minds are centered on the involuntary functions of the body. A man who has his mind constantly upon his digestion will very soon have indigestion. Nature purposes to run her own machinery, and when we undertake to supplant it by human plans or artificial ways we destroy the natural process, and disease results.

Thinking of what is eaten during or after meal hours is a dangerous practise, and if continued until it becomes a habit will be a greater obstacle in the way of curing dyspepsia than any other factor. A person who has pain can not avoid thinking about that pain, not only once or twice, but the thoughts revert to it hundreds of times, and the hundreds of thoughts of pain are often sufficient to establish a nerve habit of pain, and the

sense of pain grows, while the capacity to endure pain lessens. There can be no greater calamity to chronic invalids than that they should get together and tell their ailments to each other. Such a course is but nursing disease and rendering it less curable. It should always be the aim to cultivate reverse habits of expression to those which we feel during illness. Sickness is not the least of the opportunities in life. It is the time for reflection. It does not come by accident, but is the effect of a cause. Reason and reflect upon the cause rather than the effect.

The break in the wrong modes of living which is present affords the best opportunity to change the bad nerve habits and start in better ways. Many of the noblest qualities of life never can have a richer opportunity for cultivation than during illness. Patience, endurance, cheerfulness, forgetfulness of self, and thoughtfulness of others, when exercised and cultivated, will yield good returns, "like a medicine."

It is stated that cheerfulness is to the body what sunshine is to vegetation. Hence with a person who is in search of health, the essential thing to do is to cultivate cheerfulness, hopefulness, courage, and not allow one's self to think of his ills, much less to talk about them, except to those who may find it necessary to know them in order to properly direct his life.

A. J. S.

DON'T fret and worry and fly into a state of nervous prostration over trifles. A strong constitution can be broken down more effectually by worry and a fretful, irritable temper than by hard work.

PUT on woolen stockings. Keep your feet warm and dry. The best lung protectors and head protectors and protectors for the stomach are the protectors worn on the feet.

SCHOOL OF HOUSEKEEPING.

THE *Scientific American*, in its last issue, gives a description of a "school of housekeeping," which has been established in Boston, with the idea of placing this branch of domestic life upon a more scientific, economical, and sanitary basis. Among the branches which are to be taught in the school may be mentioned the following: Food in the relation of true economics; economic buying; domestic housekeeping; division of income in house expenditure; the house as a unit; domestic science, its past, present, and future; domestic service as a trade; dust and its dangers; practical study of the cellar, heating, lighting, ventilation, drainage, and plumbing; laundry and kitchen; store-rooms; interior woodwork, its preparation and preservation; the hygiene of the bedroom, etc.

The import of what is taught in this school will appeal to every thinking mind, and it is to be hoped that this branch of learning, which is having such a good start in Boston, may be spread through the cities of the world.

GRANOSE HAS GONE UP.

THERE was a marked rise in granose on Christmas at the Sanitarium. A fire balloon, with the word "GRANOSE" in large letters, ascended, amid the cheers of the lookers-on. An automatic device for throwing out flakes of granose, thus producing a snowstorm of granose flakes, would have made the affair a complete success. The fact is, the factory has been "snowed under" with orders for granose; and with increased facilities for manufacture, we propose that the Pacific slope shall be "snowed under" with the flakes. It is to Mr. W. J. McClosky that the guests of the Sanitarium were indebted for the balloon ascension.

G. H. H.

THE COOKING OF STARCH FOODS.

STARCH, as such, can not be appropriated by the body, but must first be converted into sugar. This change of starch into sugar, which we call digestion, is carried on in the alimentary tract through the agency of the saliva and of the pancreatic fluid. The saliva will not act on raw starch, as may be readily proven by experiment. If some raw potato be chewed awhile, and then be tested for the presence of sugar, none will be found. If, however, a like amount of cooked potato be subjected to the same process, sugar will be found present.

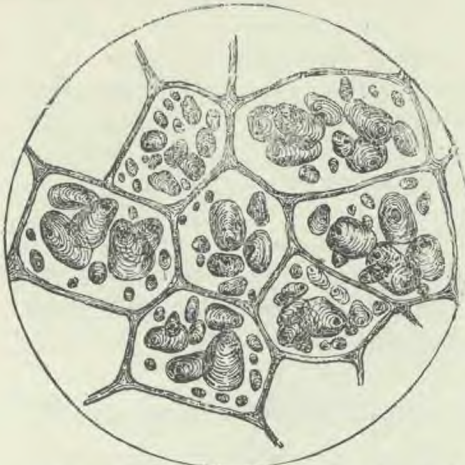


FIG. 1.—Cells of a raw potato, with starch grains in natural condition.

Every starch granule has a covering around it, like the shell around an egg. This covering or shell is not acted upon by the saliva, so the saliva can not get at the inner part. The result is that when large quantities of raw starch are taken at a meal, the food has to pass through the stomach completely undigested, and stomach disturbance is the result. The danger from eating green apples and other fruits is essentially on account of the raw starch which they contain.

Cooking bursts the outside coverings of the starch granules, permitting the

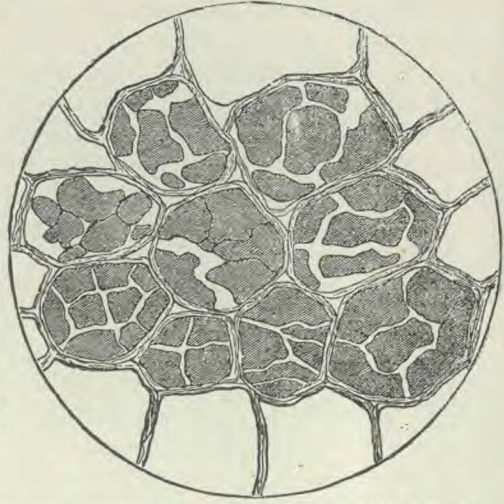


FIG. 2.—Cells of a potato boiled in water one-half hour.

starch proper to escape. In this state it is known as soluble starch, and by sufficient digestion can be completely converted into sugar. Accompanying this are drawings showing the microscopical appearance of raw and cooked potato.

Boiling thus renders starch soluble, but goes no farther in the process of digestion. If, however, the food be subjected to higher degrees of heat, as in baking, the starch will not only have the granules

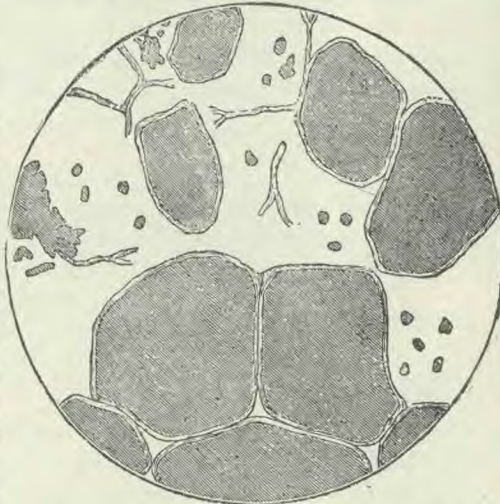


FIG. 3.—Cells of a potato well steamed and mashed.

burst, but the starch will be partly changed into dextrin; that is, partially digested; for the dextrans are intermediate stages in the transformation of starch into sugar. Baked potato is therefore more readily digested than raw, and the crust of bread than the inside of the loaf. In this fact lies one great advantage of zwieback over ordinary bread; for whereas ordinary bread contains very little dextrin, zwieback contains a large proportion of dextrin. Granola and granose also, through the process of long baking, are especially valuable to those suffering from starch indigestion. Zwieback can be made for home use by slicing up bread two or three days old and drying it, until brown through, in a slow oven.

G H H.

TREATMENT OF GRIPPE.

WE have received some requests of late to outline a treatment of this common malady, and while we can not go into all the details of how to treat it, a few general principles may be given which will be of great advantage to those who give the disease sufficient attention in its early stages.

La grippe affects every part of the body. Sometimes its most marked symptoms are in the respiratory tract, or the digestive organs, and at other times its effects are felt in the nervous system. It is nearly always accompanied with irritation of the respiratory tract, and the importance of early treatment of this disease can not be overestimated, as when it is left to run its course it nearly always produces chronic changes which leave permanent and harmful results in the system. When the disease is first contracted the whole system is more or less prostrated, and a certain amount of fever is present. The patient should at once take a hot bath. The effect of the heat will be to enable the system to rally from

the depression which has come over it. This bath should be taken in a warm room, and the patient should get out of the bath when thoroughly warmed and be wrapped in a hot blanket, with sufficient covering to make him perspire freely for a short time. From this he should get directly into a warm bed, being careful that the surface of the body is in no way chilled by making this change. Absolute and prolonged rest in bed until after all the fever has disappeared, and the principal symptoms have been ameliorated, is very essential. The patient should take only a mild liquid diet, drinking plenty of hot water, so as to increase the elimination of the skin and kidneys. If the bowels are not sufficiently free they should be moved by means of large, warm enemas. If the catarrhal symptoms are marked they should receive attention. If the throat shows signs of soreness a gargle of camphor water every twenty minutes will usually cure the condition. The nose should be sprayed with a solution of alboline containing from three to five grains of menthol to the ounce. If there is a marked soreness of the throat or chest, fomentations over the chest, followed with camphorated oil rubs, will do a great deal of good.

The patient may have complications which require other treatment, but if these simple remedies are carried out in the early stages, they will nearly always effect a ready and rad

BRIEF RULES OF HEALTH.

"I HAVE never been in a hurry; I have always taken plenty of exercise; I have always tried to be cheerful, and I have taken all the sleep that I needed." These rules were followed by Rev. James Freeman Clarke, and he outlived most of those who began life with him."

Sanitarium Question Box

[Taken from *Parlor Lectures* by Dr. A. J. Sanderson.]

88. For those who have slow digestion, can soups be eaten to advantage?

Not as a rule. People with slow digestion usually have more or less dilatation of the stomach, or poor absorption, and a large amount of liquids only hinder the digestive work. Such a person would do better to begin the meal by eating some dry food, such as granose, masticating it very thoroughly, and taking twenty minutes for such a dish. In this way the digestive glands will be set at work through the exercise of chewing, and will better respond to the work of the meal hour than if the first portion of the meal had been composed of only liquid food.

89. How can any one reduce his weight without losing his health?

A person who is suffering with an accumulation of flesh which has become an annoyance, or a diseased condition, usually can find some error in living which has been responsible for the change. It may be sedentary habits, use of stimulants, kind of food that has been taken, or other conditions. Whatever it has been, the condition must be radically changed, or, better still, let families who have an inherited tendency to accumulate flesh, correct the conditions before the flesh has been acquired. Abundance of oxygen in the system, active condition of the eliminative organs, are conditions essential to the reduction of flesh. The former is obtained by the proper kind of exercise, and the latter will be secured by living upon healthful food, with proper bathing, etc. As to the matter of diet, one should avoid sugars, excess of starchy foods, and fats. Confine the diet to two articles of food at the same meal, or, at the most, three or four. In this way the amount of

food taken at one meal, will be limited, and the best conditions secured for reducing flesh.

90. Is claret wine as nutritious as unfermented grape juice?

Claret wine has very little or no nutrition. The nutritive elements have been devoured by the germs which cause the fermentation, and there is practically nothing left but water plus the alcohol which is the result of the fermentation. The alcohol is only a hindrance to the action of the digestive juices.

91. Are germs always killed by sunlight?

Sunlight is the best germicide which we have. Any of the disease germs, especially tubercular bacilli, when exposed to direct rays of the sun, in a short time are destroyed. This, however, does not cause the expectoration of consumptives to be harmless, as the material usually becomes covered more or less with earth and other material, and dries, being carried away in the dust without coming in direct contact with the sun's rays.

92. Is ice-cream a good article of diet?

No; the ingredients of which it is made are very unwholesome, and very liable to set up fermentation and other changes in the stomach rather than to help out in the nutrition. The temperature, also, at which it is taken, is detrimental, as the energy of the digestive organs, which is needed in the way of digesting the food, is used up in counteracting the effect of the extreme cold, and thus the digestive processes are retarded.

93. Are watermelons wholesome food?

They contain but little nutrition, but are healthful to nearly everybody. We

have known persons to live on water-melons for some time, but of course it took a very large quantity. Water is the most abundant element in the watermelon, and it is supplied to the system in a distilled, natural, and healthful form, being much preferable to the drinking of large quantities of cold water near meal hours during the hot season.

94. Will a person often take cold, with his stomach and liver in good condition?

A good, active, normal liver will readily remove poisons from the body. A condition which produces a cold is usually poisons caused by a stoppage in the eliminative action of the skin, throwing the poisons upon the mucous membrane. If the liver should be ever ready to absorb these, the danger of cold would be far less. Many colds, however, originate directly from the stomach, the poisons being absorbed from there. This would all be prevented if the stomach were kept in a healthy condition.

95. What elements, properties, qualities, or attributes, constitute the human soul?

This question more properly belongs to a theologian than to a physician, and yet we must acknowledge that the influence of the soul is as great over the body as it is over the mind or over the morals. Although we can give no physical analysis of the soul, yet we know it is the vital element in the life. The body that is possessed of a living soul will usually be a healthy one, but the health of this soul is always destroyed by sin, as is indicated in the scripture, "The soul that sinneth, it shall die." Every transgression of nature's laws, whether physical or moral, will be destructive to the soul. If people want to get well, they need a good, whole soul in order to lay claims upon and acquire the riches of health. Without it efforts to get well are practically useless. From this standpoint

the soul should be zealously guarded whenever the individual wishes to enjoy health.

96. What is the cause of hay-fever?

This is brought about by a catarrhal condition that exists with the individuals, and that often combined with a susceptible nervous constitution, so that regularly, at certain seasons, usually about June, the characteristic symptoms of the trouble develops. The immediate cause is probably some germ or some substance of vegetable origin that develops at that season of the year. This, however, will not affect an individual when the local conditions are good. People who suffer from hay-fever are frequently cured when the catarrhal troubles are removed; but this sometimes requires special attention being given to treat this catarrhal condition for several successive years.

97. Can you explain why lumps should appear under the scalp, and what can be done for them?

It frequently happens that the glands beneath the scalp become enlarged. When the enlargements are slight they possibly may be absorbed by the application of iodine; but as a rule they remain, and can only be gotten rid of by taking out.

98. What can be done for the scalp to prevent the hair from falling out?

The hair comes off the scalp because of diseased conditions of the hair follicles. This is frequently brought about by the repeated wetting of the head. Often the best remedy is to stop wetting the hair. If the scalp becomes oily or has a tendency to accumulate dandruff, it may be washed thoroughly once a week. This should be done with pure soap only, and the head shampooed and thoroughly dried. Then an application should be made to the scalp of equal parts of castor-oil and alcohol.

HOW MUCH SHALL I EAT?

"DOCTOR, how much shall I eat?" is a familiar question to the physician, and one which often puzzles him to answer. To a certain extent the appetite is a correct guide as to the amount of food required by the system. No doubt it would be a perfect guide had it not been perverted by being made to minister to man's pleasures rather than to his needs. It is a common experience for individuals to eat until they think they have had sufficient, only to find at the end of an hour or two that they have eaten far too much for their digestive capacity. Others who do not suffer directly from conscious stomach trouble have a variety of ills as a result of overeating. In many cases these people do not know that they overeat or that they have any stomach difficulty. The physician may surmise that a heavily-loaded stomach is the cause of all the trouble, and may caution the patient to eat lightly. The patient will doubtless answer: "Well, doctor, how much *shall* I eat? I can not tell when I have had enough." It is not enough to tell the patient to leave the table hungry, or to eat less. He is entitled to a more definite answer—something based upon scientific study of food values and food requirements. He should know what proportions of tissue food and fuel food he should have in order to maintain the body at the highest possible condition, without waste of vitality from taking care of a surplus of either. If there is too little of either kind of food, his nutrition will suffer. If there is an excess of either kind, his digestive organs will be overtaxed, and his vitality will be unnecessarily consumed.

The St. Helena Sanitarium has been working out a new menu, in which the food values of each dish is given; so that it will be a simple matter to estimate how many and what kind of dishes will be

needed in order to furnish the proper amount of fuel and tissue foods.

For the benefit of those who have not read former articles on the subject, it may be explained that food serves two purposes: (1) To replace the tissue waste; (2) to furnish heat and force to the body. The tissue foods also furnish heat and force; but if a person eats enough protein (tissue food) to obtain the proper amount of heat and force, there would be an excess of the nitrogenous matter and a consequent loss of vitality in disposing of it. In order to get the proper amount for supplying heat and force, it is necessary to combine with the requisite amount of protein, a certain proportion of non-nitrogenous or fuel food (starches, sugars, and fats). In making up the food value of fats and carbohydrates, we give the amount of protein in grams, and the amount of heat which can be produced by the food, in calories. A person weighing 150 pounds and doing a moderate amount of work, requires daily, food sufficient to furnish 100 grams of protein and a heat value of 2,800 calories. The food requirement varies with the weight, age, and occupation of the individual and with the temperature, more food being required in cold than in warm weather. Age also exerts an influence on food requirement; for the growing child or youth will require more in proportion to his weight, and the aged person less in proportion to his weight, than the middle-aged person.

The following is, we think, a safe table of food requirements, and is the one we expect to use in making our prescriptions.

Those who have read the articles in the September and October HEALTH JOURNAL on food values and food requirements, will notice that we have now adopted a more simple method of estimating food values, one which will enable any one of ordinary intelligence to determine whether

Weight.	REST.		LIGHT OCCUPATION.		MED. OCCUPATION.		HARD WORK.	
	Grams Protein.	Calories.	Grams Protein.	Calories.	Grams Protein.	Calories.	Grams Protein.	Calories.
110	54 to 61	1,500 to 1,700	61 to 72	1,700 to 2,000	72 to 80	2,000 to 2,250	80 to 107	2,250 to 3,000
121	59 " 67	1,650 " 1,870	67 " 79	1,870 " 2,200	79 " 88	2,200 " 2,475	88 " 118	2,475 " 3,300
132	65 " 73	1,800 " 2,040	73 " 86	2,040 " 2,400	86 " 96	2,400 " 2,700	96 " 129	2,700 " 3,600
143	70 " 79	1,950 " 2,210	79 " 93	2,210 " 2,600	93 " 104	2,600 " 2,925	104 " 139	2,925 " 3,900
154	75 " 85	2,100 " 2,382	85 " 100	2,380 " 2,800	100 " 112	2,800 " 3,150	112 " 150	3,150 " 4,200
165	81 " 91	2,250 " 2,550	91 " 107	2,550 " 3,000	107 " 120	3,000 " 3,375	120 " 161	3,375 " 4,500
176	86 " 97	2,400 " 2,720	97 " 115	2,720 " 3,200	115 " 129	3,200 " 3,600	129 " 171	3,600 " 4,800
187	91 " 103	2,550 " 2,890	103 " 122	2,890 " 3,400	122 " 137	3,400 " 3,825	137 " 182	3,825 " 5,100
198	97 " 110	2,700 " 3,060	110 " 129	3,060 " 3,600	129 " 145	3,600 " 4,050	145 " 193	4,050 " 5,400

In adipose people, one-third less; in very spare people, one-third more, if their digestive capacity will stand it.

he is eating a proper quantity of food. In a future JOURNAL will be given a list of the more ordinary foods, with their food values, and directions for estimating the value of dishes made from these foods.

The writer will be pleased to correspond with any who feel they need clearer explanation than is here given, or who have any suggestions to make. G. H. H.

SOMEBODY gives the following antithetical advise: Drink less, breathe more; eat less, chew more; ride less, walk more; clothe less, bathe more; worry less, work more; waste less, give more; write less, read more; preach less, practise more.—*New York Tribune.*

TAKE the day and all that it brings quietly and patiently. Life is a tangle for every one of us. Let us straighten it as best we can, remembering that we sometimes learn our best lessons from our trials and our mistakes.

RATIONAL TREATMENT OF DISEASE.

IT is conceded that health comes from adherence to simple temperate living, with attention to diet, ventilation, personal cleanliness, outdoor exercise, and proper sanitary surroundings. If a man is healthy in spite of a disregard of these it is due to the fact that he has inherited a strong body that is able to resist much of evil influence. Even the strongest will

go down in time if he disregard the laws of life and health.

When a man comes to us sick it is due, as a rule, to such disregard. Shall we ignore this great law of his being, and give him a bad-habit antidote, letting the bad habit go on? May we even ignorantly do so? or shall we study his case carefully, and find the evil, then, having found it, strive to turn him from it to true, simple living?

There is a false theology that claims to save men in *their sins*, but the truth teaches that men are saved *from their sins*. The angel told Joseph, "Thou shalt call His name Jesus [Saviour, Heb.]; for He shall *save His people from their sins.*" Matt. 1:21. So in medicine we need men who will be saviours of people from evil habits, from bad ventilation, from unsanitary premises, yes, even from erotic thoughts.

Now we come to a study of the use of drugs and medicines. What is there in a drug that will give strength or vitality to a part? They are nearly every one poisons, and poisons are generally supposed to be inimical to life and health. If a thing is dangerous or even hurtful in health, is it not evidence of silly credulity to believe it can be less so when the body is prostrated with disease?

It is impossible for a drug alone to cure a disease without a turning away from or giving up of the habit or cause of that disease. It may make a man *feel* better; a man may feel good who is

stimulated by whisky, but will he *be* any better? The drug may change the character of his complaint, may ease him, like the shifting of a heavy burden from one shoulder to the other, but in the end it will break him down. As one has asked, "How much is your patient profited if by free use of arsenic you cause a bearable skin eruption to disappear, while at the same time your arsenic is giving him a nephritis, as shown by the edema of the eyelids and feet?"

We need more literature devoted to rational medicine, teaching "the simples of our art."

We should soon learn of the power of simple things to relieve pain, subdue fever, scatter inflammation, quiet wakefulness, eliminate poisons, promote good digestion, heal sores, *cure* diseases. We would learn how little our drugs have done, after all, to help, and how much to hinder. We would learn how much of potency there is in a wet compress, a sheet pack, a hot-water, hot-air, or vapor bath, a current of electricity, a hot or cold application, or a rational diet.—*E. L. Paulding, M. D., in the Medical Council.*

CARE OF THE FEET WHEN WALKING.

THE human foot is a wonderful piece of mechanism, which is too often maltreated at the dictates of fashion, its flexibility being neutralized by the paralyzing influence of tight boots, etc.

There are twenty-six bones in the foot, seven tarsal bones, forming the ankle and heel, five metatarsal, forming the instep, and fourteen phalanges, forming the toes. The tarsal bones are remarkable for their strength, direct communication with the upper part of the body, and comparative fixity. It is the metatarsal and phalanges in which the flexibility and elasticity are most found, and powerful muscles are

attached to these parts of the feet. The heel gives the stability; it is the base of a peculiar column, and any heavy blow or jar upon it is at once communicated to the spine, the base of the skull, and the brain. But with the toes and ankle, the greater play possible for each bone distributes any shock, and gives elasticity. The light, springy step of the child is largely due to the natural tread, the use of the toes as so many levers, though it is true that there is more elasticity, owing to the immaturity of the bones. One of the reasons why walking in towns is so much more tiring than walking in the country is the hardness of the roadway; there is no reciprocity to the elasticity of the front part of the foot, and there is consequently a tendency to walk more flat-footed, or to depend more upon the heel. This causes a jar to the foot and to the body. When much walking is done, or athletics indulged in, it is necessary to give as great freedom to the foot as possible.

There is a very direct sympathy between the foot and the brain. Mental composure is well-nigh impossible when the feet are in discomfort, bruised or even chilly. Sores and blisters destroy all comfort, and cause more general uneasiness than their insignificance would seem to warrant. But the connection between feet and personal comfort has long been recognized. In eastern countries, and in our own early Anglo-Saxon land, the provision of fresh water and oils or ointments for anointing the feet of weary wayfarers was a duty incumbent on hospitality. With us who wear boots, the necessity for perfect cleanliness and for keeping the feet dry is still greater. Let the walker wear thin socks and water-tight boots, and when the day's walk is over, bathe the feet in warm water, rub dry till in a glow, and put on clean, perfectly dry socks, and either shoes or

slippers. When the exercise is prolonged, the way rough, and the weather warm, it is wise to anoint the foot. The ancients used sweet oils; modern soldiers have found tallow excellent; but a good brand of soap will answer the purpose as well, and be more cleanly. Turn your socks inside out, and rub the feet, especially sole, heel, and toes, with slightly moistened soap. This lubrication will prevent soreness and blisters. Many prefer to bandage the feet in soft linen bands, duly soaped. In any case, when the day's walk is over, wash the feet, if possible, and at all events rub dry and put on clean socks. With these simple precautions, long walking tours can be undertaken in comfort, and even if the feet get wet in the daytime, no harm will result.—*The Gymnasium, London, Eng.*

IN CASE OF FIRE.

Putting Out the Fire.—Take this case, a description of what is unfortunately happening every day: A woman's clothes take fire; she is wrapped in flames; her arms and hands, her neck and face, are scorched with the heat; her hair is in a blaze; the smoke is suffocating her. She becomes utterly confused, and rushes to and fro, so creating a current of air, which increases the fire. The best thing she could have done would have been instantly to roll upon the floor. But how few have presence of mind to do this! The more need for a friend to do it for her. Seize her by the hand, or by some part of the dress which is not burning, and throw her on the ground. Slip off a coat or shawl, a bit of carpet, anything you can catch up quickly, hold this before you, clasp her tightly with it, which will protect your hands. As quickly as possible fetch plenty of water; make everything thoroughly wet, for though the flame is out, there is still the hot cinder and the

half-burnt clothing eating into the flesh. Carry her carefully into a warm room, lay her on a table or on a carpet on the floor—not the bed—give her some warm, stimulating drink, send for the doctor, and proceed to the next operation, that of—

Removing the Clothing.—Perhaps in the whole course of accidents there is not one which requires so much care and gentleness as this. We want only three people in the room—one on each side of the patient, and one to wait upon them. Oh, for a good pair of scissors or a really sharp knife! What misery you will inflict upon the sufferer by *sawing* through strings, etc., with a rough-edged, blunt knife. There must be no dragging or pulling off; do not let the hope of saving anything influence you. Let everything be so completely cut loose that it will fall off; but if any part sticks to the body, let it remain, and be careful not to burst any blisters.—*George H. Hope, M. D., in "Till the Doctor Comes, and How to Help Him."*

HOW TO WALK.

OF course there is no virtue in a dawdling walk. The slow and languid dragging of one foot after the other, which some people call walking, would tire an athlete; it utterly exhausts a weak person, and that is the reason why many delicate people think they can not walk. To derive any benefit from the exercise it is necessary to walk with a light, elastic step, which swings the weight of the body so easily from one leg to the other that its weight is not felt, and which produces a healthy glow, showing that the sluggish blood is stirred to action in the most remote veins.

This sort of walking exhilarates the whole body, gives tone to the nerves, and produces just that sort of healthful fatigue which encourages sound, restful sleep.—*Selected.*

ONLY A WOMAN.

BY MINNIE EMBREE.

"ONLY a woman!" some people say,
 "Made for toiling the livelong day,
 To wash the dishes, and cook the food,
 To watch the children, and keep them good."
 Only a woman—poor tired one!
 A woman, whose "work is never done"!

Only a woman! a rack, as it were,
 To hang the ribbons, the lace, and fur;
 Made to look at, to please the eye;
 To exist for awhile, and then to die.
 Only a woman, frivolous, gay,
 To fritter the precious hours away.

Only a woman! with nerves unstrung,
 For heavy skirts on her hips are hung;
 Her lungs are sore and her mind depressed,
 The sure results of a waist compressed.
 Only a woman! poor foolish thing,
 To sever her life with a corset string!

Only a woman! a counterfeit one,
 Made so by Satan since sin begun;
 Made for sorrow, and wo, and tears,
 To exist in trouble a few short years;
 Only a woman! it is a shame
 For such a being to bear the name.

Only a woman! a humble one,
 The mother of some illustrious son.
 'Tis the "hand on the cradle that moves
 the world,"

That holds the banner to be unfurled.
 O woman! thy throne is a throne of state;
 'Tis mother that maketh the great man
 great.

Only a woman! with power to make
 Home a heaven for love's dear sake;
 To raise the fallen, support the weak,
 And helpful, comforting words to speak.
 To follow the footsteps the Master trod;
 Only a woman! a child of God.

COURTESY AMONG CHILDREN.

BY MRS. S. M. I. HENRY.

IT is a great deal more important to *be* than to *do*; for it is out of the being that the doing must come. Hence the point about which one should be most anxious is to love and know the principles upon which safe conduct depends.

He who loves purity will never go very

far astray from those manners which are always of "good report." He will instinctively avoid the "very appearance of evil" so far as he knows how evil appears.

There are a few principles which should especially govern the behavior of the young, both to safeguard and defend, and which, woven into familiar thought, will assure that the details of conduct will almost take care of themselves. And yet circumstances modify this fact. It is sometimes slow work to get hold of a principle; and some specific teaching as to just what to do, and what not to do, will be a great help even to those who are pure of heart, and have a mind to be careful in deportment.

Nowhere does good breeding reveal itself more quickly than in the quiet, unobtrusive, "I-am-minding-my-own-business" air of the girl or boy who, with an armful of books held closely, looking neither to the right nor left, clips to and from school; or, if to be walking and talking together, it is with voices so modulated that no passer-by will overhear a word.

Children are to be taught by both word and example that when they are about to meet any person on the street, they should fall back into single file at the right, while still far enough distant to obviate all danger of interference. Who has not found himself caught on the street in a mob of schoolgirls or schoolboys, often both together, who heedlessly monopolize the walk, talking loudly, wrangling, jesting, jaws working at both words and gum,—a spectacle disgusting and disheartening enough to cause the fear that decency has become a condition of the past? And the children have been blamed, but they were not to blame. The blame is all back in the homes out of which they have tumbled without any instruction as to what constitutes good form.

They should be taught to give courteous recognition to acquaintances,—boys

by lifting the cap to one another as well as to their elders, always to father and mother, if they chance to meet in public; and the girls by some modest, feminine salute of bow or word. Good form in behavior does not in the least interfere with the good times that children and youth ought to enjoy, nor does it make them old before their time; but rather, like every other good thing, it will promote strength; and all-round strength is safe, and a continual source of delight.

First, as to manners on the street. Boys and girls should grow up with the idea that it is a great deal nicer for girls to keep each other company on the street, and for boys to do the same, than for boys and girls to go together. Teach your boy to protect the girls of his acquaintance from any annoyance from his presence anywhere; that carefulness in this regard is the beginning of genuine manliness; and that boisterous familiarity, even in play, breeds contempt. And teach both boys and girls to be reserved and modest in their deportment toward all other boys and girls alike.

It is bad form for two, three, or more to walk in an irregular huddle on the street, as children sometimes do, going backward, facing those who should be behind, in order that conversation may be carried on. Even young children ought to be taught that the running, leaping, jumping, loud talking, and laughter, which would be all right in the back yard or on some playground, are never to be indulged in on the public street; that the moment the street is reached, the deportment should become quiet, and thoughtful of the public. They should understand the obvious reasons for this; a running child is practically a blind and deaf one; he will be almost sure to collide with something or somebody, and will be in danger of teams and cars. The rule for the street should be: Steady, quiet, care-

ful, eyes to the front; no loud talking nor laughing; no play; no swapping of knives; no reading; no chewing nor eating; no clearing the throat, nor spitting, nor using the handkerchief, if it can possibly be avoided (if this is impossible, then let it be done in the most unobtrusive manner)—in short, let nothing be done that will necessarily draw the attention of passers-by; never, *never*, do anything *for that purpose*.—*Review and Herald*.

BREAD.

BARON STEUBEN says that the peculiar healthfulness of the Prussian soldiers was in a great measure to be attributed to their ammunition bread, made of grain, triturerated or ground, but not bolted, and which was accounted the most wholesome and nutritious part of their rations. The Dutch sailors, in the days of their naval glory, were supplied with the same kind of bread. During the war between England and France, near the close of the last century, wheat became very scarce. William Pitt was the prime minister, and at his instance the government recommended to the people generally throughout the country to substitute potatoes and rice as far as possible for bread, in order to save the wheat for the foreign army. The scarcity was alarming, and Parliament passed a law, to take effect for two years, that the army at home should be supplied with bread made of unbolted wheat meal, solely for the purpose of making the wheat go as far as possible, and thus saving as much as they could from the home consumption for the better supply of the army on the continent. Throughout the whole of Great Britain the soldiers were supplied with this coarse bread. After two or three weeks the men began to be much pleased with it, and preferred it to the fine flour bread. The result was that, not only the wheat was made to go much

farther, but the health of the soldiers improved so manifestly that it became a matter of common remark among themselves, and of observation and surprise among the officers and physicians of the army. These gentlemen publicly declared that the soldiers were never so healthy nor so robust before, and that disease of every kind had almost disappeared from the army. The public papers were for months filled with commendations of this bread. Physicians pronounced it far the most healthful bread that could be eaten, and asserted that it was the very best thing that could be taken into the human stomach. The testimony of sea captains and old whalers is equally in favor of pure wheat bread, containing the whole of the bran. "I have always found," says a very intelligent sea captain of more than thirty years' experience, "that the coarser my ship biscuit, the healthier my crew." According to a writer in "Rees' Cyclo-pedia," article "Bread," "the inhabitants of Westphalia, who are a hardy and robust people, and capable of enduring the greatest fatigues, are a living testimony to the salutary effects of this sort of bread." Even in our own army this year the three rations of flesh had to be changed for a diet composed of a larger amount of farinaceous foods, to secure better health in Camp Black, on Long Island. At first altogether too much flesh was used.—*Journal of Hygiene.*

NEW YEAR'S MENU.*

BY J. E. PATTERSON.

DINNER FOR SIX.

Nut Cream Soup	
Vegetable Roast and Gravy	
Apple and Rice Mould	Potato Salad
Sliced Nutlets	Corn Pudding
Sugar Peas	Asparagus
Cream Tarlets	Macaroni Pudding
Bromose	Ambrosia
Raisins and Nuts	Caramel Cereal Coffee
Temperance Nog	

NUT SOUP.—Prepare a pint and a half of strained tomatoes, heat and add two quarts of boiling water. Mix two kitchen spoonfuls of nut butter as for table use. When the tomato broth comes to a boil, thicken with three tablespoonfuls of braided flour. Pour half of this stock gradually into the butter. Mix well and return to the remaining stock, stirring well at the same time. Cook five minutes longer and serve with seppits of bread dried in the oven.

CREAM TARLETS.—Two whites of eggs and five yolks; two tablespoonfuls of double thick cream; four tablespoonfuls of sugar; two cups of flour; one cup of apple jam or orange marmalade; one pint double cream for whipping.

Mode.—Make a paste of the eggs, double thick cream, sugar, and flour; work it very lightly; roll it out a quarter of an inch thick. Line tarlets or patty tins with it, and fill them with rice to preserve the shape. Bake carefully in a moderate oven ten or fifteen minutes. Remove the rice, fill them with jam or marmalade, and put a tablespoonful of whipped cream upon each.

This is sufficient for ten tarlets.

MACARONI PUDDING.—Boil six ounces of macaroni in one quart of milk, with the rind of lemon, until tender. Remove the rind. Beat four eggs, add one-half pound of sugar, and a pint of milk, and one-half pound of seedless raisins. Heat well. Add this custard to the macaroni; pour it into a dish, covering with a crust made of one kitchen spoonful of nut butter and two cups of flour; rub together and moisten with water as for ordinary pie paste. Bake twenty minutes.

POTATØ SALAD.—Mince (not chop) four large, cold, boiled potatoes, one

* The recipes given in this menu are published by request of those who have taken a special interest in the preparation of dishes made from the Sanitarium nut foods. The more mixed dishes would not be recommended for those suffering from weak digestion.

green onion, if liked, also a little parsley. Mix all together and add a half teaspoonful of salt. Put in a salad bowl. Mix four tablespoonfuls of nut butter, as for table use, add to it one pint of fresh milk, whip with an egg; whip for a few minutes, add a little salt, and pour over the potatoes. Mix and garnish with lettuce and a boiled egg.

CORN PUDDING.—Rub one can of corn through a colander. Add three eggs, a cup of milk or cream; salt to taste. Beat the mixture well; put into an agate pan and bake twenty minutes. Serve as a vegetable cut in squares.

APPLE AND RICE MOULD.—Wash one-half pound of rice. Put it on to cook in two and one-half pints of milk; sweeten to taste. Add a lemon rind; when cooked take out the lemon rind, and let the rice cool. In the meantime pare, core, and quarter eight apples, and boil them till tender in a syrup made of one-half pound sugar and one quart water. When soft lift them out on a sieve to drain. Make a mould of the rice; smooth it over with the back of a spoon, laying the apples on it in rows, one row sloping to the right, the other to the left. Put the dish into the oven to keep warm. When ready for table use, pour over it a custard made from four eggs to a quart of milk, with sugar to taste. Garnish your dish with jelly or marmalade. Serve with a spoonful of custard on each order. From twenty to thirty minutes are required to steam the apples.

VEGETABLE ROAST.—Bake six medium-sized onions to a rich brown. Add to this one and one-fourth quarts of boiling water, half a pint of tomato sauce, one tablespoonful of 100 per cent gluten meal; cover the pan with a piece of oiled paper and return to the oven. Cook ten or fifteen minutes longer. Remove from the oven and strain off the gravy.*

* Onions can be used for other dishes if desired.

Put half a pound of granola into a baking pan; pour one and a half pints of onion gravy on the granola. Keep the rest to serve with the roast. Salt to taste, then beat two eggs and add, mixing all well.

Have a half pound of nuttolene sliced very thin. Oil a one-pound bread pan (one with a false bottom), covering the bottom with a layer of the mixture. Place a layer of the sliced nuttolene on that, then a layer of the mixture, than a layer of the nuttolene, and continue until all is used. Finish this with the granola mixture on top. Bake thirty minutes, turn out, cut in slices as you would roast beef, and serve with the gravy. The eggs and onions may be omitted if not liked, and a lentil and tomato gravy substituted.

TEMPERANCE NOG.—Three tablespoonfuls of nut butter, the white of one egg, the yolks of two, three tablespoonfuls of sugar, four glasses of hot water, one of cold, extract for flavoring to taste, if liked.

Mode.—Make a cream of the butter with the cold water; add the sugar and the eggs, and whip well; bring the remaining water to a boil and add it to the cream while you whip; add the extract and serve hot. There should be quite a foam, and a little of it should be served on the top of each glass.

A NEW ENTERPRISE.

THE San Francisco Branch of the St. Helena Sanitarium has just opened a hygienic vegetarian restaurant at No. 1422 Market Street, San Francisco.

The great prevalence of disease among animals, and the evils resulting from the use of flesh foods, are leading thousands of thinking men and women to adopt a more wholesome diet. The fact that so many people are suffering from some form of indigestion, rendering a special dietary indispensable, will make such a place a boon to a large class of people.

WORRY.

WORRY is killing. It is bad management that kills people. Nature will let no man overwork himself unless he plays her false, unless he takes stimulants at irregular times, smokes much, or takes opium. If he is regular and obeys the laws of health and walks in the way of physiological righteousness, nature will never allow him or any person to work too hard. I have never yet seen a case of breaking down from overwork alone, but I admit it is necessary above all things to cultivate tranquillity of mind.

Try to exercise your wills in regard to this—for will counts for something in securing tranquillity—to accept things as they are and not to bother about yesterday, which is gone forever; not to bother about to-morrow, which is not ours; but to take the present day and make the best of it. Those persons who will continually peer into what lies beyond, never have any present life at all; they are always grizzling over the past or prying into the future, and this blessed to-day, which is all that we are sure of, they never have.—*Sir Andrew Clark.*

THE TIME FOR REVENGE.

THE Arabians have a quaint old story with a noble lesson in it. A haughty favorite of an oriental monarch, who was passing along the highway—so runs the story—threw a stone at a poor dervish, or priest. The dervish did not dare to throw it back at the man who had assaulted him, for he knew the favorite was very powerful. So he picked up the stone and put it carefully in his pocket, saying to himself, "The time for revenge will come by and by, and then I will repay him for it."

Not long afterward this same dervish, in walking through the city, saw a great crowd coming toward him. He hastened

to see what was the matter, and found, to his astonishment, that his enemy, the favorite, who had fallen into disgrace with the king, was being paraded through the principal streets on a camel, exposed to the jests and insults of the populace. The dervish, seeing all this, hastily grasped at the stone which he carried in his pocket, saying to himself, "The time for my revenge has now come, and I will repay him for his insulting conduct." But, after considering a moment, he threw the stone away, saying: "The time for revenge never comes; for if our enemy is powerful, revenge is dangerous, as well as foolish; and if he is weak and wretched, then revenge is worse than foolish; it is mean and cruel. And in all cases it is forbidden and wicked."—*Selected.*

THE PONENDOSCOPE.

THE above is the title of a practical treatise on this new instrument, which has been sent to our exchange table. It is a compilation of a series of lectures delivered by Aurelio Bianchi, M. D., which has been translated into the English by A. George Baker, M. D. This instrument, which is so fast taking the place of the stethoscope in the examination of the organs of the body, is coming into universal use; and this book, written as it was by one of the inventors of the instrument, is the most practical treatise which has yet been written. The instrument with all its parts is carefully explained, and the method by which every organ of the body can be most accurately examined. The instrument is such that it can be used by two different parties in examining the same individual. Two different implementations can be used by the same person in examining different parts of the chest, or two different chests at the same time, thus comparing the normal with the pathological.