

A black and white photograph of a woman in traditional African attire. She is carrying a large, decorated pot on her head. The pot has a pattern of white and black geometric shapes. She is wearing a dark, sleeveless dress with a red sash and a red cape. She has multiple necklaces, including a large one with a circular pendant. The background is a rough, textured wall.

Life & Health

THE NATIONAL HEALTH MAGAZINE

May 1916

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WASHINGTON, D. C.

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LIFE AND HEALTH

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G. H. HEALD, M. D., Editor

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FREEDOM FROM DRUGS

Alden Carver Naud

WE speak with scorn or compassion of the "dope" habit and its unfortunate victims. We point out this man as an opium eater, and designate that other one as a cocaine fiend. We have acquaintances who use morphine, and we learn with alarm of the horrors of absinth. This is the extent of our knowledge of or interest in the "dope" habit. We give no further attention to the matter of drugs, and oftentimes close our eyes and our ears to the viciousness of the tobacco and the alcoholic liquor habits. Minor stimulants and narcotics are entirely beneath our notice, and we sip our tea and drink our overstrong coffee in supreme serenity.

There are good and bad drugs — good and bad remedies — which prove themselves either a bane or a blessing to humanity, according to their use or abuse. The ordinary individual will do well to take medicine of any kind only when advised to do so by a reputable physician.¹

It is surprising how few people live without resorting to drugs in larger or smaller quantities. The medicine tippers far outnumber the medicine teetotalers. Although the human system is handicapped and restricted by various nostrums, there are legions who depend on nostrums to do for them what simple

hygienic living would accomplish, with the difference that a nostrum of any sort will not communicate to the body what right living will impart.

There seems to be a general impression that it is eminently proper to consult a physician and rely on his judgment when serious disorders are suspected or detected, but that minor ailments can be corrected by the sufferer without any advice from medical authorities. He feels competent to diagnose his own case and prescribe for his own ailments. We find pronounced cases of chronic headache, rheumatism, dyspepsia, kidney trouble, liver disorder, heart disease, and nerve disturbances where no physician has ever been consulted, but where the patient has treated himself, oftentimes for years, mainly by the use of patent remedies and quack medicines.

The maladies enumerated may have resulted from wrong diet, defective eyesight, overexertion, foul air, or other common sources of trouble, but ignorance or prejudice refuses the inclination to handle these difficulties rationally.

"Know thyself" should not be interpreted as meaning that one should feel competent to attend to his physical ailments unaided. Rather, it should urge a little more knowledge of human anatomy, with a better idea of hygiene and the beneficent results of rational living. To this wisdom one should append a

¹ It is remarkable to what an extent physicians are learning that they obtain as good or better results with little or no resort to drugs.—ED.

knowledge of the various drugs and nostrums in general use and an enlightenment as to their pernicious effects.

Were there less wrong living, there would be less human suffering. We partake of improper food, eat too much or consume too rich or overstimulating foods, or perhaps we select an unsuitable diet.

We do not sleep as we should. We sleep too little or too much. Our bed covering is apt to be too warm or too heavy. We sleep at the wrong time of day, and generally in a room improperly ventilated.

We wear improper clothing, almost always too close-fitting, with badly shaped shoes. With women the corset is a chief offender. And yet we expect our bodies to perform their functions normally!

We choose improper amusements, too exhilarating or too exciting, and then we wonder that the nervous system becomes deranged and the body ages prematurely.

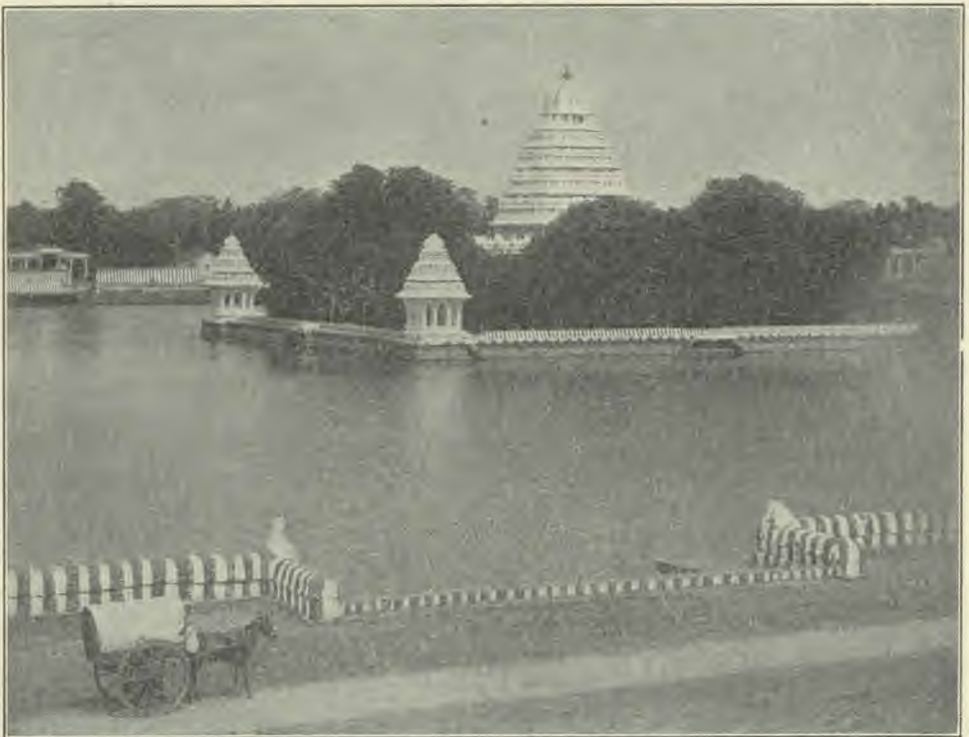
We cheat ourselves by thinking that

medicines and drugs will correct all the evils attendant upon our careless or haphazard style of living; that we may make use of laudanum, aconite, and sundry kindred agents of a more or less deadly nature, to correct our improprieties and the results of our ignorance.

Of course, it is advisable for every household to keep a few harmless remedies on hand. Among them should be witch-hazel, peroxide of hydrogen, vaseline, alum, and Epsom salts. It would be a balm to countless sufferers if they better understood and appreciated the benefits to be derived from the use of hot and cold water.

To banish the drugs from the households would be to bestow a blessing in myriads of instances. And the blessing would be multiplied and intensified were sunlight, pure air, pure water, and proper exercise given a more prominent place in everyday life.

Regular habits, correct dress, and suitable food will alleviate many ills that drugs cannot heal.



HINDU TEMPLES OF SOUTH INDIA

FALSE AND TRUE STIMULATION

Walton C. John, A. M.

The following is the substance of an address given to a select audience in Philadelphia by Professor John, who chose as his text the words of Isa. 24: 9: "They shall not drink wine with a song; strong drink shall be bitter to them that drink it."

FROM this text it may be inferred that there is a period, perhaps in the life of every individual, when wine may be drunk with a song, when the cup that "cheereth" may be accompanied by increased enjoyment and delight; but that this period is followed sooner or later by a period when the joy is turned to bitterness, when the convivial bowl no longer has the power to give pleasure. Let us consider for a time how accurately this text pictures the primary and secondary effects of stimulants on the individual and the nation.

Every person born into this world finds himself a part of the surrounding industrial and social mechanism. His success in life depends on his efficiency. Man in health, doing the work for which he is adapted, is efficient and happy. If given abnormal work to do, or if put under stress or strain, he does one of two things,—he calls upon reserve strength, or he gives up the task as a failure. If he is a man of ambition, the word "failure" is abhorrent, and he seeks to draw upon his reserve strength. He may have learned that by taking certain drugs, or poisons, he can bridge over the trying situation. The temptation comes from time to time, when stress or difficulty arises, to repeat the process of borrowing from future capital. This habit of relying on a bracer grows stronger with repetition, and the man quickly and unconsciously learns to lean heavily upon his chosen means of stimulation. The stimulant may be caffeine for the medical student; coca-cola for the average citizen; a whisky tonic, a strong cup of coffee, or perhaps a glass of light wine; but whatever the stimulus be, as soon as it is relied upon to increase the mental or muscular output, the individual has reached a place of

danger, which, if not avoided, will end in bitterness and disaster.

When traveling on board a river steamer, the writer was led to notice to what extent this artificial stimulation entered into the daily lives of the passengers. On rising in the morning, the first thing was a cup of tea or coffee,—no food to speak of, merely a slight stimulus. At eleven o'clock the men called for a tonic or an aperitive to stir up the appetite, it might be a light wine with bitters, or a whisky and soda. Then in half an hour came the luncheon,—first, cold meats, made highly stimulating with pepper and spices and other condiments; then bouillon, filled with its stimulating poisons; next, boiled meat, another stimulating food, with a vegetable or two, followed by fish, then beefsteak, with its spicy sauce. After every course most of the guests drank a portion of a glass of wine. At the last there was the dessert, with a brandy sauce, and a cup of strong black coffee, with its concentrated caffeine. After the meal, the ladies retired to the reading room, while the gentlemen took out their cigars or cigarettes.

By three or four o'clock in the afternoon all felt the need of something to quiet that little "gnawing" in the stomach, and another aperitive was called for.

At six or seven o'clock came the evening meal, or dinner, which was nothing more than an extended luncheon, with more food courses of a stimulating character, and with an equal choice of wines, closing again with a cigar or a cigarette. At nine o'clock there was more stimulant, in the form of tea or some other drink.

This case may be somewhat exaggerated, for people do not always eat at home as they do on the steamboat. But

the writer's observation among the better class of those supposed to be cultured in all Latin-American nations, as well as in European countries, is that the dietetic habits of the people are to a large extent in harmony with the preceding. The result of these habits is seen in a susceptibility to nervousness and excitability of temperament. There is a tendency to stomach disorders, and cancer of the stomach is not infrequent. Women who were beautiful at twenty-four are broken down and wrinkled at forty. The men are too often overcorpulent or emaciated. At sixty they are broken wrecks; they have passed the day when they drank wine with a song. The time has come when their reserve force is depleted, and now strong drink has become bitter, and their last days are full of misery, pain, suffering, and dejection. During the forty years of their active lives these men lived on borrowed capital. Each succeeding year they borrowed more heavily on their reserve, until at last they are physically bankrupt, when they should be at the height of physical, mental, and spiritual power.

Let us pass from the individual to the nation. If this is the life of the average individual of a country, may we not expect that the results will be similar in the national life? Does drinking produce physical, intellectual, and moral bankruptcy of the nation? Let us see.

In France it has long been known that drink has been undermining the physical and moral forces of the nation; that, in connection with other evils, it has made France a nation of receding population. So deeply has strong drink clutched the vitals of France that long before this great war it was realized that that nation must break loose from the worst of her drink habits in order to save her national life, and her leaders labored earnestly to accomplish this result. Little, however, was accomplished until the war came on, and then the nation took stock of its forces. It said, "To win the fight against Germany, we must

have efficiency; we must be stronger physically than our enemy; we must be able to resist more hardships than can those we fight against." Vigorous measures were therefore proposed in order to abolish the consumption of absinth and other liquors.

Just a short time previously, the German emperor had realized the task before him. He knew that he would soon be measuring strength with the world at arms, and he called earnestly to the young men of the nation to desist from their use of beer. Why did he do that? — Because he saw that this false stimulation meant physical and mental bankruptcy, and therefore failure in the work of perhaps the greatest military machine ever conceived by the human mind.

We need not take time to recount the details of the master stroke of the czar with respect to vodka in Russia. Before the war Russia was full of drunkenness, of revelry and debauchery. It might even be said that the people lived only to drink; but the exigencies of the situation compelled the government to decree the cessation of the manufacture and consumption of vodka, and we are glad to note, in reports from the best sources, that there has been a greater rejuvenation among the people of Russia than could have been effected otherwise. Not only has the physical, mental, and moral condition of the people been improved, but the treasury of the national government has been filled.

Let us take the case of England. We are all well aware how England has blundered in this war. Why? One reason is, because it was impossible to get the industrial units to cooperate in a serious way with the military purposes of the nation. And why was there not that cooperation? — Simply because the workmen of Great Britain were so stupefied that they could not grasp the responsibility resting upon them as defenders of the empire. Perhaps the greatest work that Lloyd-George has done, the most important step that he has taken toward winning the victory

(if the Allies are to win), is his control of this situation with respect to the liquor traffic among the workmen of Great Britain. Now one who works for the government becomes a volunteer for industrial service, but at the same time he pledges to give up the use of liquor during the six months of his volunteer service. Is there no lesson in that for us? Does it not show us what abstinence from liquor means to the greatest empire on earth? Lloyd-George has said repeatedly that the first enemy England has to conquer is alcohol, and she can then take care of the rest.

Let us turn to nations nearer home. In Mexico City, about three o'clock in the afternoon, one may see large numbers of half-drunken laborers sitting in the park, not dangerously drunk, but drunk to the point of inefficiency; able to walk, able to talk, but with their minds so blunted that they are inefficient for any responsible work. Mexico's great curse — perhaps one of the greatest indirect causes of her many revolutions, of her unstable national life — is her intemperance. No nation on earth consumes more red peppers, whose fiery contents are unquenched by water and can be mitigated only by the use of liquors. Thus the evil in eating, results in the greater evil of drinking, and both evils result in nervousness, irritability, and a bad disposition generally. If we could banish liquor from Mexico, there would be no need for "watchful waiting," and we should not need to patrol our Texas borders; for as a rule the Mexican native who does not drink is one of the kindest and most peaceable citizens you can imagine. Mexico long ago drank her wine with a song, and now she is drinking strong drink with bitterness,— the bitterness of revolution, the bitterness of anarchy, the bitterness of inefficiency, the bitterness of servitude, the bitterness of denationalization, the bitterness of helplessness.

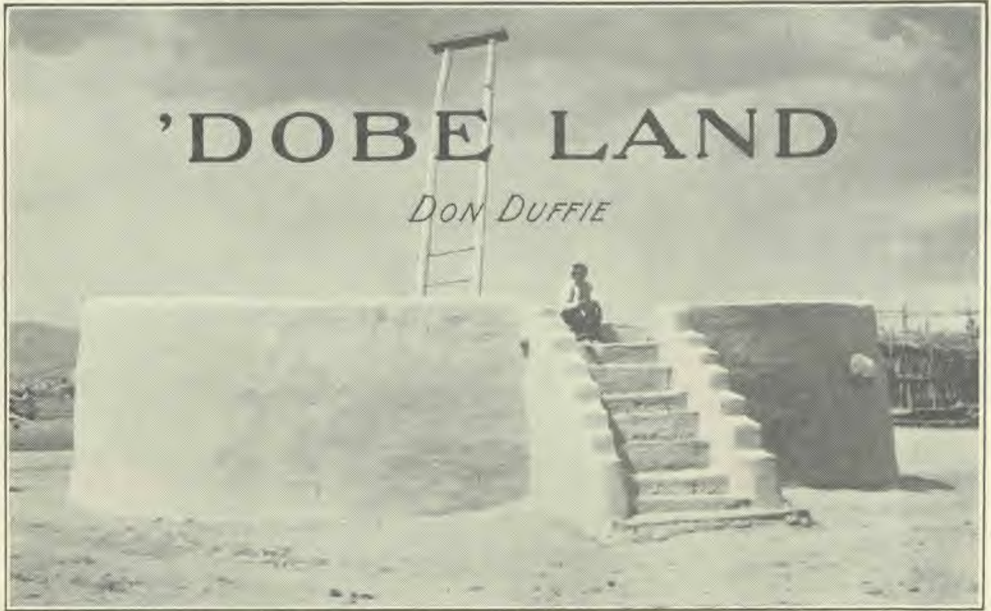
Is there not, then, a lesson for us as a nation in the experiences of those around us? As our nation comes to bear greater

responsibilities for itself and the world, the tendency will be for us to lean upon stimulants, to urge ourselves to tasks beyond our normal reach; and as we grow in wealth and power, it will be easy to gratify these tendencies in a pleasing way.

Today America is drinking her wine with a song. Today we have enormous reserves, physical, mental, and moral; but around us we see the nations that have gone down in shipwreck, fighting for their lives, physical, political, and moral, with respect to temperance and self-control. Shall not we, as Christians, redouble our efforts to keep ourselves and our fellow men from giving way to the great temptation of intemperance? Shall we not, instead of resorting to caffeine, nicotine, theobromine, and alcohol, seek truer and more worthy sources of stimulation? Is there no other way by which we can bring ourselves to a higher efficiency than by the use of these dangerous methods? — Yes; as Christians we have help. First, we can call upon God to make us sense more deeply our responsibility as individuals. A sincere prayer, asking him to show us the importance of the work that he has given us to do, will quickly, instantly, unlock energies which have heretofore never been unloosed, and this without injuring the body.

When we have exhausted our forces, as believers in Christian temperance we should be careful to give our bodies time to recuperate. We are responsible for only the strength that God has given us. We must remember that every individual has limitations of power and endurance; and when we have done our best, after calling upon divine aid, we have done all we can do. If we as individuals live up to the light we have with respect to the care of the body, the food we eat, and the way we eat it, if we take sufficient sleep, and clothe ourselves properly, if we bathe regularly and take the necessary exercise,— if we do all these things, then, fired by the great purpose

(Concluded on page 215)



IN northern New Mexico and Arizona, there are preserved, comparatively unspoiled as yet, a people regarded as one of the most picturesque and fascinating of any of our Indians. They may even claim to be the first families of the land, some of them living in the same houses where their quiet civilization was disturbed by the murderous Spaniards before ever medicine man had let Miles Standish out of quarantine at Plymouth.

These town or pueblo Indians, they would have you understand, are no common Mexican or Indian trash, but direct descendants of the original cliff dwellers. They have their cities, old and new, and their own governments; their enviable farms and herds of stock. Here you can see that highly poetic person, the shepherd, leading his flock beside irrigation ditches; and he has some evidence supporting his claim to being the father of irrigation in America.

True, this person, whose trousers may have been unquestionably welded out of two cloth sacks once containing Pillsbury's flour, and whose noble shepherd dog might be mistaken by the unappreciative for a mangy Indian pup, may not remind you of Bethlehem in Judea; but

this may be because unlike the picturesque natives of Palestine, he has not been educated as to how the American tourist prefers to see him, nor has he learned to pose. From this, too, one is not to picture "ole cloes" as being regular pueblo attire. In the good old days, and until very recently, grain was ground by the women on a washboard-like stone, Mexican style. But gradually these Scripturally suggestive mills are being torn out of the houses, and in place of their delicious whole meal, white flour and baking powder are bought at the trading post. No statistics are available, but in one case, at least, there happens to have been more sickness since this change was made.

Of course, to find wild things of any kind, in their wildness, one must expect to go some distance from the railroad. But here in New Mexico, somehow the largest, wildest, and most obstinate of all the pueblos are actually on the main line of the Santa Fé, where dull-eyed tourists, if they see the villages at all, take them for Mexican villages. One of the largest, the pueblo of Santo Domingo, is a two-mile walk over a plain road from the station of Domingo. En route to California, it doesn't cost you a cent



PUEBLO BREAD MAKING

This educated little Indian lady obligingly exchanged her shirt waist for the old-time manta, and showed the camera man how her people make bread in the less progressive pueblos.

to stop off and see it, if you can walk two miles. If you cannot, transportation is reasonable. A few miles farther west, just across the river from the track, is another large pueblo, San Felipe.

In these villages you will still find all the water for domestic uses carried from the well, or even from the river a mile away, in the same riskily artistic way (as shown on our cover) that Rebekah supplied that historic drink to Abraham's servant. Of course one does not always, or even usually, put on her best clothes and solid silver beads to go for water, as did the lady of the cover. The usual dress, whatever it may be, is commonly hidden under an Indian blanket worn as a cape, falling from the top of the head to below the knees; as the water jar rests on the blanket, the latter may serve to protect the wearer in case she is a bit shaky. We were greatly entertained one evening by the merriment arising from the attempts of two mis-

chievous little imps of about four to sneak up behind a maiden and jerk the blanket, hoping to make her spill the water. If you should, like me, think of the Indian as a doleful sort of stoic who never smiles, you will discover that it is merely impolite to laugh in the presence of strangers, and that when it comes to having a good time upon pathetically slight provocation, they seem to be equal to anything we hear about plantation darkies.

It is also often supposed that all Indians are beggars. Well, it is true that you will hardly get into the pueblo before from one to twenty half-shy little brown wingless Cupids come dancing around you, pleading for something, you can't understand what, till some one you don't see calls out that they want a match. You never knew how much fun you could have for a box of matches! The incomprehensible part is that each little scamp who gets a match runs straight home with it, to where a plump,



A NATIVE INDUSTRY

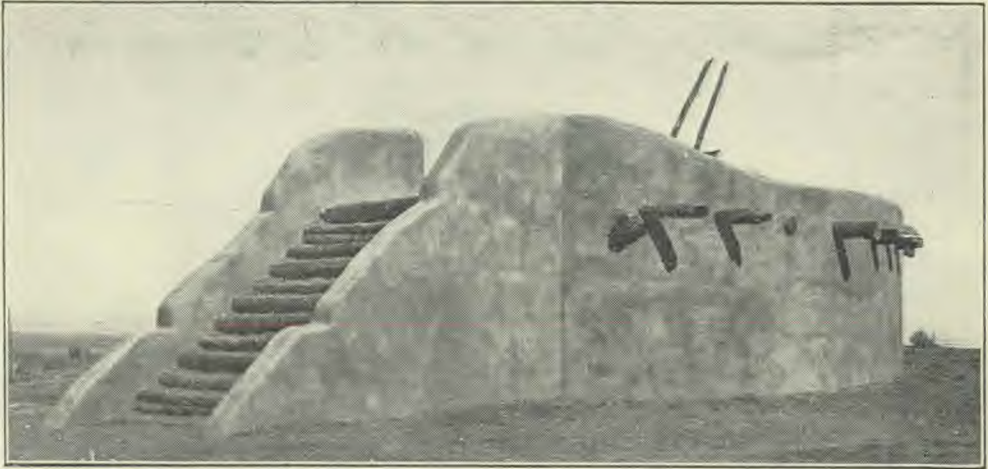
Making the 'dobe, or sun-dried brick, of water, stubble, and earth.

smiling little woman is waiting for it in the doorway. She may own one thousand head of stock, but no money to squander on matches. And if you have aroused no suspicions of being a fiend (why, camera fiend, of course), you will be as welcome in that humble home as was the match. For Santo Domingo has one of the worst cases of photophobia ever known, and is said to hold the western interpueblan championship at camera kicking for distance. A man in the trading post told me that at the last Dance of the Green Corn, a lithe young pagan had kicked a too inquisitive 3A from the estufa in the dance plaza, over three rows of 'dobe houses, into the street in front of Tenorio's, the trader. But leave your camera behind, and you are a good fellow (if you are good), and find many a kindly smile for you inside these mud houses.

Now, mud house is an expression not really suggestive of structural beauty, but it is surprising what permanent and artistic effects are produced with this most rejected of materials, a cubist architecture, not to be taunted,

like that favorite of art, with being a fad, having stood the test of time for four hundred years that we know of. In the sleepy little Mexican village of Pena Blanca, just up the Rio Grande from Santo Domingo, they point out to you a little 'dobe mission which, from some unmentioned vicissitude, was not finished by the builders, and stood a hundred and fifty years without a roof, till energetic Father Francis, lately assigned to this parish, finding the old walls well preserved, put on a nice peaked tin roof, which, while perhaps not architecturally consistent, has certain advantages over the starry heavens as a roof.

But the real 'dobe house has a 'dobe roof; and the one thing 'dobe won't stand is *running* water. That is why the roof is flat, and why the walls are carried up a course or two above it on all sides, inclosing a shallow pool, from which the rainfall is safely led clear of the walls by curious spouts, to keep it from drizzling down the wall and washing cañons into the side of the house. The old-time house was entered and lighted entirely by an opening in this



THE ESTUFA

This is the temple, or place of secret pagan ceremonies. The illustration at the head of the article, the fraternity house at the University of New Mexico, shows how faithfully the native style has been followed. Entrance is down a ladder through a trapdoor in the roof.

same flat roof, for better protection against prowling Apaches; at night the pole ladder was pulled up, when all would breathe easier. But the white conquerors did do the Pueblo one good turn when they put the Apache in quarantine. Pueblo houses now have doors on the ground floor, and some even have windows, though my own idea of leaving the windows open all night, together with my wishing to stay in the pueblo at all, seemed to confirm the Indians' impression that some one was a bit queer in the head.

The older 'dobe buildings were made of irregular round balls of clay, as big as your head, giving a cobblestone effect, like the background of our cover piece. Later this point was yielded, and the modern practice of casting them in a mold was accepted. The roof timbers are brought from the mountains and put in place by the men, who also set the window frames, if any are used; but the building of the walls and the rest of the house is the work of the women. Of late years some of the maidens returning from tearful sojourn at the Indian schools, in absence of other results, seem to have infected their once submissive sisters with the notion that they were not hired for that; so the men now sometimes do the masonry.

One illustration shows a Mexican in this district in the first act of building himself a house,—making the bricks. The materials are the ground he stands on, a little straw (it was in regard to making 'dobe bricks that Pharaoh showed what kind of disposition he had), a barrel of water, and a little ambition; the first two, at least, are easy to find in these parts. The shovel and the hoe, then the parching sunshine, do the rest. The construction is about the cheapest possible, and 'dobe is warmer than cement block; yet on a hot day, when sizzling winds, like the proverbial blast from the well-known furnace, singe your brows, it is as cool as a cellar inside the 'dobe house. So satisfactory a house does 'dobe seem to make for this country that when the Franciscan Fathers put up their new mission building, after having lived for years in 'dobe, and having built a frame school in the meantime, they went back to the earthen walls, in a building so pretentious that it took fifty thousand of the huge 'dobe bricks to lay the walls. The mortar and plaster are made of the same material as the 'dobe bricks, but mixed a bit richer in water. Of this mortar the Indian makes a floor, which is very satisfactory for moccasined feet, and for those who sit on their haunches. If a



FEAST DAY IN THE PUEBLO OF COCHITI

In other pueblos (Indian villages) photographers are detested. In this pueblo they are even welcomed. An artist once spent two years here, they say, making paintings of this house.

real chair is produced for you, the guest, try to be polite enough not to let its wooden legs spoil the floor!

This original and genuine American architecture has been fittingly adopted

by the progressive young University of New Mexico for nearly all its buildings, even to a fraternity house in the form of a pagan estufa, seen in the title hereof. Evidently fearing, however,



OLD 'DOBE MISSION AT COCHITI

On his first visit the writer of the article contributed half a dollar toward a new roof for the restoration of this building, and at his next visit found, to his horror, that the entire front had been obliterated, and the noble structure made over into an imitation of a tin-roofed barn.

that the college youth might prove more destructive than the wild variety of Indian, the material used has been something more "fool-proof" than 'dobe.

We are pleased to learn that some of our missionaries returning to Mexico will build a 'dobe house, instead of feeling impelled, as missionaries often do, to introduce some ill-fit foreign style. They also have had experience.

Some day we venture that some one will perfect a binder whereby weather-resisting, air-dried brick can be made from any soil, so that the poor man can build his house, and a good one, with the earth dug from the cellar.

To see the best architecture, you must

go back some little distance from the railroad, to Taos, for instance, where the houses are four or five stories high.

If you must photograph, go to the little well-tamed pueblo of Cochiti, ten miles upriver from Domingo, where the people almost welcome schools and photographers. But don't count on getting a shot at the dear old mission shown in the illustration. The writer innocently contributed a half dollar toward putting a new roof on this church. The next year he received a photograph of the structure, transformed into a glittering, shiny-roofed barn, with a dinky frame cupola at one end of the ridge-pole!

FALSE AND TRUE STIMULATION

(*Concluded from page 209*)

which God puts in the heart of each of his followers, we shall have the power and strength necessary to fulfil every task, no matter how great or how small it may be, in a way which will satisfy not only ourselves, but our superiors, and also our God.

Let us enumerate some characteristics of the truly temperate man. The temperate man exercises control over all his acts. The temperate man is the most efficient. The temperate man has care-

fully studied and knows his limitations and his capacities. In the time of stress, with a greater task to perform than has seemed possible for him to perform, the temperate man, instead of relying upon the agencies of evil for support, leans confidently upon the most powerful agent, even upon God, who gives him the added strength which he may need. True temperance, then, is acquired when we as individuals, as Christians, have learned to utilize these good forces to their greatest extent.



COCONUT ISLAND, HILO, HAWAII



CARE OF THE NEWBORN

Harold J. Morgan, M. D.

Before the section of Obstetrics and Pediatrics of the Ohio State Medical Association, Dr. Morgan read a paper on "The Care of the Newborn," which was afterward published in the February issue of *Pediatrics*. Following is an abstract of the paper, using generally Dr. Morgan's words, but abbreviating and changing to adapt it to the needs of nonprofessional readers. Dr. Morgan states that the textbooks usually contain a good deal of misinformation as well as information, and that doctors and nurses are in this way misled into using antiquated methods.

First Attention

CONSIDERING that the newborn infant has just completed a very arduous journey to the outer world, twisted, turned, and violently squeezed in transit, to say nothing of now having to breathe for himself, common sense would indicate that the best thing for him would be to wrap him up warmly and allow him to rest.

What usually happens is, that almost before he has had time to breathe, he is oiled and scrubbed, freely exposed to his new environment, due to the frantic haste of the nurse to remove the vernix. His delicate skin is subjected to this process over and over until the nurse is satisfied, and the oiling process is repeated day after day.

Now the vernix, while unsightly, does no harm, and its removal may very well be left for some hours. True, it dries and is more difficult to remove then, but my opinion is that it is better to safeguard the strength of the infant, rather than that of the nurse. Wipe off excess vernix, oil the body and especially the head, dress the cord lightly, weigh the baby, and then lay him away wrapped up in a blanket with a hot water bottle

or two, for at least four hours. If the vernix does not come off easily at one sitting, try again a few hours later, even a third effort may be necessary, but do not allow the child to become exhausted by these efforts.

For the first few days the temperature should be taken per rectum twice daily. If this falls below 98°, enough external heat should be added to bring the temperature up to this figure.

Why oil the skin daily? There is no proof that any appreciable quantity of oil is absorbed by the skin; certainly there can be no nourishment acquired in this way, and while the dry skin of the under-nourished child may be benefited by oiling, that of the healthy infant does not need it.

Care of the Mouth

The mouth and nose should be cleansed of mucus immediately after birth, and the eyelids carefully wiped off, after which some form of silver is put in the eyes as required by law. Water should be given after feeding, to cleanse the mouth. Daily swabbing of the mouth and nose and cleaning of ears, as so frequently recommended in our

textbooks and regularly practiced by our nurses, is not only unnecessary, but positively injurious. The mucous membranes, while not sterile, are reasonably clean, and are exceedingly delicate; and I am convinced that the sore mouths, ears, and noses so frequently seen, are directly induced, in many instances, by abrasions occurring during the toilet.

Babies under my supervision are not subjected to these processes, and the number of sore spots are thus materially reduced both in the hospital babies and in those seen in private practice.

It is difficult to break nurses of this swabbing habit, and only inspection and repeated caution will do away with it. Even when sore mouth exists, it is well to remember that, as in cases of sore buttocks, swabbing of the former, or the application of ointment to the latter, is apt to prove futile unless the diet, especially the quantity of sugar, is altered.

Care of the Cord

As infection may be transmitted through the cord, it is important that this be treated, as is any other wound, with sterile gauze; but nurses and grandmothers usually have some favorite application, septic, of course, which they regard as having mysterious good qualities, and which they will use unless forbidden.

Genital Toilet of the Girl Baby

Infection is common in girl babies, often caused by feces coming in contact with the vagina. I believe that if nurses and mothers are taught to wash and wipe the parts toward the anus and away from the vagina, many an infection will be prevented.

Binder and Pinning Blanket

The infant's bellyband, or binder, is really useful to protect the cord dressing while such is used. It is neither a

strengthenener of muscle nor a preventive of hernia, nor will it ward off colic, as so many nurses and physicians believe. Nurses usually apply the binder on the infant just as tightly as they can pin it, while it should be so loosely fastened that two fingers may be slipped under either edge, the center only being a little more snug.

The usual pinning blanket is useless, prevents free breathing, and tends to misform the ribs and cause colic and distress.

Infant Clothes and Lodging

Who first decreed that an infant needs long clothes, stockings, and knitted "bootees" is not known. We do know that the baby gets along very well without them, the hot water bottle furnishing any heat that bedclothing will not.

A baby does best in a room temperature of from 65° to 70° F., with the face exposed. Most babies are reared at hothouse temperature. Most nurses and grandmothers have a fear, which almost amounts to an obsession, that a baby will take cold; so after heating the room to 85°, they carefully wrap up his head. Overdressing, faulty construction of clothing, too much bedclothing, too high room temperature, and lack of fresh air really cause many digestive disturbances, which the physician vainly tries to correct by skipping from one food formula to another.

To any one who has observed the average obstetrical nurse put a baby through his daily paces, lifting, turning, dressing and undressing, scrubbing, oiling, and swabbing,—it does not seem remarkable that we have so many cross babies. Let us try to instil some common sense into those who are to care for the infant, beginning with the doctor and ending with the relatives.

SCHOOL of HEALTH

DIET, DRESS, GENERAL HYGIENE,
HOME TREATMENT, NURSING, ETC.

THE PREVENTION OF BLINDNESS

"Babies' Sore Eyes"

AMONG the blind are many unfortunates who do not remember when they could see. They were not born blind; they had good eyesight at birth, but they got "babies' sore eyes," or "cold in the eyes," and for lack of proper treatment, the condition went from bad to worse, until sight was lost in both eyes. We give illustrations of children whose eyesight was destroyed in this manner. The sad feature is that a very simple treatment at the right time would have prevented the eye trouble and the blindness. It is not an expensive treatment, and it is not one that requires great skill. Many cities furnish the medicine free, and any physician can give the treatment. In some cities the midwives are instructed in the use of this preventive. In any case, on account of the danger of a possible infection, with its lifelong disastrous consequences, it is worse than folly to neglect the preventive measures; it sometimes amounts to criminal care-

lessness, if I may speak the plain truth.

"Babies' sore eyes," or "cold in the eyes," first shows itself when baby is about a week old, or perhaps a little older, as a redness, followed, perhaps, by swelling of the lids and the discharge of matter. But the infection actually takes place at birth, and all that first week the germs are establishing themselves in their new home, increasing in number, and getting ready to do aggressive work. If the drops are used at first, the infection is killed except in rare instances; but with every day of delay the trouble becomes more difficult to deal with; in fact, the condition may get suddenly worse, and in one day so much damage may be done that it will not be possible to save the sight with the best of treatment.

One wonders, when there is a simple remedy, costing little or nothing, that will prevent a not uncommon affection which often ends in total blindness, why such a remedy is not more frequently used. The explanation would



A CASE OF NEGLECTED "BABIES' SORE EYES"

This girl, neglected because "every baby has sore eyes," is totally blind. Proper care at the time of her birth would have averted this disaster.

seem to be that the use of the drops sometimes causes a mild irritation or soreness of the eyes, and the mother then refuses to have drops used on her children, and advises all her acquaintances against their use. But this irritation

doctors believe that it is best to use the drops in the eyes of all newborn babies. Mothers should not consider the use of the drops a reflection on them, but should insist on having the drops applied to baby's eyes.

It should not be necessary to add that if mothers observe any signs of inflammation about the eyes, the doctor should be called at once; for the sooner such an affection is treated, the better.

Trachoma

Trachoma, the true granulated lids, sometimes called "pink eye," is accompanied with redness of the eyeball, itching of the lids, and watering of the eye.



A VICTIM OF A MIDWIFE'S CARELESSNESS

Because the midwife did not use medicine in the eyes of this child at birth, the little one is nearly blind. Many cases of blindness are due to some one's neglect.

sometimes caused by the drops is temporary in character, whereas, if the drops are not used, there is the possibility that the baby will have "babies' sore eyes," followed by blindness.

Another reason why mothers sometimes refuse the drops is because of the notion that this disease is contracted by the baby when the mother has a bad disease. But there are other ways in which the disease may reach the baby's eyes, without the mother's being to blame, and for this reason the most experienced



BEWARE OF THE ROLLER TOWEL

It is a means of spreading disfiguring and blinding diseases of the eyes.

If the lids are turned back, minute pimblelike granulations may be seen or felt on the inside of the lids. It is the rubbing of these granulations against the eyeball that causes the scratchy feeling

which always accompanies this disease.

Trachoma is very contagious, or "catching," the infectious matter being easily transmitted from one person to another by means of roller towels or towels used in common by two or more persons. If a trachoma patient uses a towel, one who uses it after him will be very fortunate indeed if he does not contract the disease. Wash cloths, sponges, bed clothing, door knobs, street car straps, and in fact anything that the patient may lay his hands on, may be infected, and is therefore a possible source of danger.

Trachoma is sometimes so severe that the patient must be kept constantly in a darkened room. It is disfiguring to the face, turning the eyelids outward and giving a repulsive appearance; and it often causes blindness. The disease is so serious that immigrants having it are not admitted to this country.

Now while the disease in its developed form may cause great pain, mutilation, and blindness, and could not be overlooked or mistaken for anything else, it may in its early stage escape observation altogether. Even one who has the disease in this stage may not know that anything is the matter. For this reason it is imperative that one should never use a roller towel or a towel used by others, and the eyes should never be touched except with clean hands. If there is any indication of eye trouble, consult an eye specialist — an oculist — at once; and if you have granular lids, continue taking his treatments until he

assures you that you are cured. To stop treatment because the eyes no longer feel scratchy, may be to allow the disease to gain another and firmer foothold. Home treatment without the advice of a physician may do more harm than good.

Eye Injuries

Many cases of partial or total loss of sight are the result of wounds caused in play or otherwise, which did not receive prompt and adequate treatment. In their play, children not infrequently injure one or both eyes of one of their number, by the use of some sharp instrument, by throwing something into the face, or by the use of toy guns, fireworks, and the like. An eye which has had a dangerous injury may not look bad at first. The child may say nothing to the parents; or the parents, thinking it a minor matter, and not wishing to be at the expense of a doctor's

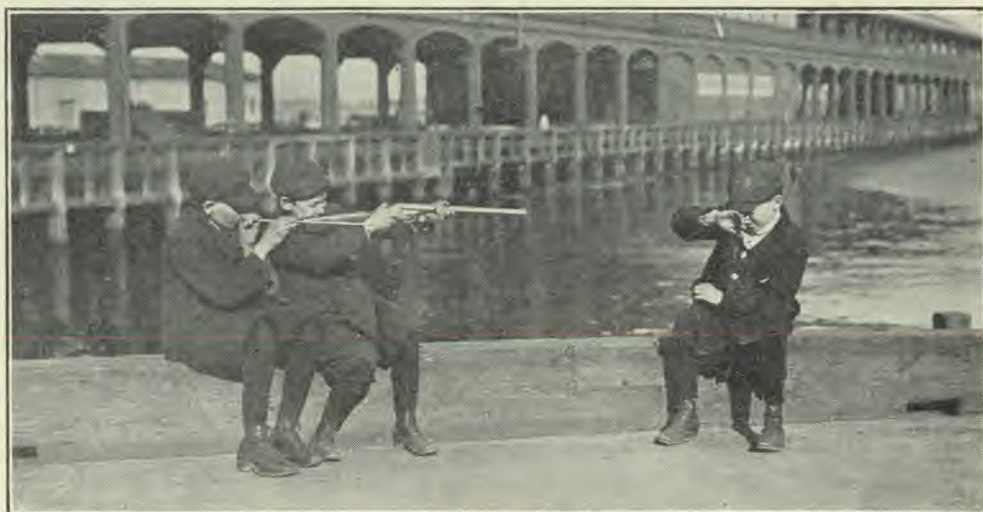


INJURED EYE NEGLECTED FOR SEVERAL WEEKS

As a result the blind eye had to be removed in order to save the good eye.

fee, may neglect to have proper attention. Such delay sometimes causes the loss of an eye, which, with proper and early treatment, might have been saved.

In case of accident involving the eye, it is always well to call medical aid. Meantime it is proper to bandage *both eyes* with a clean handkerchief or a bandage, and to keep the child quiet until the doctor arrives. Even if the eye is not painful, the injury may be so serious as to threaten the loss of the eye, and possibly of both eyes; for sometimes a bad eye, left to take care of itself, causes also loss of sight in the uninjured eye. For this reason it is of the utmost



SOME BOYISH SPORTS ARE DANGEROUS

Many eye tragedies are caused by the use of toy guns and similar playthings.

importance in all cases of eye injury to call an eye specialist, or if one is not at hand, to call the doctor.

Foreign Body in the Eye

Particles of dust or small insects may get into the eye, and the most natural thing for the child to do is to rub the eye; but this is just what should not be done, for rubbing the injured eye only increases the pain and irritation. If the lashes are grasped, and the lid lifted away from the eyeball, the speck may be washed away with the tears. If this measure is not successful, the particle may be swept off by drawing the upper lid down over the lower lid and allowing it to return to place. The lower lashes may thus be used as a broom to sweep off the upper lid. Sometimes rubbing the *opposite* eye will stimulate a greater flow of tears, and thus remove the object. If these procedures fail, the lid may be turned back and the particle carefully wiped off with a piece of clean soft cloth. The particle may be found on the lid or on the eyeball, usually on the lid. It is likely to be so small as to require very careful searching in order to detect it.

If the particle is not easily removed in this way, it is better to call a physician

or an oculist, as otherwise a serious and dangerous irritation may result. It is possible that the unskilful attempt to remove a particle may cause more injury than the particle itself.

Ulcers of the Eye

The common form of ulcer of the cornea—that is, the transparent surface of the eyeball—is caused by poor nutrition. It is often present in those who have what is known as the “scrofulous diathesis.” The patient with this form of ulcer of the cornea is usually a child with swollen glands under the jaw, and a running nose. Such children are generally under bad hygienic conditions, and have to live on food that is either insufficient in amount or of improper kind. Though their constitutional trouble is partly a heritage at birth, it may be made much better or worse according to the diet and the conditions to which they are subjected.

Among the things which should not be given to young children, especially to scrofulous children, are tea, coffee, too much sweets, candy, cake, etc., especially sweets of poor quality, such as cheap candy; and they do not thrive on fruits in quantity.

Recovery from the scrofulous condi-

tion usually follows the adoption of a proper mode of living,—cleanliness, abundance of fresh air, with plenty of the right kind of food, including milk. If the wrong mode of living is continued too long, ulcers form in the eye, heal



ULCER OF THE EYES

This child could not bear the light, but treatment and right conditions gave her comfort and good vision.

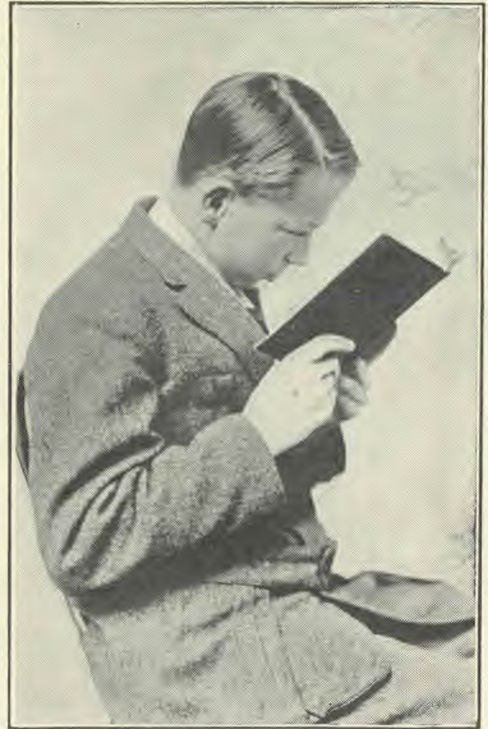
and reform, and gradually form scars which cloud the vision. The important thing in case of scrofulous ulcers of the eye is to make a radical change in the mode of living.

Progressive Nearsight

Farsight in children is natural. It is the result of the smallness of the eyeball, and is compensated by the powerful muscles and the elasticity of the eye. Nearsight, on the other hand, is not a natural condition, but a diseased condition, brought on by the strain of continued close work when the eyes are yet tender. Nearsight is apt to begin in the first years of school life, when the deli-

cate structures of the eyeball are called on to do close and unaccustomed work. The trouble usually begins when there is a period of strain, and it may get better if the eyes have a period of rest; but with every period of close work, there is a tendency to a relapse, and the condition tends to become progressively worse, as the child grows older.

If detected soon enough and rightly treated,—proper glasses being fitted to the eyes, and care taken to avoid an excess of taxing, close work, and to provide an abundance of open-air life and physical exercise,—the disease may be ar-



TRYING TO READ WITHOUT GLASSES

This nearsighted boy is in danger of serious trouble later if neglected. Properly fitted glasses would add greatly to his comfort.

rested. But too often its presence is not discovered until it is firmly seated.

The mechanism of the change is something like this: The eyes of the child are not accustomed to close work. They are soft. A long-continued period of close work is followed by congestion of the

eyes. The muscles pulling on the eyeball to hold the eyes to the work, cause a slight bulging of the back of the eyeball. This is the beginning of troubles. It now requires stronger muscular action to bring the misshapen eye to a proper adjustment, and so the trouble goes from bad to worse. But if the condition is properly treated at first, it may not get any worse. The proportion of near-sighted children in school increases with the age of the pupils, owing probably to neglect of the trouble in its early stage.

Any child who has difficulty with his eyesight so that he has to hold the book in an unnatural position or wrinkle his face in his efforts to see, or who has difficulty in seeing what is on the blackboard, needs the attention of an eye specialist. Some parents have thought that glasses put on a young person would cause a weakening of the eyesight. This might be so if the eyes were fitted by an incompetent man. It might be even better to do without glasses than to have the eyes attended to by one who

is not expert; but a properly fitting pair of glasses may be the saving of eyes that would otherwise become almost useless. One who is doing very close work should rest the eyes occasionally.

Illumination

The source of the light — oil, gas, or electricity — is not of so great importance, provided the light is properly arranged. There should be sufficient light to enable one to see his work without strain. Better light is required for close work, such as sewing or reading fine print, than for other work. The light should be in such a position that it shines on the work rather than into the eyes. One should not work facing an unshaded light. A flickering light is bad for the eyesight.



SHOULD BE ATTENDED TO WITHOUT DELAY
Nature will not remedy this condition.

As dark walls absorb light, it is better to have light wall paper or light tinting. Dark walls require more light than light walls. White and the creams and light yellows reflect over one half of the light, while the reds, greens, and browns may reflect not more than a sixth of the light.

Because of the fact that a very large proportion of the cases of blindness could, with simple precautions, have been prevented, and are therefore unnecessary, and because this blindness entails an undeserved lifelong affliction on many, public-spirited men and women have formed organizations whose purpose it is to teach preventive measures. The principal of these organizations is the National Committee for the Prevention of blindness, with offices at 130 East Twenty-second St., New York. It is to this committee that we are indebted for the illustrations which accompany this article.

HOME COOKING SCHOOL



THE KITCHEN AND ITS EQUIPMENT

George E. Cornforth

MOST of my readers, no doubt, already have kitchens; and if their arrangement is not ideal, it would probably be impossible so to change them as to make the arrangement ideal. But perhaps a little thought and planning may make some improvements, so that the work in the kitchen can be done in less time and with greater ease. I am sure that, no matter how much we like to cook, we do not care to spend *all* our time in the kitchen; and the old story that —

“Man works from sun to sun,
But woman’s work is never done,”

is largely because she has not a convenient workshop, and her work is not so carefully planned and systematically done as man’s. There are three things to look to in order to reduce time spent in the kitchen: first, kitchen arrangement; second, kitchen equipment; third, methods of doing the work.

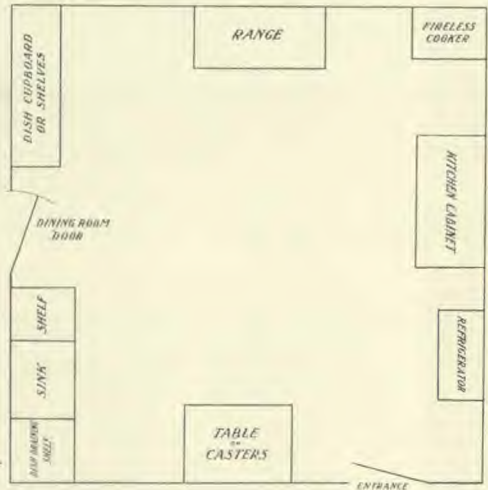
No man who is trying to be up-to-date and efficient in his work is content to work in an inconvenient shop or office. He will have the place where his work is done as conveniently arranged as possible, and he will have the best and most up-to-date equipment. Just because the kitchen is the *woman’s* workshop is no reason why it should be any less conveniently arranged and equipped; rather, it seems to me, it should have the preference, if there is to be any difference.

The statement may seem too evident to be made, but a kitchen should neither be too large nor too small. It should be just large enough to contain the necessary equipment conveniently arranged.

There should be no unnecessary equipment or furniture in the kitchen. Of course I am speaking of the kitchen that is used only for a kitchen, not one that must be a sitting-room and dining-room also.

I will draw a diagram of an arrangement that would be convenient.

The equipment that is used in preparing the food is on one side of the kitchen, the clearing-up equipment is on the other side.



It is most convenient to have the refrigerator built into the wall so that the ice can be put in from the outside. A kitchen cabinet is a great convenience, because everything needed in preparing food is within easy reach, without taking any steps. The fireless cooker is a time, labor, and fuel saver. The kitchen table is on casters so that it can be pushed where it is needed. During the serving of the meal it may be placed in front of

the range. It is placed near the sink while washing dishes. The clean dishes are placed on it, then it is pushed over to the dish closet. A wheel tray is a great convenience in carrying food to and from the dining-room and removing soiled dishes after the meal, saving many steps back and forth between kitchen and dining-room.

Chairs, table, and sink should be of a height suited to the person who is to work in the kitchen. As a rule, six inches below the waist line is a convenient height. The gas stoves with ovens on top, making it unnecessary to stoop

drainer may hang on hooks, free from the wall. The modern enamel or stone sink with no cupboard under it is much to be preferred. There may be a four-inch board, or "chair rail," around the kitchen, about four feet from the floor, and to this hooks may be attached, ten or twelve inches apart, and on these may be hung all utensils that can be hung up, such as mixing spoons, strainers, egg beater, batter whip, dippers, ladles, funnel, and saucepans.

Sanitas wall covering is considered best for kitchen walls. It has a woven-cloth foundation. It will not tear nor



SOME OF THE MOST NECESSARY COOKING UTENSILS

in using them, are most convenient as well as efficient.

In the kitchens of some large institutions it is considered much better, from a sanitary standpoint, to replace the closed cupboards with open shelves on which to keep utensils and dishes of all kinds, and to hang on racks all utensils that can be hung up. On the shelves everything is open to view, and can be easily kept clean. There are no inclosed places for vermin and dirt to collect in. The top one of these shelves is slanting like a roof, so that it will not be a place on which dirt and rubbish may collect. Instead of boxes in which to keep knives, forks, and spoons, wire racks, like dish drainers, are used, in which no dust can collect, and their contents are in full view.

Under the draining board to the left of the sink the dish pan and wire dish

drainer may hang on hooks, free from the wall. The modern enamel or stone sink with no cupboard under it is much to be preferred.

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Sanitas wall covering is considered best for kitchen walls. It has a woven-cloth foundation. It will not tear nor

fade like wall paper, and is easily cleaned with a damp cloth.

The preferred floor covering for a kitchen is linoleum, which may be wiped up daily. Sweeping stirs up the dust from the floor to collect on the walls and furniture. As in any workshop, mere decorations are out of place in the kitchen.

Have a place for everything, and keep everything in its place, in order that time or temper be not lost hunting for things.

Utensils

Have a letter file or card index in which to keep bills, receipts, addresses, clippings — anything in the line of papers or records, filed away where they can be conveniently found.

The following is a list of utensils that should be kept in every well-equipped



SOME OF THE MOST NECESSARY COOKING UTENSILS

kitchen, some of which are shown in the illustration, and all of which will be needed to follow most successfully these lessons: Batter whip, small vegetable brush, earthen mixing bowl, paring knife, tablespoon, measuring teaspoon, egg whip, lemon drill, tin measuring cup, small strainer, large strainer, colander, quart measure, gem irons, grater, scales, small double boiler, egg beater, cake pan, wooden potato masher, flour sifter, large mixing spoon, food chopper, thermometer, small paint brush, bread knife, bread tins, shallow baking pans, rolling pin, bread board, biscuit cutter, pie tins, large funnel for filling jars.

Methods of Work

Have a definite plan for each day in the week. Find what is the best time for doing each task, and even write out a schedule, or at least have one in mind, for the days of the week; and in this plan and schedule do not forget to include all that you want to do during each day, not only your work, but recreation, calling, reading, study—whatever for you is worth while and should be included in your life. Then, having made your schedule, do your best to dispatch your tasks on schedule time. A timetable would be of little value to a railroad if the trains did not run on schedule time. Study the arrangement of your kitchen to see if a little rearrang-

ing will make it possible to accomplish the tasks in an easier and quicker way. Study yourself and your own motions as you do your work, with a view to eliminating unnecessary motions. These not only waste time, but waste energy. And when you have found the easiest, quickest, and best way of doing a task, let that be your standard way, and always do it that way. If necessary, when you have found the best way, write it out, and let this be your written standard practice instructions. "Investigation shows that the average untaught servant makes upward of one hundred motions in making a bed, and a trained worker can do it better in less than half that number. The same is true of nearly all other common household labor. There is an unnecessary waste of motions."

Have an ideal. Know what you are living for, or running a home for, or following this course of lessons for, and bend everything to the reaching of that ideal.

Make the best use of all the common sense you have, in all your work.

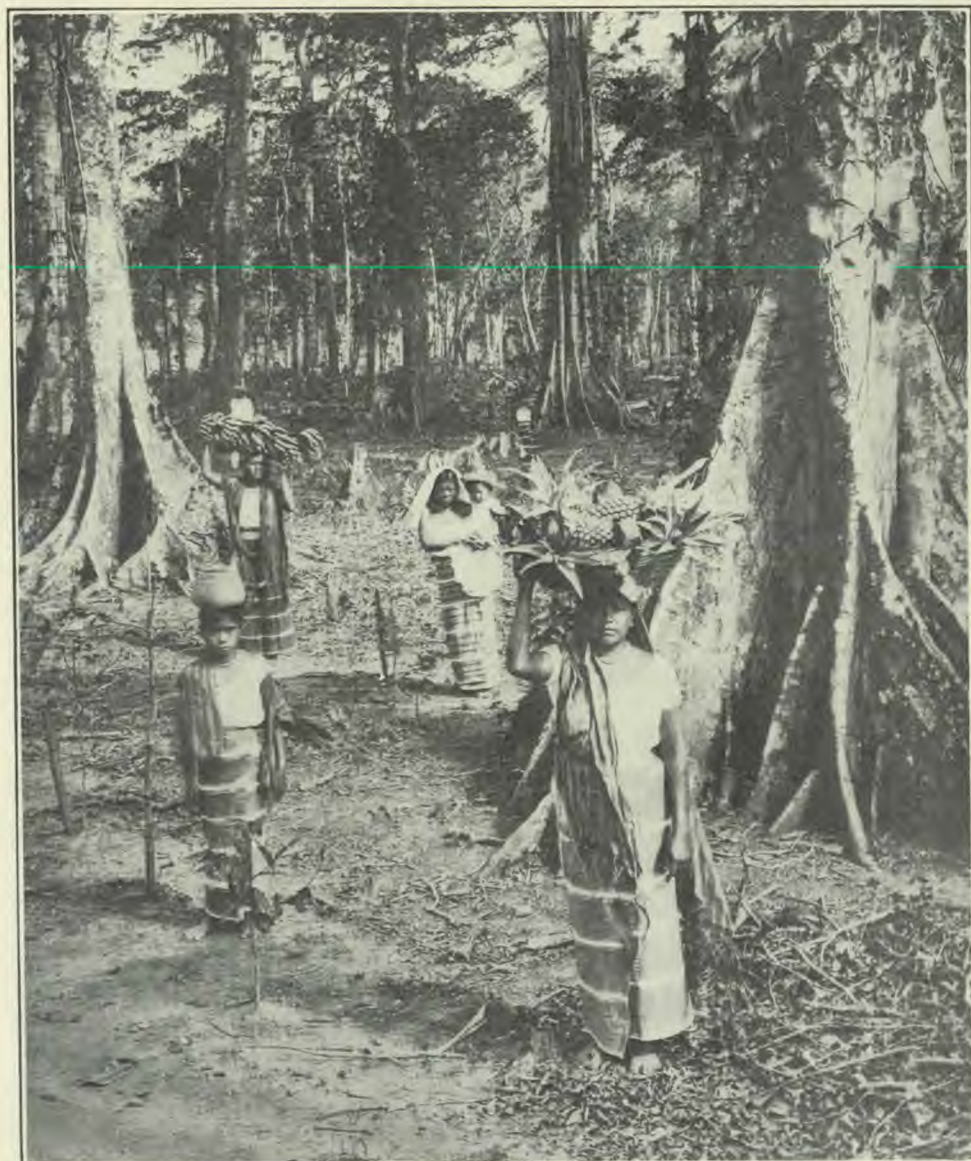
Get all the advice and counsel you can as to the best methods of work. Magazines for the home, including the one you are reading, are sources of information along this line.

Following all the suggestions I have given requires rigid self-discipline. It means that we will not be, as so many

people are, governed by our *feelings*, but will bring ourselves under the control of our reason, for the purpose of greater accomplishment in life. And while this may seem distasteful at first thought, the reward will fully repay the effort. For the man or woman who does things worth while, and who gets not only the most good but the most enjoyment out

of life, is the man or woman who puts the most into life — the well-disciplined man or woman.

After you have made improvements in your own homes and methods of work that bring great satisfaction to yourself, perhaps you will wish to tell your neighbors about them, and help them to change drudgery to delight.



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EDITORIAL

THE BRACING EFFECT OF A PURPOSE

JOHNNY'S pa and ma urged him to eat some breakfast food, telling him it would make him strong; but Johnny did not care to eat sawdust and shavings, he said, and no amount of argument and persuasion could induce him to touch it. He wanted pancakes and maple sirup and some of the other things which pa and ma thought were good for them but not for him. Being young, he could not understand why he could not thrive on the foods that were good for older people.

One day to ma's great surprise and rejoicing he called for a bowl of breakfast food with cream, and ate it with a gusto; and she, curious to know what had caused his change of attitude, asked him what had come over him. He replied that Billy — a neighbor boy a year or two older than Johnny, and a neighborhood bully — had struck him, and he wanted to get strong enough to give Billy the punishment he needed.

A purpose had entered Johnny's life, and he was determined to adopt any means or submit to any régime that gave promise of helping him to accomplish his purpose. And having, in this spirit, tasted the breakfast food, he was surprised to find that he actually relished it. His previous dislike had been merely a prejudice.

Many of us older people are very much like Johnny. We dislike the things which are good for us, and hanker after the things which are not good for us. Some of us like fiction so well that we can scarce avoid spending time needed for the performance of some duty, in finishing some favorite story. And we find ourselves dropping off to sleep as soon as we attempt to read anything serious that calls for thought. Others of us have learned to like whisky, beer, or wine better than water, and to give way to our likes, notwithstanding we know better. Others of us prefer idleness to activity, and choose to live in poverty and ill nourishment rather than in comfort and health. Others of us prefer confections, sweets, and other knieckknacks, with their headaches and other accompaniments, to real food and good digestion.

Now we know, most of us, that these indulgences do not build up the best type of humanity. Doubtless many who indulge know that their indulgences are harmful. Why is it that we have such a strong tendency to do those things which are not good for us?

Do not the animals instinctively live in such a way as to preserve their health? Why do men and women almost instinctively choose any way but the right one? And why is it that, having been admonished as was Johnny, most of us continue doing the same as before the admonition? Is it not because, like Johnny, we have no definite purpose that grips us and compels us, as it were, to make use of any and all means that give promise of helping us to succeed?

And what purpose is better adapted to this end than a genuine Christian experience? Every real experience in religion involves a consecration of all one's powers to the higher life, and that presupposes the adoption of every measure that gives promise of increasing our powers. Are Christians always as earnest as Johnny, to the extent that they adopt all known measures to increase their efficiency? And if Christians fail here, have they had a genuine experience?



CONCERNING NUTRITION

The Newer Views Concerning Nutrition

As a result of a wealth of carefully conducted nutrition experiments, students of the physiology of digestion and nutrition have so changed their views that even the most recent textbooks on physiology and biological chemistry are soon out of date and possess only a historical interest. Not so long ago we were taught that proteins in the intestinal canal are transformed into peptones, and that as peptones they pass through the intestinal wall into the blood stream. And yet it was a mystery what became of the peptone, for it cannot be found in the blood stream in appreciable quantities, and if it is injected into a blood vessel, it acts as a poison. In some mysterious way, the peptones were supposed to be elaborated into the proteins needed in the body.

Now it is definitely known that digestion does not end with the peptone stage. The peptones are further split up into amino acids, or "building stones," as they have been popularly called, before absorption from the intestinal canal; and from these amino acids, of which there are seventeen known, the body builds up its proteins, which may be entirely different in composition from the proteins of the food.

Let us suppose, for illustration, that a party of workers tear down a row of houses, and that from the material they erect other houses. The new houses may differ in size, and may contain the various materials in different proportion from the way they occurred in the old buildings. Now suppose the old houses contained no windows. If the workmen had to build the new houses entirely from the old material, they would have to make the new houses without windows. It has been found to be much the same in the matter of building up proteins in the body.

The various proteins, whether in the body or in the food, contain the various amino acids in very different proportions. Some proteins are entirely lacking in one or more of the amino acids, or perhaps contain them in too small a proportion to afford complete nutrition unless they are supplemented by other proteins containing the lacking amino acids. The body seems to be able to make some of the amino acids, or at least to get along without them when they are absent from the food. For instance, the amino acid glycocholl is not found in casein, the protein forming the curd of milk; yet a young animal may have all its protein furnished in the form of casein, and thrive on it. But

there are amino acids which the body does not seem to build, such as tryptophan; and any protein, as zein, one of the proteins of corn, that does not contain tryptophan, is not a perfect nutrient, at least it would not be a perfect nutrient for a growing animal or a child, and would have to be supplemented by some protein containing the missing amino acid. So it is not enough that the food contain a certain number of grams of protein; the proteins must contain the proper amounts of the various amino acids that are necessary to body building.

Formerly it was supposed that a dietary that contained protein, fat, and carbohydrate, each in its proper proportion to the body weight, was sufficient; and tables have been laboriously prepared, showing how many grams of protein, or fat, and of carbohydrate are required for a man of a given weight, at rest, at moderate work, and at hard work. Now it would appear that very much depends on the character of the proteins. If these are deficient in some of the necessary amino acids, more might be required than if the proteins are complete.

It would also seem that the body is more likely to be well nourished if there are a number of different proteins than if there is only one protein in the diet. This is possibly one reason why those who from necessity live on a diet containing about the amount of protein sufficient to sustain life according to the Chittenden standard, are sometimes ill nourished. It is not that they have an insufficiency of protein, but the protein in their diet does not contain a sufficiency of some of the amino acids.



Why Meat is So Prominent in the Average Menu

At the Fifteenth International Congress on Hygiene and Demography, held in Washington in 1912, Prof. Max Rubner, a world authority in matters relating to nutrition, read a paper in Ger-

man, which some of his unlingual hearers were not able to appreciate. Mendel¹ has recently furnished a translation of a portion of this paper, which will be interesting to English readers:—

“Nutrition in the cities has at all times a tendency toward refinement, but in former times, when the classes lived strictly separate, the food materials were also very different within the city walls. The food of the nobility was different from that of the middle class, and the latter from that of the poor people. Among the materials successfully used in the culinary art, a high place has always been held by the meat of mammals, fowls, and fishes. These meats were the chief part of the meal, other foods of vegetable origin—as salads and vegetables, sweets, and flour foods—being added. Bread remained in the background.

“The traditions of this culinary art have remained the same down to our days. This diet of the upper classes is the only one which provides the pleasures of the table. It is rich in protein and fat, it is not voluminous, does not overburden the stomach, tends less to obesity than any other diet, keeps the body even of a lazy man in good condition, and does not overwork the digestive functions. The less well-to-do reduce, of course, the amount of meat, but they use in its place bread and potatoes. This is called a mixed diet. When the barriers between the classes fell, the middle classes gradually rose to the more luxurious food of the formerly privileged classes.

“It is a fact that the diet of the well-to-do is not in itself physiologically justified; it is not even healthful, for, on account of the false notions of the strengthening effect of meat, too much meat is used by young and old and by children, and this is harmful. But this meat diet is publicly sanctioned; it is found in all hotels, it has become international, and has supplanted almost everywhere the characteristic local culinary art. It has also been adopted in countries where European culinary art was unknown. Long ago the medical profession started an opposition to the exaggerated meat diet, long before the vegetarian propaganda was started. It was maintained that flour foods, vegetables, and fruit should be eaten in place of the overlarge quantities of meat.

“The descendants of those well-nourished classes are, on account of many influences, especially the school and the indoor life, not always the strongest part of the nation; but since in recent times bodily exercises have become general, they are again decidedly in the ascendancy.

“The sanitary conditions of the great mass of industrial workers and their children, and of people of very small earnings, are different. Here we find a decided deterioration of the body, as is amply shown by the recruiting for military purposes. In spite of continuous migration from the country to the cities, conditions are little changed. The social surround-

¹ “Changes in the Food Supply and Their Relation to Nutrition,” by Lafayette B. Mendel, Yale University Press, New Haven, Conn.

ings of a great city are decidedly unfavorable to the maintenance of a strong race. Among the many factors which cause this decrease of bodily efficiency, nutrition is not the least.

"The industrial workers coming from the country to the city cannot well get along with their former simple diet, because the cheap food materials which are easily obtained, as bread and potatoes, contain too little protein. They undoubtedly need an increase of protein material. Neither can they find in the city the food conditions to which they had formerly been used; but they accommodate themselves rapidly to new conditions, coming into the new surroundings, as they usually do, without a family. Just as, under the doctrine of political equality, the lower classes try to attain the luxurious table of the well-to-do, so it is not surprising that industrial workers, coming from the country to the cities, accommodate themselves to the new dietetic forms.

"The workingman does not want protein, leguminous food, milk, etc., to improve his vegetable diet; he wants simply meat, not because he needs it, but because it is for him a matter of pride to follow, as best he can, the other classes in his diet. The difficulty is that the cost of meat is considerably higher than in the country, where food can usually be obtained without the aid of dealers, and where many foodstuffs are raised on one's own land."

Mendel himself, later on in the book, notes a change in the dietetic customs of the people. This change has doubtless been brought about partly by the increasing price of meat, but largely perhaps because of the propaganda of education which has shown that animal food is not essential to the preservation of health. Professor Mendel says:—

"Most of us can recall the days when meat or eggs, or both, formed an indispensable part of the early meal, in the United States. At present there are signs everywhere, at least among those classes which are not engaged in more vigorous muscular work, of a simplification of this meal by the exclusion of meat and the substitution of cereals and fruits."



Does the Use of Meat Tend to Hasten Old Age?

LORAND seems to think it does, especially if freely used. In his work, "Old Age Deferred," of which the English translation has gone through several editions, he gives reasons why from his extended experience he believes it possible to postpone old age and death.

He treats of various influences which may hasten old age, such as sexual excess, violent emotions, infectious disease, and intoxications. An important form of intoxication is that from within the body—auto-intoxication; and Lorand asserts with other authorities that "animal food is more apt to produce intestinal putrefaction than any of the various other foodstuffs." He also finds meat a source of danger to the circulatory apparatus, the weak spot of old people:—

"The greatest danger to the circulatory apparatus lies in meat, for, as already mentioned, the viscosity of the blood is thereby increased, as discovered by Determann, and thus its circulation through the blood vessels impaired. It is a well-established fact that arteriosclerosis can very often be observed in persons who have been largely addicted to a meat diet for a long time. Apoplexy also is more frequent among such.

"These conditions can, however, be improved if the meat be suppressed and replaced by a vegetarian diet."

Lorand is not a vegetarian, and he does not advise a sudden change from a meat to a vegetarian diet, but he believes there are certain classes who should eat no meat:—

"It is best not to give meat to little children nor to persons in advanced years—above seventy, or earlier than this if they are decrepit."

He is a strong advocate of the use by elderly people of considerable quantities of milk, for the reason that it helps to prevent putrefaction, and it contains small quantities of thyroid and other secretions of ductless glands, especially useful in old age.

Lorand's book is not merely a discourse in dietetics. Lorand considers exercise, sleep, mental hygiene, and various other matters related to the extension of the life period.

It is well, however, for those who have imbibed the notion that a heavy flesh diet is consistent with health and long life, to realize that some of the most eminent students of nutrition and personal hygiene are discarding this idea.

POSTPONING OLD AGE

Man may Continue Efficient from Forty to Eighty

A FEW years ago Osler made a statement to a class of medical students which has been given wide notoriety. As the newspapers had it, Osler taught that few things worth while are accomplished by men over forty years of age, and that a man might as well be chloroformed when he reaches the dead line of sixty. It was the discussion by the newspapers rather than Osler's own words that suggested the notion that a man's usefulness ends at sixty. Osler, who was himself nearing sixty at the time, certainly had no notion of giving up active work; and he has been doing strenuous medical work "at the front" in France, though he is now past sixty-five.

Though men smiled at the radical notion of man's brief period of usefulness, the product largely of the newspaper "clubs," there has undoubtedly been a tendency to regard the man of sixty as past his day of usefulness. The pendulum appears to be ready to swing the other way, and the conception of a virile old age seems to be approaching again.

Dr. Louis E. Faugeres Bishop, of the medical school of Fordham University, New York, in a recent lecture before the Social Economic Science Section of the sixty-sixth annual convention of the American Association for the Advancement of Science, asserted that a brain worker should continue active labor until the age of eighty, and gave some reasons why men fail earlier. His declarations before the fifteen hundred assembled scientists follow, in part:—

"After a man of active affairs loses his fatigue sense, his capacity for work seems to be increased at fifty, when it ought to be the same or less than in youth. His color becomes higher, and his capacity is lost for relaxation, including light literature. That man has a sclerotic tendency,—hardening of the arteries,—and it is high time for him to look to himself. He feels fine, has no symptom of any illness of any sort, and would laugh at the suggestion that he is in danger. This is the worst

feature of degeneration in its earliest stages; it rings no warning bell of pain; it creeps on a man so subtly, so insidiously, that he does not know he is ill, and would ridicule a physician who warned him.

"But the disease is all over his body, and often is the very cause of his superabundant activity and immunity to fatigue. It has progressed so far that his blood pressure is increased. This gives him a sense of well-being, and deceives him and his friends, but tells its own story when his blood pressure is measured or the chemistry of his body is studied.

"Barring accidents, a brain worker should count on forty years of labor after forty. If he is healthy in mind and body, he never looks forward to retirement. He enjoys his work too much."

Dr. Bishop here sounds a warning to the aging man. It is the one who feels most keenly the vigor of his intellect, and is the most ambitious to do a large work, who needs caution to take his work a little easier. And he is the very one who will refuse to take such counsel, and who will do all in his power to rush the time of his funeral.

Concerning Old Age,

Why It is Postponed

OLD age is postponed at least a decade, so that mankind is no longer satisfied with the Biblical allotment of three-score and ten years, according to an editorial in the February *Southern Medical Journal*, which accounts for the fact by certain changes which have come about in the practices of physicians and in the method of living:—

"Several circumstances help to account for this postponement of senility. When the elderly person is ill, he is no longer bled and purged by a Dr. Sangrado, but is dieted and fed and bathed and encouraged, so that instead of succumbing to violent measures, his constitution is reinforced and he takes a fresh start in life. The excessive use of alcohol, the profuse eating of meats and highly spiced dishes, and the excitements of the gaming table and the race course, all of which caused a strain on the arterial system, tending toward sclerosis, are now the exception instead of the rule. The importance of physiological rest, the value of vegetables and fruits in the diet, and the advocacy by the medical profession of proper exercise and the free use of water internally and externally, are all valuable elements in the reform."

Concerning Old Age, How It May be Further Postponed

BUT the editor previously quoted believes that "even yet the value of rest and relaxation combined with proper exercise free from exertion, for the man or woman past fifty, is not appreciated as it should be." He continues:—

"If work must be done during the autumnal years, its hours should be few and interspersed with brief periods of rest, and any 'exercise' should be of an opposite character from the labor."

He advises the brain worker to read light literature and take brief walks, adding:—

"He can accomplish more in the output by doing so, and with less wear and tear to himself. The most treacherous element in the conservation of health is the exercise. Too many people confuse it with exertion, and exhaust themselves with walking, horseback riding, rowing, or the dumb-bells. The fact is that for many aged people sufficient muscular motion to maintain health can be pursued within the home."

Regarding dietetics for the aged, he suggests that they eat what experience has shown agrees with them, and eat slowly and masticate thoroughly.

Regarding tobacco, he believes that to those accustomed to tobacco two or three cigars a day will do little harm, then adds,—

"It is best not to use tobacco in any form."
"In one thing only can they indulge themselves freely,, and that is their hours of rest and sleep."

For constipation, he recommends "two sovereign remedies—apples and olive oil. If these are freely combined with the diet, the constipation generally disappears."

He warns that "all the time and everywhere they must beware of crowds, for therein lurk those fatal foes, la grippe and pneumonia."

Possession of Motor Car Adds Ten Years to Man's Life

THE following, appearing in the *Automobile Dealer and Repairer* of January, 1916, was written by E. R. Erskine, president of the Studebaker Corporation, and perhaps for that reason may have been influenced by personal considerations; but as it is addressed not to prospective purchasers of cars, but to men in the business, we can, I think, credit Mr. Erskine with sincerity, and he probably knows from experience whereof he speaks. He says, in part:—

"It may be difficult to say how many years an automobile adds to a man's life, but I should say that ten years is a fair estimate. There is no gainsaying that the possession of a motor car increases the number of years a man lives, especially if in addition to owning a car, the owner drives it himself. For in that way he gets the fullest possible benefits in the way of health. . . .

"The motor car has accomplished almost invaluable results in doing away with a certain species of person known as the tired business man. The individual who once was classed as 'a tired business man' is tired no longer; he is alert every minute; his eye has a brighter sparkle; he is alive and keen and responsive.

"Figures prepared by the government Census Bureau certainly show in striking fashion the decrease in our death rate since the automobile came into being; and though we cannot give all the credit to the use of motor cars, still we must not ignore the fact that motor cars have played their part in helping us to live longer."

Mr. Erskine then quotes death rates as follows: "1880, 19.8 per thousand; 1890, 17.6; 1896, 15.7; 1912, 13.9 per thousand." Here are some of the reasons:—

"The more automobiles in use, the more men get out into the country and enjoy the benefits of a change of scenery, fresh air, and respite from business care. Likewise, the more automobiles, the more persons give up time to recreation and relaxation, particularly when no mental strain is involved in operating the car. Automobile drivers give this time to recreation and relaxation largely because they find they can perform their regular daily tasks quicker and better."

DISEASES IMPORTANT TO AMERICANS

Better Housing a Key to the Tuberculosis Situation

STATISTICS prove that tuberculosis thrives in precisely those places where the housing is poor, and the worse the housing conditions the higher the tuberculosis rate. Moreover, an improvement in housing conditions is invariably followed by a lowering of the tuberculosis death rate. Of course there are other unfavorable factors which usually accompany bad housing, such as an insufficiency of food, a poor quality of food, or foods lacking in some important element; but the fact that any improvement in the housing is almost immediately reflected in a lessened tuberculosis rate, would indicate that the housing is a most important factor in the incidence of this disease.

Pulmonary tuberculosis, we are informed by those who have studied the situation, is a disease in which seventy or eighty per cent of the cases occur in houses of three rooms and under. The proportion is larger in houses of one room than in houses of two rooms, "and the number of cases of tuberculosis increases almost in direct proportion to the number of small houses in any district or ward of a city."



Sprue, a Tropical Disease Now Becoming Important to Americans

A FEW years ago American physicians knew pellagra only through the textbooks; now its rapid increase is one of the most serious of our public health problems.

Sprue is a disease until recently known to Americans only by name, but already cases are reported in the Southern States, and it is not at all improbable that it may become a scourge in some sections of the country.

It has some resemblance to pellagra, — the sore mouth, the disturbance or destruction of the gastrointestinal mucous membrane, and the marked diar-

rhea; but in sprue there are no skin symptoms nor mental or nervous symptoms, and the diarrhea is characteristic. The voluminous stools usually occur early in the day, and are acid in reaction, light in color, and frothy. But it is not always easy to distinguish the two diseases, for the skin symptoms and the nervous and mental symptoms may not show in all cases of pellagra. The character of the stool is the chief means of differentiation between the diseases, in sprue there being an evident failure to digest the fats. In some cases of sprue there may be a lack of some of the symptoms, some cases being characterized by tongue symptoms alone, others by diarrhea alone.

As with pellagra, so with sprue, the determining cause of the disease is not known.

It is true some of our public health men have "discovered" the cause of pellagra. So have others discovered the cause of tuberculosis to be lack of sunlight, fresh air, and nourishing food. Deprive a people of these, and tuberculosis will increase. Treat tuberculosis patients with these, and there will be gratifying results in many cases. If we were not acquainted with the tuberculosis germ, we might accept such an explanation. The cause of pellagra is yet to be found, though there is no doubt whatever that lack of protein and excess of carbohydrates in the diet is a contributing cause.

It is to be hoped, however, that the Public Health Service will not so far lose its head over the supposed discovery that it will cease to search for the essential and specific cause of the disease, which is probably some unidentified organism.

Meanwhile the sprue problem seems destined to be added to the pellagra problem. In Porto Rico during the last decade sprue has come to occupy the front rank among the fatal afflictions of the island, and is especially dreaded by the American residents, among whom it seems to be more fatal than tuberculosis.

How the Government is Meeting the Malaria Problem

ONE of the most serious health problems in many localities is the prevalence of malaria. The incidence of the disease may vary from four per cent, as shown by the 1914 reports, up to forty per cent, as shown by actual blood examination in certain localities. The seriousness of the situation has led the United States Public Health Service to give increased attention to the problem, with the result that there has already been a marked reduction in the prevalence of the disease in certain localities. For instance, in some places an incidence of fifteen per cent in 1914 was reduced to less than five per cent in 1915.

In 1915 the important discovery was made that the mosquitoes of the genus *Anopheles* do not carry infection over the winter. A dissection of over two thousand mosquitoes did not reveal a

single infected insect until May 15. This indicates that, in the latitude of the Southern States at least, protection from malaria may be had by treating human carriers with quinine previous to the middle of May, thus preventing any infection from chronic sufferers reaching mosquitoes, to be transmitted to other persons. The Public Health Service publishes this warning:—

“Although quinine remains the best means of treating malaria, and is also of marked benefit in preventing infection, the eradication of the disease as a whole rests upon the destruction of the breeding places of *Anopheline* mosquitoes. The Public Health Service, therefore, is urging a definite campaign of draining standing water, the filling of low places, and the regrading and draining of streams where malarial mosquitoes breed. The oiling of breeding places, and the stocking of streams with top-feeding minnows, are further recommended.”

The service also gives advice regarding screening and other preventive measures.



PREBISCHTOR, A WONDERFUL NATURAL BRIDGE IN SAXON SWITZERLAND

The TEMPERANCE MOVEMENT

MODERN SCIENCE AND TOBACCO

The Life Extension Institute is an organization whose purpose is to lengthen the span of life by the avoidance of all influences which will or may induce disease or weaken the resistance of the body, and by the adoption of all measures which may strengthen the body. Its work is largely a propaganda of education. Subscribers are given a yearly medical examination, and advised as to the approach of any insidious disease and how to avoid it. Recently the institute published a health manual, "How to Live." In the preparation of this book, the authors, Prof. Irving Fisher and Dr. Eugene Lyman Fisk, secured the collaboration of a committee of one hundred of the world's most eminent experts. The book contains, not the one-sided notions of one man or of a few men, but the well-digested opinions of many. Below are some of the statements of this book regarding tobacco. They are remarkably conservative, and for that reason are the more worthy of heed by the person who desires to live the most efficient and useful life.

TOBACCO contains a powerful narcotic poison, nicotine, which resembles prussic acid in the rapidity of its action, when a fatal dose is taken.

No doubt pyridine and furfural are factors in the drug effects of tobacco, but recent painstaking experiments by high authorities have shown the presence of nicotine in tobacco smoke; and when we reflect that there is sometimes sufficient nicotine in an ordinary cigar to kill two men, it is not strange that enough of it may be absorbed from the smoke passing over the mucous membranes of the nose, throat, and lungs to produce a distinct physiologic effect.

Cigarette smoking is a time waster; that is, it breaks up the power of attention, as few smokers are satisfied with one cigarette, and the mere physical act of lighting a fresh cigarette disturbs the continuity of thought and work. Dr. W. J. Mayo calls attention to the fact that according to his observations research scholars who smoke cigarettes have not done well.

Experiments on animals with nicotine extracts from tobacco and inhalation of tobacco smoke have produced hardening of the large arteries. Clinical observation by some of the world's best authorities indicates that the same conditions are brought about in man by heavy smoking.

Disturbance of the blood pressure,

rapid heart action, shortness of breath, palpitation of the heart, pain in the region of the heart, are important effects. Tobacco heart is often lightly spoken of because the abandonment of the habit will often restore the heart to its normal condition; but tobacco heart sometimes causes death, especially under severe physical strain or in the course of acute disease, such as typhoid or pneumonia. Surgeons have noted failure to rally after operation in tobacco users, who are, of course, deprived of their accustomed indulgence immediately before and after operation.

Cannon, Aub, and Binger have also shown that nicotine stimulates the adrenal glands, small organs adjacent to the kidneys, which secrete a substance that in excess powerfully affects the blood vessels, constricting them and temporarily increasing the blood pressure. This influence may be partly responsible for the change in the blood vessels noted in heavy smokers.

Excessive smoking is often an important factor in causing insomnia.

Blindness or tobacco amblyopia, a form of neuritis, is not an uncommon affection among smokers. There is also often an irritant effect on the mucous membranes of eyes from the direct effect of the smoke.

A very common and at the same time injurious form of air vitiation is that from tobacco smoke. Smoking, espe-

cially in a closed space, such as a smoking-room or smoking-car, vitiates the air very seriously, for smoker and non-smoker alike.

From the mass of evidence and opinion with which medical literature is loaded, a few salient facts stand out:—

First, tobacco and its smoke contain powerful narcotic poisons.

Second, it has never been shown to exert any beneficial influence on the human body in health, and it is not even included in the United States Pharmacopeia as a remedy for disease, notwithstanding the claims that are made for its sedative effects and its value as a solace to mankind. . . .

Fifth, the well-known effects of tobacco on the heart and circulation should lead one to pause and consider the pos-

sible cost of this indulgence, especially as,—

Sixth, it is difficult to determine, years in advance, whether or not one is endowed with sufficient resistance to render so-called moderate smoking comparatively harmless.

Seventh, the vital statistics show that diseases of the heart and circulation are rapidly increasing in this country, in which,—

Eighth, the per capita consumption has rapidly increased in recent years, while,—

Ninth, in the United Kingdom, where these diseases are decreasing, there has been no material increase in the use of tobacco, and the per capita consumption is less than one third that of the United States.

ITEMS OF INTEREST

Yucatan Dry.—By a permanent order of the governor, forbidding the sale of liquors, Yucatan has gone dry.

Chicago Ordinance Holds.—Twenty-one Chicago saloon keepers who kept open their saloons in defiance of the closing ordinance, sought to restrain the mayor from revoking their licenses, but failed. They would not close according to the ordinance. Now they remain closed.

Snuff Poisoning.—Since 1914 twenty-five cases of snuff poisoning have been recorded in the Mayo Clinic at Rochester, Minn. The symptoms are excessive headache, indigestion, irritable heart, increased respiration on exertion, and greatly impaired mentality. In a number of cases the mind was deranged. The chronic snuff taker does not want to be cured of his habit, but to be relieved of the consequent bad symptoms. Crispin, who has been investigating the evils of snuff taking, believes there should be legislation against snuff.

Cannabis Sativa Importations.—Learning that the dried flowers of *Cannabis sativa* are being imported and used for purposes other than the preparation of medicines, the Secretary of Agriculture has recommended that instruction be issued to customs officers, pursuant to the provisions of Section 11 of the Food and Drugs Act, to refuse admission to the drug unless it is to be used for medicinal purposes. Importers are to be required to execute a penal bond guaranteeing that the drug will not be used otherwise than for the manufacture of medicines. *Cannabis sativa* is hemp, from which the Oriental booze, hashish, is made, and might in this country become a dangerous habit-forming drug.

Georgia Officers Must Enforce Law.—The people of Georgia want more than a law on the statute books. They promise trouble for any officers who fail to enforce the prohibitory laws this year.

Motoring and Drinking.—The campaign is growing wider and wider regarding heavier fines for drivers arrested when under the influence of liquor. The highway commission of Massachusetts is contemplating asking the legislature to pass a law empowering the commission to suspend the license of a driver for several months, or even a year, at the time of the first offense. The present period of suspension is sixty days. It is claimed that liquor figures in more than fifty per cent of the accidents in the Bay State; and if this is the case, then any law that will stamp out the condition is desirable. Taking away the privilege of a person to drive a car is a good punishment for lawlessness.

Harrison Law Constitutional.—The Harrison antinarcotic law has been held, by the United States District Court for the Northern District of Ohio, to be constitutional. Judge Killits, in rendering the decision, says, "We are not content to hold that the only ground upon which the constitutionality of this act can be sustained is that it is designed to protect the revenues of the United States. The indiscriminate and unrestrained use of opium, coca, and their derivatives is well known to be a great evil, gravely affecting the general welfare of the country. These are exclusively foreign products, and it is entirely within the power of Congress, in the interest of the general welfare, to exclude their importation entirely, or so to regulate the traffic in them in this country that their importation may be traced."

Iowa State Law Holds.—So a Davenport saloon keeper learned. He kept his saloon open in defiance of the prohibitory law, and it was at once closed by the State authorities.

Oregon Law Must be Enforced.—The thirty-four Oregon district attorneys met in council with the State attorney-general, and after a long conference they decided that the prohibition law must be enforced.

Wood Alcohol Kills Five Lepers.—Some lepers in the leper settlement on Molokai Island, Hawaii, finding a tin of wood alcohol, drank it. Four men and one woman died as a result, and others were made seriously ill.

Blindness from Wood Alcohol.—A man purchased a pint of whisky from a dealer, and lost his eyesight a day after he had consumed part of it. Testimony showed that the drink had been diluted with methyl alcohol (wood alcohol), and the saloon keeper and jobber were both held responsible. The jury awarded the injured man \$7,000 damages.

The Indefensible American Saloon.—Referring to the rioting and carnage in East Youngstown, the Youngstown *Telegram* said in a leading editorial, "And the center of it all was the indefensible American saloon. If the strikers had not been soaked with bad booze, the probabilities are there would have been no shooting. The responsibility rests upon the people who tolerate the saloon and its accompanying vices."

What Prohibition Did to Arizona.—George Herbert Smalley has in the January *Sunset* an article with the above title, in which he describes in picturesque language the changes that have come over the border State as a result of prohibition. He furnishes an array of comparisons showing that since the license days have passed, bank deposits have increased, crime has decreased, business is better, and labor is more efficient.

Local Enforcement of State Law.—The city of Spokane, Wash., has passed an ordinance for the strict enforcement by the municipality of the State prohibition law.

City Department Forbids Intoxicants.—The chief of the water bureau of Philadelphia issued orders on Washington's birthday forbidding any of the fifteen hundred employees of his department to use any intoxicating liquor while on duty. The water department is on the water wagon.

Prohibition Good for Kansas Students.—The chancellor of the Kansas State University says that "since prohibition has been enforced through the State, there has been a steady advance in the character values and the mental and moral standards of the young men and women students."

Motor Car for Smuggling Liquor.—Two men hired a car which they used to smuggle eighteen cases of liquor into Alabama. They were arrested, and the car was retained by the sheriff. When the owner of the car tried to obtain its return, he also was arrested on a charge of violating the prohibition law.

Hearst Papers Drop Liquor Ads.—For a long time the Hearst papers have published strong editorial articles against the use of alcoholic drinks, but inconsistently they have continued to carry liquor advertisements. On January 9 Mr. Hearst announced that hereafter his papers will carry no more such advertisements.

Motor Cars to Smuggle Liquor.—On account of their speed, motor cars have been used of late to smuggle liquor into prohibition States. In one case a car, stopped on suspicion, was found to contain no liquor; but as it was equipped with extra storage tanks (said by the owner to be for the purpose of carrying a reserve supply of gasoline), which smelled of liquor, the man was compelled to pay a heavy fine.



MOONLIGHT ON THE POTOMAC

OUR WORK AND WORKERS

THAT CONGRESSMAN

Told by a Nurse

WE had been giving treatments in private homes, my wife and I, and were having calls for more extensive facilities than were thus offered. The time seemed ripe for opening city treatment-rooms.

It was out of the regular rental season; and after an exhaustive search for suitable quarters, we found it a matter of Hobson's choice on a storeroom already occupied, but subject to subleasing. The owner was a Congressman who was very busy at that time, looking after his campaign for reelection.

It was of no particular concern to this property owner to consider our rental proposition, as he already had a tenant, so he did not even care to give us an interview to discuss the matter. After repeated efforts to see him, he at last told me to come the next Thursday night.

I was at his headquarters at the appointed time. With profuse apology he pleaded pressure of business as an excuse for disappointing me, saying, "Come tomorrow night, and I will surely see you." I replied, "I can't do business tomorrow night."

"You can't do business tomorrow night? and why, may I ask?"

"I am a Seventh-day Adventist," I replied, "and keep the Bible Sabbath, from sunset Friday to sunset Saturday."

"So you are a Seventh-day Adventist! Well, that settles the whole business," only he put in another word that did not speak well for the brand of our business. "I will have none of that in my place. No, siree, no closing on Saturday and opening on Sunday in mine," and with that he dismissed me.

It might be here mentioned that at

that time there was some stringent enforcement of Sunday laws in that State, and that Seventh-day Adventists had felt the force of it in an unusually severe manner. This had raised issues of general public interest.

My wife's treatment work had given her entrance to some of the best homes of the city, and among her patients were some near relatives of this Congressman. Through their intercession the matter of securing quarters for treatment-rooms was reopened, and he finally agreed to let us occupy the storeroom.

Mr. Congressman kept busy and found no time even to look in on us. Having no dealing with him, renting from the former tenant, we had no occasion to meet him, until it came to securing his permission to make certain changes necessary for installing our boiler.

I tried repeatedly to see him, but as repeatedly failed, until the matter became most imperative. At last I knocked on the door of his sleeping-room. It was well along in the day; but the night before having evidently been a long one and the man not feeling well anyway, I met with some pretty strong language, and a forcible command not to bother him.

Circumstances just naturally demanded that I see the man, so I watched for him as he left his rooms, and again approached him. I must draw the curtain here, for our man was evidently feeling worse, at least he sounded worse, and I escaped, having secured the information I wanted, and more, too, some of which I did not follow.

Our Congressman was reelected and went to Washington. Our treatment-rooms were duly installed, and a good

business was developed. The best people were patronizing us, and the changes in the storeroom were of a nature to reflect favorably on the premises.

Some time after that session of Congress had closed and our friend had returned, he was one day passing our place when I asked him in. With a little hesitation he accepted my invitation to look through and see what we had done to his storeroom. He was apparently pleased.

After telling of the different appliances and their uses and advantages, I persuaded him to undress and let me give him a complimentary treatment. I gave him a good one, too, and he was in shape to make good use of it. An electric-light bath followed with a neutral hydroelectric, then a salt glow and spray, and lastly a massage, seemed to fit right well.

As our new patient, for he became a permanent one, finished dressing, he said, "So this is what you are doing here, is it? Well, I should think you could do this kind of work on Saturday or Sunday or any other day of the week." And, mind you, this was on Sunday.

He went out to his club, and within a short time two fellow club members came in for treatment, saying the Congressman had told them to come. Other pa-

tients came to us by his recommendation.

This man, formerly so strongly prejudiced and severe toward us, became one of the best friends we ever had. Many a time did he come to us for treatment when worn with official duties. There came a time when he was seriously ill, and nothing would do but that I should nurse him.

When our lease expired and we had to deal with him direct, he was most considerate. Later a growing business near by was looking for larger quarters, and the proprietor approached us with a proposition to buy our lease. He also had an influential real estate man write to our landlord, offering a handsome increase over our rental figure. Our friend wrote me, "I leave this matter entirely to you. You are a good tenant, a good citizen, and a public benefactor. While I am offered considerably more than you are paying me, I will do nothing to embarrass you."

At one time when the Congressman was leaving for Washington, he said to me, "You may be sure that if anything comes up on the question of Sunday laws, I will stand in defense of your people."

This is but one example of many to show how friends are won by means of our health work, both in this country and abroad.



A HISTORIC BUILDING

Washington's Headquarters, Newburgh, N. Y.

QUESTIONS and ANSWERS

Questions accompanied by return postage will receive prompt reply by mail.

It should be remembered, however, that it is impossible to diagnose or to treat disease at a distance or by mail. All serious conditions require the care of a physician who can examine the case in person.

Such questions as are considered of general interest will be answered in this column; but as, in any case, reply in this column will be delayed, and as the query may not be considered appropriate for this column, correspondents should always inclose postage for reply.

Heart and Blood Pressure.—"I am forty-four years old, weigh one hundred and seventy-five pounds, have had six serious operations, have very rapid heartbeat, have taken strychnine, anarsarin, and other medicines to relieve pain and reduce blood pressure. I have severe pain in the heart, and pain in arms, with feeling of bursting; head feels full, and face is quite red; feet and ankles are cold. Sewing causes the heart to beat so rapidly I have to lie still for a number of days. I use no tea or coffee, eat meat once or twice a month, and use eggs, fruit, milk, vegetables, and butter freely. I drink three or four quarts of water daily, and try to keep the bowels open by enemas and other means."

This is certainly too serious a case to be treated by correspondence. Perhaps, when your heart is overacting, an ice bag placed over the heart will do much to relieve you. You may be suffering from auto-intoxication, and it is possible that you are sensitized to some proteins, such as meat and eggs. There are many persons who have an idiosyncrasy to some animal proteins, so that their use is followed by very distressing symptoms. Perhaps it would be better for you to abstain entirely from these.

It is possible also that the large quantity of water you use helps to increase the blood pressure temporarily, and thus adds to your troubles.

You would probably be better off to eat so that you would enjoy eating more. If there is a minimum of food in the intestine, there is not so much likelihood that poisons will be produced.

Possibly you do not masticate your food properly. If there are lumps in the food, and these are carried into the intestine, there is more likely to be decomposition, with the production of poisons.

Another matter to be considered is the condition of your teeth. If you have either decayed or loose teeth, or any mouth condition that is likely to infect the food, it is impossible to obtain complete relief from your condition until these matters are corrected. I think, however, that notwithstanding these instructions, you will need to go to some competent physician and have a personal examination.

A Stomach Wash.—"Is a glass of hot water with a teaspoonful of limestone of phosphate in it, taken each morning before breakfast, in any way harmful as a wash for the stomach, liver, kidneys, and intestines?"

By limestone of phosphate I suppose you mean calcium phosphate. I am not at all certain that such a wash for the stomach, liver, kidneys, and intestines would be at all advantageous; and possibly a routine treatment of this kind would not be without harmful effects.

Indigestion and the Eyes.—" (1) What effect, if any, will indigestion, chronic constipation, auto-intoxication, or high blood pressure have on a person's eyes? (2) Can permanent relief be found from such disorders by a course of treatment in one of the associated sanitariums or treatment-rooms conducted on sanitarium methods? (3) What kind of treatments are most beneficial for indigestion, sour stomach, headache, and constipation?"

A person having a tendency to eye trouble would probably have it increased by any of these disturbances. It is well to remember, however, that digestive disturbance is very often caused, or at least increased, by eye trouble. Such conditions frequently form what is called a "vicious circle," and it is difficult to tell which one causes the other.

It is not easy to determine the nature of a disorder from the recital of a few symptoms. So it would be impossible for me to give any positive answer as to whether permanent relief might be obtained by sanitarium treatments. I may say, however, that persons apparently as bad off as your description indicates are being constantly relieved in our sanitariums and treatment-rooms. The tendency, however, with patients is to expect a cure in a few days for something that has been coming on for months or years. A permanent cure of a chronic trouble requires time.

The treatment would probably best be varied, and would include dietetics, rest, hydrotherapy, and mechanical, electrical, and other forms of treatment, and possibly the proper fitting of glasses.

Hardening of the Arteries.—“(1) What is the cause of the hardening of the arteries, and is there any cure for it? (2) How high would the pulse have to go before there would be danger of breaking an artery? (3) What would be the best diet in such a case?”

There are supposed to be various reasons for the hardening of arteries, the principal one being auto-intoxication from transformation of food products in the intestines. It is probable that if we should eat only what we absolutely need, avoiding everything that would cause digestive disturbance, and masticate our food thoroughly, our arteries would last much longer.

The breaking of arteries does not depend on the pulse rate. An artery gives way after it has become brittle, and when the blood pressure is suddenly increased, as in excitement, or after a heavy meal or overwork.

For one with hardening of the arteries, the best thing is a quiet life, with light diet. You will find, on the whole, that milk is much better for you than meat. You would better avoid tea, coffee, and all stimulants.

Cravings; Indigestion.—“(1) Is it harmful for a person who has a craving for pickles to eat them once in a while? If so, what can take their place? (2) Is the sleepy, heavy feeling after meals caused by indigestion? and how should one diet in order to overcome it? (3) What kind of foods should be eaten by one of a bilious temperament?”

You are evidently suffering from indigestion, and the cravings you experience are an evidence of digestive trouble. I doubt whether pickles are the best thing for you, even if you do have a craving for them. Try a small quantity of lemon.

Your symptoms indicate serious trouble, and you should have a careful examination to determine just what is the matter. Certain foods which you are eating may cause your difficulty. Eggs are apt to cause such trouble.

Not knowing more about your condition, it would be impossible for me to prescribe a diet. It might be an advantage for you to eat much less than you have been eating, and to take a glass of hot water one-half hour before meals, and to lie down for half an hour after eating.

Lingering Bronchitis.—“After six weeks in bed with what the doctor called ‘bronchitis,’ I am just able to walk. I still have sweats and cold spells, and am very weak. I seldom have a cold, but this one seems to linger. Have had no bath since I was taken sick. Would it be right for me to have a tub bath, and how hot should the water be? I have not been out of doors. Should you advise me to go out? I have my window open night and day. What can I do for my cough?”

It will be proper for you to take a bath, in fact, it will be much better for you; but you should have it warm enough to be comfortable, and the room must be warm enough so that you will avoid chilling after coming out of the bath. You would do better to go out of doors a little, if well protected.

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A heating compress to your chest would do much good. But you could not put it on very well yourself. It would be necessary for you to have a trained nurse or some skilled person put it on for you.

It may be advantageous for you to take one or more real hot leg baths. The water should be as hot as you can bear it, and more hot water should be added as you can endure it, until your feet and legs are red. While in the leg bath you should be surrounded with a kind of tent made of a blanket or comforter. If you are perspiring at the close of the bath, get into bed with the comforter around you, and go to sleep if you can. It is better to have some one assist you in taking treatment of this kind.

You should have an examination in order to determine whether there is not something more serious than bronchitis present.

Burning Feet; Sore Chest.—"My feet burn nearly all the time, especially the bottoms, and are so swollen almost every night that I have to remove my shoes for comfort. Cold water is always a relief. I also have soreness in chest and shoulders. Kindly suggest remedies."

As nearly as I can judge from your symptoms, you are suffering from edema, due to circulatory trouble, and you should have medical examination and treatment. Your trouble may, however, be due to prolonged standing on the feet. It is possible that the use of loose slippers, the avoidance of standing too much, and alternating hot and cold treatment to the feet, may benefit you.

There is a possibility that the trouble in your feet, chest, and shoulders is due to some circulatory derangement, or it may be a rheumatic condition. I should suggest that you have a personal examination by a physician.

Soda Crackers.—"Please tell me whether soda crackers are healthful, and if there is any nutritive value in them."

Soda crackers are made up largely of starch. They contain, however, a minimum amount of other elements, including protein and mineral salts. If these lacking elements are supplied by some other food, there is no reason why these crackers should not be good food when taken in moderate quantity. Being composed largely of white flour, they tend to constipation, unless used in connection with laxative foods. Those who have conscientious scruples about eating pork products should not eat soda crackers. I am answering the question from a health standpoint. There is probably not enough lard in crackers to have any material effect on the health.

Peanut Butter.—" (1) Is peanut butter a satisfactory substitute for dairy butter? (2) By what method can peanut butter be made most healthful? (3) Is the peanut butter on the market as healthful as it might be made?"

Peanut butter is not a substitute for dairy butter. Dairy butter is almost entirely fat. Peanut butter contains some fat, a small amount of starch, and a fairly large proportion of protein. With most people peanut butter is

not so easily digested as dairy butter. It is more likely to cause digestive disturbance if used continuously and in considerable quantities. Carefully used, it is an excellent food; but more persons have digestive troubles from the use of peanut butter than from the use of dairy butter.

To make peanut butter most healthful, the peanuts should be carefully freed from the inner hull after blanching, and the nut should be very lightly roasted. Overroasting develops acrid fatty acids which may cause digestive trouble.

It is, of course, necessary to select good peanuts. There are various grades of peanut butter on the market, some containing small specks of the inner hull. Such butter is not so desirable as that which is entirely freed from the hulls. The peanuts are often overroasted before they are ground. It is possible that some peanut butter is made from inferior peanuts.

Piles.—"Is there any cure for protruding piles except a surgical operation? I have seen pile cures advertised, but have had no faith in them."

Probably the best thing for you would be to have an operation. It is possible that some local sanitarium treatment might temporarily relieve your condition, but the relief might not be sufficient to justify the expense. It will be greatly to your advantage to avoid digestive disturbances and constipation. You might receive some slight relief by the use of liquid paraffin, one of the mineral oils, of which there are a number now on the market. This, by its lubricating effect, would tend to relieve to a certain extent the tendency to protrude.

Worms.—"Please advise what to give a child from three to five years old for stomach worms."

The first thing is to be sure that there are worms, for remedies that are poisonous to worms would be injurious to the child, and should not be given in any case unless you are sure from seeing the worms that the child is infested with these parasites. The remedy for the roundworm, which is similar to the angleworm, only much larger, is santonin. But this is a dangerous remedy, and should never be given except under the direction of a physician. There is a possibility of killing your child. If you refer to hookworm, the remedy is oil of chenopodium. This is also a remedy that should be given under the direction of a physician. The worms which most commonly affect children are pinworms, or seatworms, which are often found in the stools. The remedy in this case is a decoction of quassia chips given as an enema. All the clothes on the child should be cleansed, and the child given a bath; and it may be necessary to repeat the enema a number of times.

Basements Insanitary.—"I recently saw it stated that a place where flowers will not grow is not fit for human beings to live in. I was interested, because I am living in a basement, and have never been able to keep plants. They soon wither and die. We have been here five years. My daughter was taken

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With some advice to the gouty, rheumatic, and diabetic.

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NOSTRUMS AND QUACKERY.

For years the government has been putting out of commission one medical fraud after another; but no sooner is one dislodged by the difficult processes of the law, than another springs up to take its place; and before it can be controlled, it has succeeded in swindling a large number of needy persons. This book explains the methods of these different frauds, so that the reader may be on his guard.

\$1.50, \$1.75, \$2.50.

with heart trouble soon after we came here, and died. My husband's health declined, and he died one year ago. My own health is poor. Is the statement I quoted correct? Why will the plants not grow? Can the condition be remedied? Do you think living in a basement may have caused my daughter's sickness? Are all basements unhealthful to live in?"
(See bottom of next page)

SOME BOOKS



Hygienic Cookbook, compiled by Jacob Arnbrecht. Price, \$1. International Publishing Association, College View, Nebr.

The author, who is an experienced cook, has attempted to give a compilation of carefully tested recipes in a clear and concise manner. Nearly all recipes are given in measure, to avoid the necessity of weighing. The aim has been to give recipes for such dishes only as are recognized as wholesome.

Civilization and Climate, by Ellsworth Huntington, Ph. D. Price, \$2.50 net. Yale University Press, New Haven, Conn.

The new science of geography adds to the maps of our boyhood days maps showing the distribution of plants, animals, and man, and every phase of life of these organisms. One object of this is to compare physical and organic maps, and thus determine how far vital phenomena depend on geographic environment.

This book is a careful coordination of climatic conditions with health, vigor, and the various characteristics of civilization, with the purpose of determining to what extent climate molds or determines civilization.

The work has certainly been carefully and conscientiously done, and Dr. Huntington is to be commended for his faithfulness in following out his allotted task. His conclusion may perhaps be best given by the following quotation from page 218:—

“Such, then, is the meaning of our maps. They do not indicate that climate is the only factor in determining the condition of civilization, or even the main one. Far from it. Yet they indicate that it is as essential as any other. Today civilization seems to make great progress only where a stimulating climate exists. A high civilization may be carried from such places to others, but it makes a vigorous growth and is fruitful in new ideas only where the climate gives men energy. Elsewhere it lags, or is kept at a high pitch only by constant reinforcements from more favored regions.”

I think the statement that a place where flowers will not grow is not fit for human beings to live in, is true. Plants as well as human beings need sunlight, fresh air, and other natural conditions which they do not get in a basement. The only remedy, it seems to me, is to move out of the basement.

In this case there is a possibility that there may be something more than the absence of sunlight and fresh air, for this would not tend to bring about suddenly a condition of heart failure. There is a possibility that there was a leakage of gas, which would destroy the plants and would readily affect the heart. But

Changes in the Food Supply, and Their Relations to Nutrition, by Lafayette B. Mendel. Postpaid, 50 cents. Yale University Press, publishers, New Haven, Conn.

A discussion, by a prominent physiological chemist and student of food problems, of the effect of commerce and of scientific discoveries upon the national dietary. Beginning with the prediction, made by certain European scientists, that the increase in population is destined within a few years to call for food in excess of any possibility of production, Professor Mendel shows that new economies, new methods of production, and increased transportation facilities are bringing into use foods which formerly could not be utilized. Moreover, physiology is showing how we may live on a dietary that is at once more economical and more healthful. Domestic science is now beginning to adapt and put into practice the recently discovered truths regarding human nutrition.

Handbook of Athletic Games for Players, Instructors, and Spectators, by Jessie H. Bancroft and W. D. Pulvermacher. The Macmillan Company, New York.

The official rules of an athletic game offer very little in the way of description, and the printed matter describing the games fails to give definite rules. In this volume the aim has been to give a working description of each game, together with the technical rules; so it becomes at once a textbook for learners who want a clear working description of the games, and for those who know the games but who need classified technical information for all parts of the play. In a handy pocket volume we have here all that one needs to know about baseball, basket ball, field hockey, football, golf, handball, ice hockey, lacrosse, lawn tennis, polo (equestrian), soccer football, squash tennis, volley ball, running and walking races, jumping, pole vaulting, weight throwing, and rowing races. The book is intended for player, spectator, coach, play instructor—in fact, any one who has anything to do with or any interest in games.

when your daughter was ill, she had less opportunity to recuperate than if she had been under more sanitary conditions.

Generally speaking, basements are unhealthy to live in. Notwithstanding this, in the summer time more babies die under the roof in city tenements than in basements, on account of the great heat. So while conditions might be bad in the basement, they are still worse for the baby in the hot air of the attic.

Conditions are decidedly unfavorable for health in the congested quarters of the cities, and those who have not the means to secure sanitary apartments are most apt to suffer.



NEWS NOTES

Bacteria on Toy Whistles.—As it is the custom of vendors of toy whistles to demonstrate their wares by blowing the whistles, the New York Department of Health made an investigation of some of these whistles, and found on them a large variety of germs, some of them capable of killing mice when injected. Of eight mice injected, five died within twenty-four hours, two the next day, and the last one on the fourth day.

Epidemic Septic Sore Throat.—A large number of cases of this serious malady, which yields very little to treatment and which is often fatal, have been shown to be due to milk contamination—perhaps from a milker, the infection spreading from the milker to one or more cows and then to the milk. In this way a large number of cases may occur on a certain milk route. Pasteurization of the milk would prevent this danger.

Horse Manure Kills Fly Larvæ.—It has been observed in the trenches that while horse manure at first breeds flies, it will later, when heating under the influence of fermentation, kill the larvæ. The fly lays eggs in fresh manure, but not in that which is several days old, the fermentation and high temperature being fatal to larvæ. The best way, then, to kill fly larvæ, is to bury fresh manure with its larvæ, inside of a pile of heating manure.

Sweets and Diabetes.—Two investigators of the Rockefeller Institute, Metzler and Kleiner, believe that they have found in the increased consumption of dextrose the cause of the increased prevalence of diabetes. Since the commercial manufacture and the cheapening of sweets, the quantities eaten are enormous. Candies and sirups containing these artificial sweets are being used in large quantities, thus perhaps increasing the prevalence of a very serious disease.

Motor Car Manufacturers and Aviation.—The aircraft industry is now farther advanced than the motor car industry was fifteen years ago, says *Motor Age*, and many of the motor car manufacturers are preparing to enter the aviation field. One reason why aviation has progressed so slowly in the land of its origin is the dare-devil performances of American aviators, with their frightful mortality, which led the American people to look upon the aeroplane as an exceedingly dangerous craft. Since the wonderful feats of the army aviators, Americans are coming to realize that the aeroplane is a practical craft destined to have a future no less wonderful than the motor car. Some day we may all be flying.

Municipal Health Magazine.—Chicago is to have a municipal health magazine with an issue of 100,000 copies a month for free distribution. Health Commissioner Robertson, the originator of the idea, has found a philanthropist who is willing to finance his project at a cost of \$1,000 a month. The editorial staff is to consist of fourteen physicians and surgeons.

Ingrowing Toenail.—With a sharp knife, remove any flesh or granulations covering the edge of the nail. Make a V-shaped incision in the middle of the free edge. Scrape the nail along the center until it begins to be sensitive. This causes increased growth at the center and retraction from the edge. Run a little absorbent cotton under the edge of the nail in order to prevent its cutting into the flesh, and soak the cotton with a drop or two of flexible collodion. Dress in antiseptic dressing. Continue the notching and scraping as needed from time to time.

Educational Tours for School Children.—A writer in *Motor Age* queries, "Why not use the motor car more to supplement the public school education of the boys and girls?" Why not utilize the midsummer vacation for educational tours? "The time is ripe," continues the writer, "to stage a national tour for the boys and girls, a tour in which the route will be through historical sections of the country that the boys and girls have been reading about in the school courses. There is no better way to impress on the children the realities of our country. . . . The night stops could be made occasions for lectures."

Preparation of Lye Hominy.—Experimental work by Marden and Montgomery, as quoted in *Experiment Station Record*, January, 1916, page 66, shows that the solutions of salt, acetic acid, hydrochloric acid, and calcium chloride, used as substitutes for lye, prove entirely ineffective. Sodium bicarbonate partially hulled the corn after several hours' heating, and both lime and soda lime worked fairly well. Lye was the only substance which gave satisfactory results. Two pounds of lye to twelve gallons of water is ample, and half this concentration is nearly as efficient. Not more than two bushels nor less than one bushel of corn should be used to forty gallons of water. [An average would be a quart of corn to a gallon of water.] At this concentration a temperature of 158° F. for about one and one-half hours is recommended, or a temperature of 194° for a shorter time. Efficient stirring is required. The product must be thoroughly washed to remove all the lye from the corn.

Hard Water and Canned Foods.—Hue-nink and Bartow have determined experimentally that the presence of calcium or magnesium salt in the water has a hardening effect on canned beans.

Sunlight for Wounds.—A French physician asserts that he has been much impressed with the more rapid healing of wounds exposed to direct sunlight. In case of severe wounds it was necessary to allow time for recuperation before applying the sunlight, otherwise fever and inflammation resulted. After two to four weeks the most destructive wounds were benefited by exposure to sunlight; and if there was still fever, the temperature, under the treatment, dropped to normal. The deodorizing effect of exposure to sunlight is immediate. Under the influence of solar radiation, suppuration first increases and then diminishes.

A Motor-Car Danger.—A number of deaths have occurred in closed garages as a result of an "idling" motor exhausting into the room. In such cases the escaping gas contains not only carbon dioxide, which is comparatively harmless, but also enough carbon monoxide—a deadly poison—to cause asphyxiation, and death if the exposure is long continued. One should never work or remain in a closed garage with the motor running. It is better to run the motor in the open air. Even in cases where the exposure is not sufficient to produce asphyxiation, enough of the gas will be inhaled to cause serious deterioration of the blood, resulting in invalidism and mental weakness.

Electric Heating for Homes.—In Norway where electric current is cheap, electric heating of houses has been tried in many places. It has been found possible to heat a cubic meter of space (thirty-five cubic feet) to a temperature of 64° F. when the outside temperature was as low as 5°, with an expenditure of thirty to thirty-five watts. This would mean about a watt to a cubic foot, or a kilowatt for a room 10 x 12 feet and 8 feet high—1,000 cubic feet. A house of 6,000 cubic feet would cost, at the rate of one cent a kilowatt hour, 6 cents an hour, or \$1.44 a day. Probably electricity in this country will never be furnished for less than three cents a kilowatt hour, which would make expensive heating for homes.

Blood as an Ingredient of Bread.—A German scientist has developed a new method of making bread, by which a certain proportion of fresh blood is incorporated. In making the bread he uses hydrogen peroxide, which bleaches and deodorizes the blood. At the same time the bubbles formed from the splitting up of the peroxide perform the good office of aerating the bread. There has long been an attempt to make bread with a larger proportion of protein. The prices of milk and eggs are now almost prohibitive for this purpose, and so the recourse to this comparatively cheap source of nitrogen. The bread is doubtless good for people who like such bread. The idea will probably be used largely in the German army, and perhaps in the feeding of the large companies of men. It is doubtful whether the average housewife will take kindly to it.

Discovery of Disease Germs.—It has generally been conceded that the germs of rabies, poliomyelitis, smallpox, vaccinia, and foot-and-mouth disease are ultramicroscopic; that is, so minute that they are beyond the power of the strongest microscopes. But Proescher, in *Berliner Klinische Wochenschrift* (Berlin Clinical Weekly) of Aug. 2, 1915, claims that by means of a special method of staining with basic methylene blue, he has been able to render them visible under the microscope, and that by the same method he has been able to detect the germ which carries typhus fever. It cannot be made visible by ordinary staining methods.

Spitters Arrested.—There are laws against spitting in public places, but they are seldom enforced. About the middle of January, on account of the rapid spread of the grip, the New York City Department of Health determined to lessen as far as possible the sources of infection, and as a result several hundred spitters were arrested each day, and a fine of \$1 to \$5 was imposed in most of the cases. Perhaps if this campaign were kept up, even when there is no epidemic, the time would soon come when it would not be necessary to make any arrests for spitting. It would be an excellent educational campaign, and doubtless there would be a marked decrease in the spread of infectious diseases.

Increase in Price of Drugs.—The war has had a marked effect on the price of many drugs, as will be seen by the following list. The first column represents price per pound immediately before the war; the second, the present price:—

Acetanilide	\$.20	\$2.00
Caffeine	4.00	12.50
Calomel .....	.50	1.50
Carbolic acid .....	.09	.48
Mercuric chloride .....	.50	2.00
Ipecac	2.00	6.00
Phenacetin .....	.50	15.00
Antipyrine	1.50	18.00
Quinine sulphate .....	.50	17.00
Sodium salicylate .....	.30	5.50

Anthrax Traced to Fur Worn by Baby.—A few months ago a Brooklyn (N. Y.) baby died of anthrax, or malignant pustule, or carbuncle, as it is variously known. This is a disease formerly very common among cattle, but owing to quarantine methods much more rare now. It does not frequently affect human beings. Most human cases have been persons who were handling hides of animals which died of anthrax. In the present instance the only possible source of infection seemed to be a fur worn by the child. It was found that this fur had been made from the skin of cats brought from Barren Island, the dumping ground for New York City. Dr. Graham Rogers, after a thorough investigation, has submitted a report to the industrial commission, advocating the enforced discontinuance of the use of these skins for human wear. It would seem that Dr. Rogers implicated the cats on rather meager testimony, for though he claimed to have found on the furs spores resembling anthrax, he did not identify them as anthrax by animal inoculation.

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HOW TO LIVE—RULES FOR HEALTHFUL LIVING BASED ON MODERN SCIENCE, by Irving Fisher and Eugene Lyman Fisk, M. D. \$1, \$1.50, \$2.

A description of this most excellent book on the conservation of life and health appears in the April LIFE AND HEALTH, page 193. It is the work of two eminent authorities in life conservation, who were assisted by a committee of one hundred sanitarians. The book can be relied upon as containing the last pronouncement of science on the preservation of health.

Rice Bread.—In France an excellent bread is made by incorporating in the mixture twenty per cent of rice flour.

General Blue Reappointed.—The Senate promptly confirmed President Wilson's nomination of Rupert Blue for a second term as Surgeon-General of the United States Public Health Service.

Health Conservation.—The Secretary of the Treasury has made application for a special appropriation of \$100,000 for the field work of the United States Public Health Service, to be used wherever most needed in the control of malaria, typhoid fever, tuberculosis, trachoma, and other diseases.

Doctors in Demand.—Owing to the great need of physicians in the British army, the war office has taken twenty to thirty fourth-year Toronto medical students who were serving at the front, and has returned them to Toronto to complete their medical studies. In order that they may qualify for degrees by December, 1916, they will be given a special summer course.

Deficiency Diseases.—There are a number of diseases, including beriberi, scurvy, and possibly pellagra, that are supposed to be due to the absence from the diet of certain food constituents which are never present in any but minute quantities,—too minute for chemical analysis,—and which have been named vitamins. A new name has been coined for these diseases—avitaminoses—meaning diseases due to depreciation of vitamins. It is believed at present that the vitamins are contained in fresh fruits, fresh vegetables, and meat, and that overcooking destroys them.

Esperanto and the War.—A number of German soldiers taken prisoners by the Russians, found the universal language of great help to them in having their wounds cared for and in other ways. Not the least was the immediate bond of sympathy between Esperantist captors and their prisoners. In Siberia the Esperantists were enabled to obtain many concessions for themselves and their fellow prisoners by their command of the universal language. The green-star badge, the emblem of the Esperantists, brought the prisoners comrades in many places.

Digestive Power of Oysters.—A French investigator, M. Henri Coopin, has brought before the French Academy of Sciences proof that the digestive power, supposed to be possessed by oysters, is due to the bacteria swallowed with the oysters. He found that the bacteria inhabiting the sea have very marked digestive powers. Of forty-three species studied, only four were inert. This will explain why it is necessary to eat the oysters raw in order to preserve their digestive powers. With present knowledge, one may cook his oysters, and then add the sea water in which they came, and get the same results. Or he can take an "oyster soup" consisting entirely of raw sea water, and obtain all the marvelous digestive effects of the raw oysters.

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Christchurch Sanitarium, Papanui, Christchurch, New Zealand.
Christiania Health Home, Akersgaden 74, Christiania, Norway.
Friedensau Sanitarium, Friedensau, Post Grabow, Bez. Magdeburg, Germany.
Kimberley Baths, 7 Cheapside, Kimberley, South Africa.
Lake Geneva Sanitarium (Sanatorium du Lemman), Gland, Ct. Vaud, Switzerland.
Natal Health Institute, 126 Longmarket St., Pietermaritzburg, Natal, South Africa.
River Plate Sanitarium, Diamante, Entre Rios, Argentina, South America.
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