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OLIVE GROVE CLOSE TO THE FOOT-HILLS

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Life & Health
THE NATIONAL HEALTH MAGAZINE

JULY
1913

AIM: To assist in the physical, mental, and moral uplift of humanity through the individual and the home.

George Henry Heald, M. D., Editor

VEGETABLE TABLE OILS

REGARDING the comparative merits of olive-oil and other vegetable-oils, Dr. Wiley, in his book "Foods and Their Adulteration" (P. Blakiston's Son & Co., Philadelphia), says: —

"Olive-oil has been used from the earliest historical times, and probably was the first vegetable-oil that was manufactured to any considerable extent in the early history of civilization. Its qualities have maintained for it a market among the nations of the world, in spite of the fact that many other palatable and wholesome vegetable-oils have been produced which, while not inferior in nutritive value to olive-oil, are so very much cheaper that unless the olive-oil possessed peculiar properties it would be forced out of the market. Its delicate flavor, extreme palatability, high nutritive power, and other general characteristics have maintained for it a market against the strongest competition."

In this he admits that the superiority of olive-oil is not in its healthfulness, but in its flavor.

There are different varieties and qualities of pure olive-oil. Says Dr. Wiley: —

"The quality of olive-oil upon the market varies in a very great degree according to the country from which it comes, the degree of maturity of the olive from which the oil is extracted, the method of expression employed, and the character of the refining process to which the expressed oil has been subjected. Botanically, there are very many varieties of olive-trees, and thus nature would impart to the olive peculiarities due to the origin of the oil itself. The environment also has a great deal to do with the character of the olive and necessarily with the character of the oil produced."

Regarding the adulteration of olive-oil, Dr. Wiley says: —

"By reason of its great value as an edible oil and its high price, there is no one of the edible oils which has been subjected to such a systematic and extensive adulteration. By reason of the resemblance in general character of many of the edible vegetable-oils to olive-oil, adulterations of the most extensive character may be practised without indicating to the eye any change in composition. Nearly all the edible vegetable-oils have the light-amber tint, which is characteristic of many grades of olive-oil, and the difference between the color of olive-oil and that of other edible oils is not greater than the difference between the tints of the various olive-oils themselves. The connoisseur of extremely delicate taste is usually able to distinguish by the flavor any given edible oil from olive-oil. If, however, any given edible oil is mixed with olive-oil in small proportions not exceeding twenty-five to thirty per cent, even the skilled taster will be deceived. In such cases only the chemist who has much skill and practise is able to detect the adulteration."

Regarding its adulteration with cottonseed-oil, he says: —

"In the United States the principal adulteration of olive-oil is with cottonseed-oil. This is an oil that has already been described as of high nutritive value, and to which no objection can be made from any hygienic or dietetic point of view. It is made in great quantities in the United States, and when subjected to the most careful refining processes, can be offered to the consumer at a price probably not greater than one fifth of that of high-grade olive-oil. It becomes the ideal material with which to adulterate olive-oil."

So such adulteration is not bad from a hygienic standpoint, but from a commercial standpoint. It is selling gold bricks on a large scale. It is collecting some dollars a gallon from the consumer for what he ought to receive for perhaps thirty cents a gallon.

KEEPING COOL

James Frederick Rogers, M. D.

MAN in the temperate zone is occupied for so much of the year in adjusting himself to a colder atmosphere than that to which he was originally native that he has lost or forgotten, to a large extent, the first principles of keeping cool, and, in the few tropical days of July and August, his remonstrances against the weather gods become more vigorous than his efforts toward securing relief.

Man is one of the warm-blooded or, more exactly, one of the even-tempered animals. Year in, year out, day or night, his internal temperature seldom rises, when he is most active, above 99°, or falls, when he is least active, below 97°, though the thermometer if applied to the skin would of course show very wide variations, according to the conditions of the atmosphere, for we know that the skin may become so cold that it will freeze.

The primary source of body heat is the food we eat, which, in muscle and gland, is ever burning in a slow but constant way. As these fires never go out and can be reduced only to a certain point, it is necessary that heat be constantly lost to the surrounding air, else the temperature of the body would slowly rise until we were cooked by our internal fires. In winter we have no trouble in getting rid of not only the minimum but the maximum of heat produced, and the problem then is to furnish sufficient fuel in the way of food, and to keep the heat from escaping too fast by surrounding ourselves with heat-retaining houses and clothing. We even resort to artificial heat to prevent our own too rapid loss to a colder unheated air.

For keeping cool the procedure must be just the reverse of this: first, the reduction of heat formation in the body, and second, the facilitating of riddance of heat. The heat-regulating machinery of the body will take care of the matter, but, by more carefully obeying its demands upon consciousness, we can help it along, and be much more comfortable to boot.

For helping in the reduction of heat production, the first hint is not to be needlessly stirring the internal fires; and we stir these fires every time we make an unnecessary muscular movement, or work our brains unnecessarily over the fact that the weather is warm and that we do not know how to take its warmth philosophically. We should in the hottest weather follow the hint from the temperature-regulating portion of our brain to rest, to relax, and even to sleep if we have the opportunity, for only so can heat production in the muscles be reduced to its minimum. The dwellers in the South are reasonable and wise in following these directions, and we shall not degenerate into Hottentots if we imitate them for a few days of the year.

The second hint for consciousness is to take less fuel (food) into the body. We do not need it, can not use it, and it is a burden for the body to rid itself of it. We must forget our December, or even April, eating habits, even if food

IN BRIEF

Keep as quiet as circumstances will allow.

Take a siesta, or even a nap, if so inclined.

Use light-weight, light-colored, porous clothing, linen or cotton.

Take a cold bath at least once a day, two or three are very refreshing on a hot day.

Keep in the shade, in the breeze, and away from the reflected light of the sun.

Eat largely of fruits, avoiding the fats and heavy carbohydrates.

Do not watch the thermometer and "stew" over the weather. It will only make you more uncomfortable.

does "taste so good." It is the hunger appetite — the heat appetite — which we must obey. There is no danger of our becoming "weak" by such a reduction.

The food should be different from that of the winter months: we need little fats and more fruits. Hot foods and hot drinks of course add to our heat, though we need not go to the other extreme and indulge too freely in ice-cold things which may possibly damage our internal linings. Unlimited water is not a help, and the body will inform us when we are taking more than is needed for a sufficiently active perspiration.

In the way of aiding the loss of heat, and so of cooling the body, consciousness is asked to reduce the amount of clothing, and also to reduce the number of layers, for it is the air entangled by the clothing which prevents loss of heat, rather than the clothing itself. Light-colored materials are coolest, as they reflect rather than absorb heat. The hint also comes to move the body to a cool place sheltered from the heat-radiating sun, and, as moving air abstracts heat far faster than stationary air, a breeze, even if only from a fan, is a scientific help to comfort. A cold bath also is a rapid reducer of bodily temperature, though we are not asked to keep it up until we are chilled.

The prescription, then, for keeping cool is very simple: To keep as quiet as one's circumstances allow; to take a siesta if so inclined; to put on light-weight, light-colored, porous clothing of linen or cotton; to take a cold bath at least once a day; to keep out of the sun, and to frequent breezy, shady places free from the reflected heat of the sun; to eat and drink according to the dictates of real hunger and real thirst; lastly, to never mind the weather, for "boiling over," or even "stewing" about it, only makes it seem hotter.

There will be no danger of sunstroke if the above prescription is followed. We should be thankful for any kind of weather, hot or cold, and even if we can not keep cool, we can keep as cool as we can.

TOBACCO USING AMONG WOMEN

Lauretta E. Kress, M. D.

ON Dec. 11, 1912, an article appeared in one of the Chicago papers, from which the following is taken: —

"For the first time in the history of transpacific shipping, an ocean liner entered San Francisco port to-day with the bar cleaned so spick and span that none of the passengers could procure a single drop of liquor refreshments. Not alone was the ship a perfectly dry one, but to make matters worse, there was not a single cigarette left on board.

"The reason for this peculiar condition is declared by the ship's officers to be due to the heavy drains made upon the stores by the women passengers. According to the same source of information, the daily allotment of a prominent society woman on board was never less than sixty."

This habit among women is growing to an alarming extent. In foreign countries it is very common, becoming more so in society circles everywhere.

Some months ago at the close of the Congress of Hygiene, Chicago received some of the noted foreign doctors and their wives as guests. A prominent German doctor's wife was very much dismayed at the criticism of the women of Chicago when she and her other foreign friends smoked publicly after dinner at the Hotel La Salla. In an interview with a reporter she replied: —

"Why, certainly I smoke." Then she opened her hand-bag and displayed a silver cigarette-case with two rows of tiny

perfumed cigarettes nestling cozily and enticingly therein. " I can not see," said the Frau, " why there is so much hubbub raised over the smoking of cigarettes by the women of our party at the banquet tendered our men-folk. Smoking among women with us is so common that we really do not think anything of it. It is almost a universal custom in Germany. You stare at us so that it makes us very uncomfortable.

" Now understand, I am not in favor of unmarried women smoking; unmarried women should never smoke. And right here is another point of difference between you Americans and us Germans. Here in this country you allow unmarried women to have much more liberty than married women. Your unmarried women do things that we would not permit for an instant.

" But we smoke," continued the lady, " and we think nothing of it. At a dinner where men and women are present, the women's cigarettes are always lighted first. That is a signal to the men that smoking is to be permitted."

This noted *Hausfrau* gave a general description of the way a woman should smoke a cigarette to enjoy it. Among these rules are the following: —

Women should have their own brand of cigarettes; they should select mild tobacco that suits their taste and fancy.

Women should smoke their cigarettes very slowly. They should take a puff of the cigarette only every few moments.

Women certainly should learn to *inhale* their cigarettes. To inhale a cigarette is the only proper way to enjoy one thoroughly.

American women are not very far behind their German sisters, for February 8 a special from New York to the *Record-Herald* gave us the following bit of news in Chicago: —

" Smoking-rooms have been provided for the new home of the Woman's University Club, the plans for which were filed in the building bureau to-day. The smoking-room will be on the third floor, and will be attractively fitted up; and on the same floor will be several card-rooms. Space has been reserved on the seventh floor for a beauty-parlor, and on the roof will be a gymnasium and garden. Mrs. Mary Sanders Hays is the president of the club. The cost is estimated at $120,000."

New York women are certainly doing their share to swell the vast tobacco fund, for last year one hundred thousand women smoked thirty-five million cigarettes in that city alone. One young woman is reported to have performed the feat of smoking three hundred cigarettes in twenty-four hours,— one every five minutes, without allowing time for eating or sleeping. And again we learn that some have been graduated from the cigarette and are using cigars. This is more prevalent in the East than in the West; but one noted cigar-stand in Chicago lately made public, through its manager, this fact: —

" Women have been smoking cigars in Chicago for a long time. I get so many orders from women for cigars that I could not, offhand, tell the exact amount. They don't ask for any light, small cigar though, and I don't think they smoke it through a holder. They usually smoke a brand that comes two for a quarter. They select them just the same as men do,— black, strong ones and light *panetela,* according to their taste. They're smoking them just the way they began smoking cigarettes."

These facts are appalling to me. What can we expect of our women when a habit of this kind takes possession of them? If the cigarette has injurious effects upon the boys of our schools,— and every scientific man or woman has watched such effects,— what will it be to our young women, whether married or single? In the past *woman* has been the redeeming factor in race degeneracy; but when a habit of this kind takes possession of the women, what can we hope for the offspring of the future?

In the early history of tobacco using in England, women smoked universally with men at the close of their meals; but

in the latter part of the reign of Queen Anne and the early part of the reign of Queen Victoria, it was considered vulgar to use tobacco in any form, and even a man seen on the street with a pipe in his mouth was considered "irretrievably bad." Smoking during that period was rarely practised at home, even by men. It was confined to the club-houses or taverns, and was regarded among the lowest vices.

History repeats itself. Again the habit is well-nigh universal. We are going through some of the earlier experiences. I sincerely hope the time will come in enlightened America when the habit of smoking among women as well as among men and boys may be wiped out.

The cigarette of to-day, possibly, leaves more serious results on the nervous system than did the tobacco used in those long-ago periods. The by-products produced by combustion in smoking the cigarette are more deadly in their effects than nicotin. Furfurol — one of the aldehydes — is said to be fifty times as poisonous as ordinary alcohol, and small doses cause symptoms of transient irritation, such as ataxia, tremors, and twitching. This explains the trembling hand and characteristic handwriting of the cigarette fiend. In adequate quantities it gives rise to epileptiform convulsions, general muscular paralysis, ending in paralysis of the respiratory muscles.

The London *Lancet* report of investigation on the cigarette says it was found that the addition of glycerin is to moisten the tobacco, saltpeter is added to make it burn and to counteract the bite of the aldehydes, giving a smoother but by no means a less harmful smoke. It is further stated: "It is clear, too, that cigarette smoke contains injurious constituents other than nicotin, among which may be counted aldehydes, including acrylaldehyd, or acrolein, a class of bodies which are intensely irritating."

When these substances are inhaled through the lungs and air-passages, thus entering the circulation, one becomes narcotized by them, and by their continual use the nervous system is shattered.

I say again, This great subject is appalling to me. What will the future generation be when women as well as men are addicted to habits like this? Already our insane asylums are full to overflowing. New ones must be erected to accommodate the surging masses. We have more insane cases confined behind the walls of our asylums than we have students in our colleges and universities. In Cook County, Illinois, there was an increase of insane of twenty-five per cent during the year 1912. Imbecility is increasing with great rapidity. Is not the cause of the increase of insanity and imbecility to be found in the wholesale way American women are adopting pernicious customs of drinking, smoking, and eating? If we expect to make advancement healthwise for our women and children, we must improve the habits of the mothers.

Boards of health, armed with the police power of the State, isolate carriers of typhoid and quarantine the victims; but alcohol and tobacco, a thousand times more destructive to public health than typhoid fever, continue to destroy. We are face to face with the greatest crisis in our country's history. These health-destroying and nerve-destroying practises must be eradicated, or we shall have, in the course of a few years, a crippled and degenerate race, who will write the epitaph of this republic.

PICKING OLIVES IN A YOUNG ORCHARD

FIFTEEN HUNDRED ACRES OF OLIVE-TREES

OCEANS OF OLIVE-OIL

John L. Cowan

PROBABLY few persons in America not directly interested in the trade have any adequate conception of the magnitude of the industries of olive growing and olive-oil production in the countries bordering upon the Mediterranean. Exact statistics are unobtainable; but from consular reports it may be learned that the commercial olive orchards of the Old World cover an area of approximately 11,000,000 acres, and yield about 240,000,000 gallons of oil annually.

Spain leads in both acreage and production, the thirty-two olive-producing districts of that country having orchards with a total area of 3,290,000 acres, producing a crop that yields about 70,600,000 gallons of oil annually. Italy is second in rank, with eleven producing districts, in which olive orchards covering 2,690,000 acres yield 67,400,000 gallons; and Asia Minor, with 2,400,000 acres of olive-trees, has an oil production in excess of 51,500,000 gallons annually. These account for the major part of the world's supply; but Greece, with an olive acreage of 645,000 acres, produces 20,000,000 gallons; Portugal, with 545,000 acres, produces 11,300,000 gallons; Tunis, with 575,000 acres, produces 8,000,000 gallons; Algeria, with 472,000 acres, produces 6,400,000 gallons; and France, with 330,000 acres, produces 5,000,000 gallons.

When compared with these figures, the olive acreage and olive-oil production of California appear almost trivial. The annual olive-oil output of the State probably amounts to no more than 300,000 gallons, and the value of pickled olives placed on the market each year is estimated at $500,000. Yet it must be remembered that there are olive orchards now in their prime in the Old World that were bearing before the white man ever set foot in California; and that the modern development of commercial olive orchards in the Golden State is of a date so recent that large orchards will not reach full bearing for years.

So one would expect the world's largest olive orchard to be located somewhere in western Asia or southern Europe, where this fruit has been cultivated ever since history began, and where the olive has always been held in equal esteem with the vine and the fig-tree, among man's most useful possessions. But, as a rule, the olive groves of the Old World are of small extent, the vast production of fruit and oil being made possible by the industry of a great number of small orchardists. So the dis-

tinction of possessing the largest unbroken area of land, under the same ownership, planted exclusively in olives, is claimed by California, where are also found the largest walnut and almond groves, prune, apricot, peach, and pear orchards, orange and lemon groves, seed farms and flower farms. Compelled to seek their market across the continent, the California producers of fresh and dried fruits, seeds and bulbs, have closely imitated the methods followed by great industrial combinations, have learned the value of cooperation as it has been learned by none of their rivals, and conduct their operations on a scale of surprising magnitude. This enables them to introduce economies in the production, handling, preparing, and marketing of their specialties that render possible their continued existence and prosperity in spite of the handicap of a railroad haul from ocean to ocean.

The world's largest olive orchard contains 2,000 acres of land, on which 170,000 trees are growing, 130,000 of which are now bearing fruit. Three hundred acres remain unplanted, but these are being set in olive-trees at the rate of 100 acres each year, so that it will not be long until the 2,000 acres comprised in the ranch will contain 200,000 olive-trees. The property is located two miles from the old mission of San Fernando, and twenty-four miles from Los Angeles, the ranch and railroad station being appropriately named Sylmar, which means "sea of trees." Up to date, the Los Angeles Olive Growers' Association, which owns and operates the property, has expended half a million dollars on the olive orchard, canning establishment, and oil-mill.

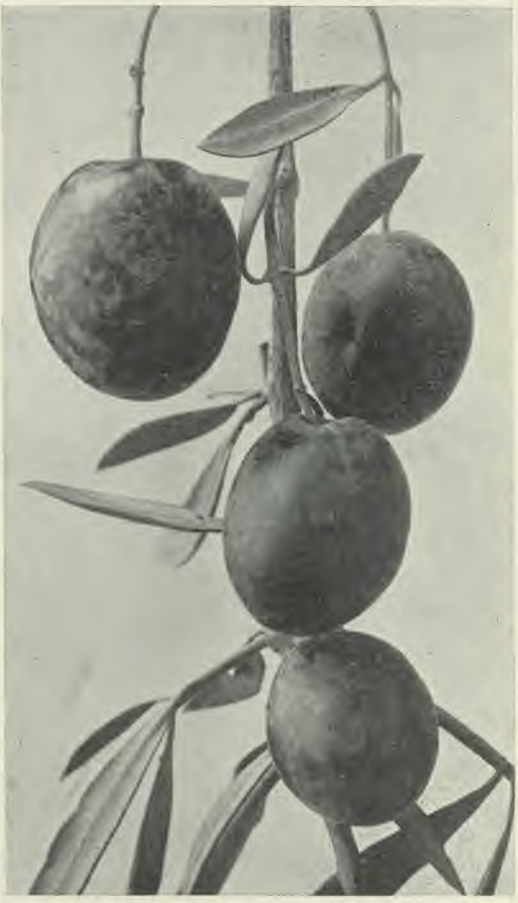
Considered merely as a spectacle, Sylmar is one of the notable sights of California, surpassed in beauty only by the view of the orange groves of Redlands, from Smiley Heights. There are points on the eastern edge of the ranch, on the first low foot-hills of the Sierra Madre range, from which every tree in the orchard may be seen, an undulating ocean of gray-green foliage, extending without a break as far as the eye can clearly distinguish its nature. There is no other olive scene, in either the Old World or the New, at all worthy of comparison with it.

The olive-growing industry of California is now undergoing a remarkable expansion, many groves being started in various parts of the State. To meet the unprecedented demand for trees, which is expected to continue, one nursery company is engaged in the propagation of six million trees.

Olive growing is not a new thing in California. The old Franciscan fathers, who built the missions for the conversion of the Indians, planted the first groves more than a century and a quarter ago; and many of the trees they set out are still bearing. However, commercial olive culture, for the production of fruit and oil for shipment to distant markets, in competition with the products of Mediterranean countries, is a very recent development. Curiously enough, although

OLIVE ORCHARD, SYLMAR

nurserymen have gone to great expense to import olive-trees of many varieties from France, Spain, Italy, and the Levant, the "Mission olive" is found to be the best for all purposes that California growers have yet obtained. It is equally desirable for pickling and for oil extraction, and usually yields a fair crop, even when weather conditions are unfavorable, and in spite of neglect that would prove fatal to citrus-trees.

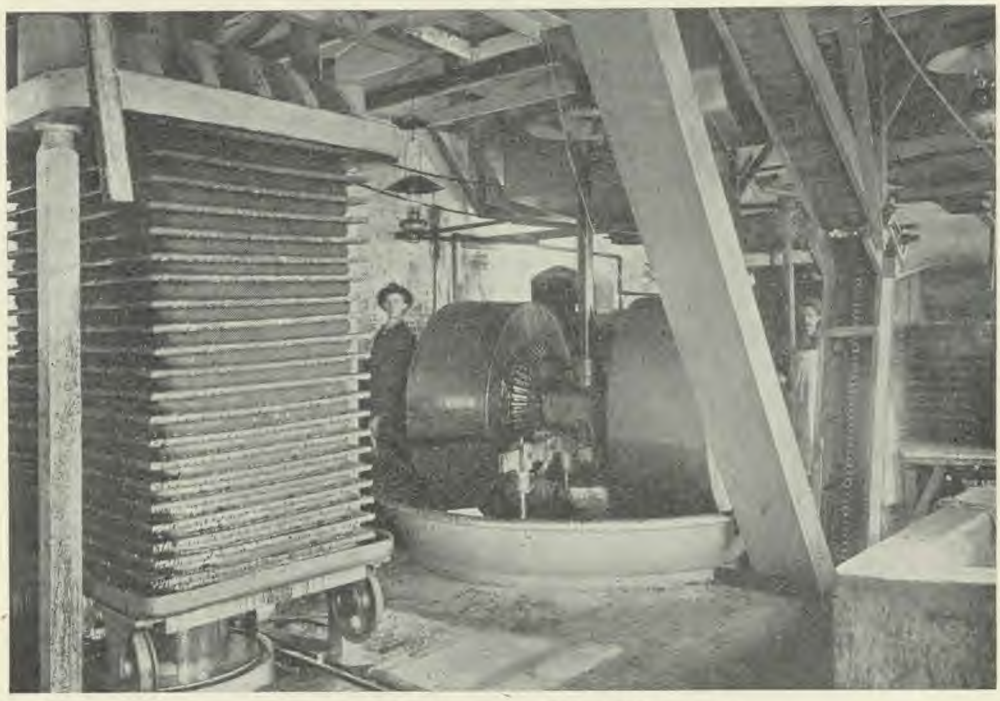


OLIVE-BRANCH WITH RIPE FRUIT

In Europe and Asia the olive-tree is nearly always neglected, the gnarled and twisted trees rarely being pruned, and cultivation being considered unnecessary. In California the modern commercial groves are set out as symmetrically as orchards of any other fruits, are headed not more than eighteen inches from the ground, and are kept carefully pruned in order to produce symmetrically developed trees with the largest possible bearing surface. The good effects of the American system may be judged from the fact that the average crop in the Old World hardly exceeds one third of a ton of fruit to the acre, while in California one ton to the acre is considered no more than a fair yield, and from a ton and a half to two tons to the acre is sometimes gathered. It is further claimed that the olives of southern Europe contain less than ten per cent of oil, but that those of southern California contain from twenty-four to thirty-two per cent.

The olive has always been held in high esteem in the lands in which it is familiarly known, the fruit, both dried and pickled, being used as a valuable food adjunct, and the oil employed for numberless medicinal purposes, as well as in place of butter, and for all culinary purposes to which American housewives apply lard and butter. Among the Greeks the olive was held sacred to Pallas Athene; and the highest distinction coveted by an Athenian at the hands of his countrymen was the award of the civic crown made of olive-twigs. A crown of olive-leaves, also, was the supreme prize of the victor in the Olympic games; and an olive-branch was equally symbolic of peace and chastity.

Among modern peoples, as shown by the figures already given, the Spaniards are the greatest olive growers. Statistics of the amount of fruit pickled or dried in each county are lacking; but the Queen olive of Spain is considered as representing the highest type of excellence. Very little imported olive-oil reaches the American consumer in its purity, the adulteration with cottonseed-oil and pea-

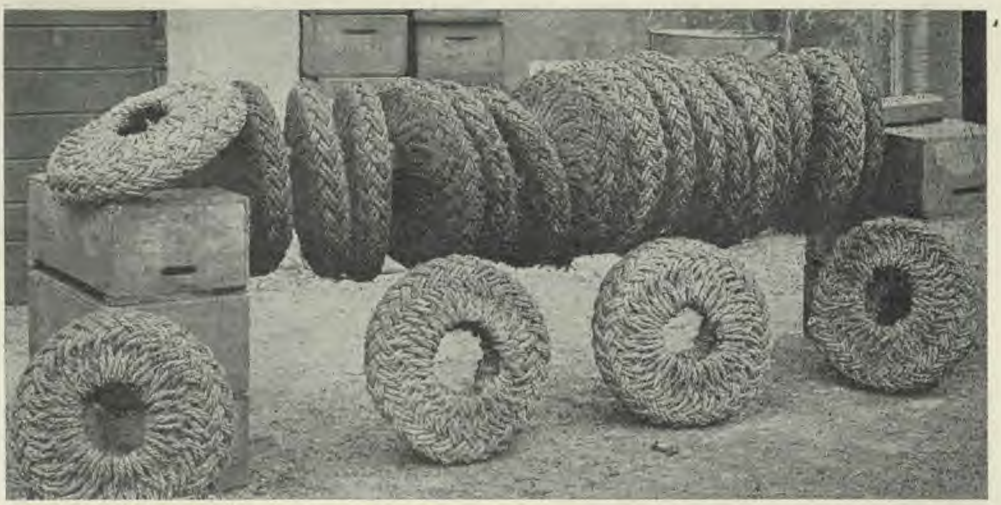


OIL PRESS ON LEFT, CRUSHER IN CENTER

nut-oil sometimes amounting to ninety per cent. However, the California product, if purchased in the original packages, is absolutely pure, with the added recommendation that it is prepared with a scrupulous regard for cleanliness that would amaze most manufacturers in the Mediterranean countries, where cleanliness is a virtue held in little esteem.

The olive-tree is an evergreen, blossoming in May; the small, white blossoms, with prominent yellow anthers, being borne in short, dense racemes. In the warmer valleys of California, the fruit begins to mature about the middle of September; and, where several varieties are grown, the harvest may continue through January, or even February, as ripe olives are not injured for oil extraction by being left on the trees for several weeks. In the first picking, green fruit is gathered, the largest olives being selected for pickling, and the most heavily laden trees being thinned, as this thinning process improves the size and quality, and hastens the ripening of the fruit that is left. At the Sylmar ranch, hundreds of Chinese and Japanese pickers are employed for the harvest, the removal of the small fruit from the trees being a slow and tedious process. Trees begin to bear four years after being set out in the orchards, yielding about twenty pounds of fruit each, and increasing the amount annually for ten years or more, when full bearing is reached. Two hundred pounds of fruit is considered a fair yield for a tree fifteen years old. Olives gathered for pickling must be handled with great care, as, if bruised, they will become soft and fall to pieces; but those intended for oil production may be handled in any manner without injury. The cost of harvesting olives for pickling is at least twenty dollars a ton.

Green olives for pickling are first sorted with respect to size, and then soaked in a solution of lime-water, to which three ounces of lye per gallon has been added. When this has penetrated the fruit to a depth of about one sixteenth of an inch, they are washed for several days with clear water, until every trace of the lye has been eliminated. They

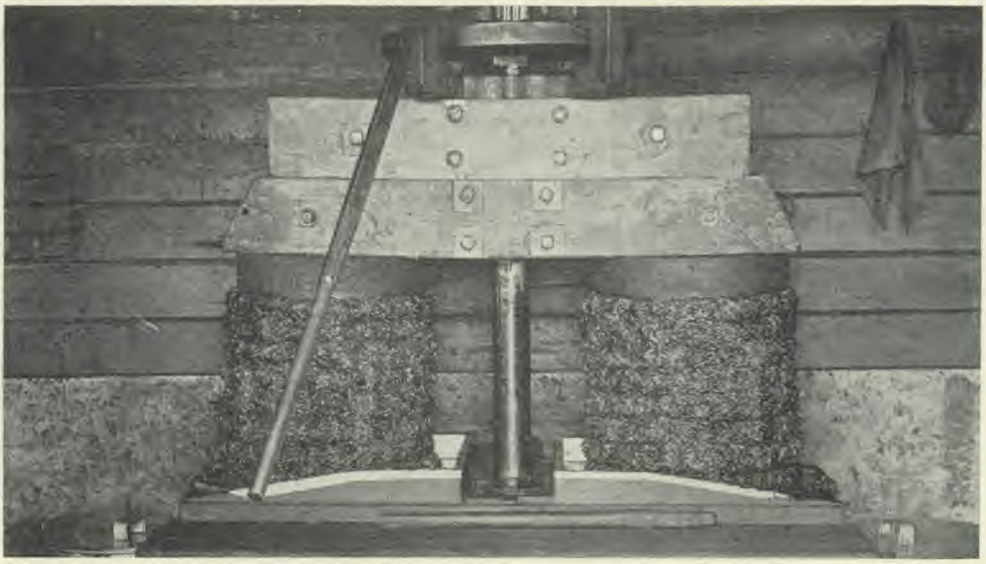


MATS FOR PRESSING THE CRUSHED OLIVES

are next immersed in brine, which is gradually increased in strength in the pickling-vats, about three weeks being required for the pickling process. They are then sterilized in a steam-heater, barreled up, and placed in storage, the bungs of the barrels being removed occasionally to permit the escape of gases, and to add new brine if necessary to replace what has been lost by evaporation. Not for six months are the olives ready for market. There are few things in nature more bitter than the natural olive (a fact not without its advantages, as neither birds nor small boys ever molest the fruit on the trees); but by the end of six months in the brine most of this bitter principle has been absorbed. The old brine is then poured off, and a brine made by the use of distilled or filtered water is used to replace it. The pickled fruit is then ready for bottling and placing on the market. Some concerns do not market their product for one to two years after it has been processed, the advantage in this being that the natural bitterness of the fruit has, by that time, entirely disappeared.

Ripe olives have largely displaced the green pickled fruit in the California market, but in most cities of the East these are as yet little known. When the people of the Eastern States come to an understanding of the great superiority in flavor and food qualities of the ripe fruit, green olives will take a secondary place in the market. The green olive is hard and woody, and of value only as a relish. Ripe olives are firm without hardness, easily digested, and of great food value, while infinitely more agreeable as a relish than the green fruit. A taste for either has to be acquired, as most persons know by experience; but a liking for the ripe fruit is acquired much more readily than for the green. The only difference in the manner of preparing the ripe fruit is that the use of lime-water is not necessary, and that a second lye bath is given, mainly for the sake of obtaining uniformity in the color.

Small, inferior, and frosted fruit may be used for oil making — anything, in fact, that is not wanted for pickling. Leaves, twigs, and other foreign substances are removed in a fanning-machine; and the fruit is then crushed by heavy iron or stone rollers revolving in a shallow, saucer-shaped iron pan. It is a popular superstition that if the pits are crushed, the oil will be of inferior quality. As a matter of fact, it is impracticable to crush the fruit sufficiently to permit of the extraction of the oil without also crushing the pits; and there is no olive-oil produced in any other manner.



OLIVES ON MATS UNDER PRESSURE

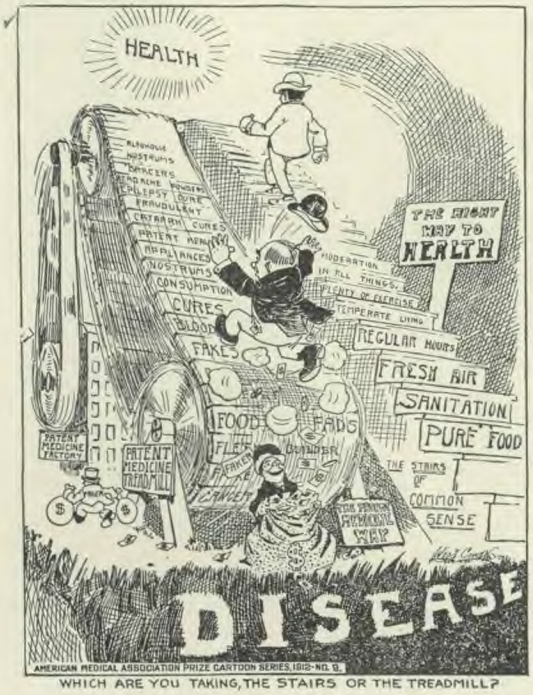
The first pressing is light, and the product is largely water. Another popular fallacy is that this constitutes the "virgin-oil," and is of superior quality. This is good "trade talk" (like the statement that oil of the best quality can not be obtained if the pits are crushed), and is freely indulged in by salesmen in expatiating upon the merits of particular brands; but it should not be taken seriously. Before making the second pressing, the pomace is again crushed, and then subjected to a pressure of two hundred tons to the square inch. This second pressing extracts the major part of the oil, in which there is but little water. In some establishments the pomace is crushed once more, and subjected to a third pressing, water being added to facilitate the extraction of the last ounce of oil that can be recovered. This final product is usually employed for soap-making and other industrial purposes.

The oil and water as they come from the presses are run into settling-tanks, where the water, being the heavier, settles to the bottom, when it is drawn off, or the oil skimmed from the top, a day or two later. The oil is then placed in huge storage tanks, which are lined with glass, four of those in use at the Sylmar establishment having a capacity of twenty-five thousand gallons each. In these tanks it goes through a sort of process of fermentation, and all impurities settle to the bottom. Before being bottled for market, the oil is filtered through several thicknesses of filtering-paper, completing the clarifying process. A ton of olives will produce from thirty-five to forty gallons of oil. Not the least striking feature of an establishment where this product is manufactured is the extraordinary care taken to insure perfect cleanliness. This is necessary as a matter of business, for the reason that olive-oil is a great absorbent of bad odors, and if manufactured or stored in bulk in uncleanly or badly ventilated quarters it will soon become rancid and unsalable.

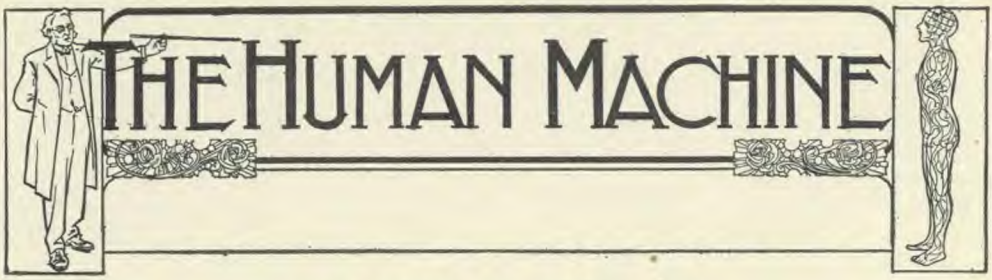
That the olive industries of California have expanded so slowly has been due mainly to the impossibility of marketing pure olive-oil in the East in competition with adulterated oils from foreign countries, and that prepared by Eastern jobbers by mixing olive-oil with cotton-seed, peanut, and other vegetable oils. If the national and State pure food laws can be enforced in such a manner as to make both foreign and domestic oils stand upon their merits as to purity and quality, the

olive industries of California are destined to a development comparable to that of the raisin, prune, and citrus-fruit industries.

Both the olive and the oil extracted from it are worthy of a much more extended dietetic use than is now accorded them in this country. Ripe olives are rich in fat and albumin, and in nutritive value are well fitted to take the place of meat. They are easily digested, contain twenty-five per cent of fat, and practically no starch, so that they may be eaten freely even if the digestion is weak. The value of pure olive-oil can hardly be overestimated. Its medicinal virtues are well known; and for all culinary purposes it is much more desirable than butter or lard, or any of the substitutes for these usually employed.



WHICH ARE YOU TAKING, THE STAIRS OR THE TREADMILL?



"THAT TIRED FEELING"

THIS is a very common condition. The very name indicates it. It is not only common in the sense that its victims have it often, but in the sense that its victims are numerous.

Almost invariably the cause of this very common, very disabling, and very distressing condition is something in the body itself, something caused by a wrong adjustment,— by wrong habits of living, to speak plainly.

As G. H. E. Starke, of New York City, in a paper read before the Borough of Bronx Medical Society, said, "That tired feeling" can be put down as of five distinct origins. The one most frequently met with is the overacid stomach.

The symptoms of the condition are belching after eating; a feeling of heaviness in the abdomen; flatulence; eructation, or belching of some liquid with or without food; heartburn, relieved only when food is again eaten; being weak and tired; having difficulty in concentrating the mind; suffering from a poor memory, drowsiness, and restless sleep; and awakening unrefreshed. In general, he is dragged out and miserable, knows he is "not right" and lacks much of being in good, efficient condition.

Dr. Starke finds these patients to be suffering from toxemia produced within their own bodies, and states his opinion that what they eat is "not food for their systems, but poison that is paralyzing their muscular and nervous systems." According to the doctor,—

"this entire trouble is one that is acquired either by too fast or by excessive and indiscriminate eating, and it can be relieved only by proper diet, the avoidance of acids, sweets, alcoholics, coffee, and tobacco. If not, often the way for gouty or rheumatic conditions is paved."

Another cause of "that tired feeling" is malaria, which often gets blame for what should in reality be attributed to faulty eating. Malaria, in fact, is not very frequent in the well-settled parts of this country. Other causes of "that tired feeling" are neurasthenia, hookworm disease, and beginning tuberculosis, each of which should have its own individual treatment.

Either of these conditions should be diagnosed by a competent physician. One who is not living in a state of fair health should learn if possible where the trouble lies and do what he can to remedy it.

Sometimes, as in the case of hookworm disease, a very simple course of treatment will remove the cause of the trouble, and the patient will immediately begin to show improvement.

In connection with Dr. Starke's views, Dr. Cornwall's suggestions in the *Medical Record* for the reduction of intestinal toxemia are also of interest. He directs, first, to reduce the putrefiable protein to a minimum by limiting the animal protein food almost entirely to milk; second, to keep the intestinal passage acid by the use of lactic cultures (as in the various forms of "ripened" milk or sour milk); third, to reduce the amount of cane-sugar to a minimum, or do without it altogether, because of its tendency to ferment; and fourth, to insure at least one bowel movement daily in order to clear away the putrefying substances.

HOT WEATHER AND HEALTH

[The following article, which appeared in the Monthly Bulletin of the New York State Department of Health, is well worth passing on to our readers.— Ed.]

WHY should not the human body find its most congenial environment in midsummer, when the atmosphere is nearest its own temperature of 98½°? As a fact, it has been hard to keep comfortable in the first half of the last two Julys. But the mercury in our thermometers has in these heated spells seldom run as high as a clinical thermometer will after a minute or two under the tongue of a person in normal health. When the atmospheric temperature approaches within ten or fifteen degrees of this, the resources for cooling the body begin to be put forth actively by the human organism; the sweat-glands are set to work with increased activity, so that by the evaporation of moisture on the surface the heat may be consumed. And when by reason of humidity of the atmosphere this evaporation is less available, we are very uncomfortable. Yet it would seem as if the most normal condition would be to have the body surrounded by a medium as warm as itself.

But the human body is the theater of heat-producing activities of itself; the processes of life, the energies of living, the food, some of it taken as fuel, all are calorific. We can not exercise or work without this resulting: in fact, the heat-regulating function of the skin is always operative; otherwise the heat of our own making would go beyond the limit. It is wonderful how near the body in health maintains its uniform balance of temperature, whether that of its surrounding medium is of the temperate, torrid, or frigid zone. Of either, the frigid is easier to adjust to, for by external protection and more active combustion through exercise the body can make itself warm. But how can we safely resort to agencies to reduce our temperature? The native of the equator, with little or no clothing and with few needs, gives himself to an idle life, and is happy; but the Anglo-Saxon has that in his blood which will never let him degenerate to the life of the Negro. Indeed, dress is a positive protection against great heat, especially of the head and back.

One may live in these hot spells as becomes the custom of Europeans in the tropics; rise early and do the day's work in the cool of the day; rest during the midday heat; sleep when the night cools off; admit the night air to the house and exclude the hot air of the daytime; have the air of the house as dry as possible. Sleeping-porches are a good device for hot weather. Diet in hot weather must be of the simplest and most digestible, for we can not afford to put our internal machinery to any more work than is necessary. Besides, the housewife must have her labors lightened. Cooling drinks of simple sort, such as weak lemonade, serve the purpose of abstracting heat and supplying material for the refrigerating perspiration. Fruits and vegetables that are seasonable are better than meat.

The state of mind can be a great contributor to comfort. It would be a good thing to hide the thermometer, and skip the newspaper account of what humanity is having to endure; reporters make as much an asset of news out of the hot spell as they do of a prize-fight or a baseball game. One should forget the heat rather than try to be philosophical about it; and the imagination can be made to work either for good or evil. Do not worry nor allow the heat or insects to worry you. Most have to work, and few of us can any more lie in the shade in a hammock and fan ourselves than we can fly to a more salubrious clime; but we can take what we must do in a quiet, complacent way, and avoid that, so far as is possible, which is under the circumstances disturbing in exposure, work, eating, or state of mind. Employers can

contribute much to the health of those who serve them by fitting the service to the occasion.

After all, it is the babies more than the workers who suffer from the heat. At least it is in July that the deaths of these immature little ones occur in greatest number. In May about one fourth of the deaths occur under the age of five years, but in midsummer they sometimes constitute one half of the total mortality. . . .

The chief disease of hot weather is of the digestive organs, and for the most part diarrheal. Heat contributes much to various disturbances of the functions of the body which react on the intestinal tract; it depresses vitality, and quickly decomposes the food, especially that of an animal sort. But it is easy to see how these disturbances can be guarded against, and the deaths from diarrheal disease are actually fewer than they were years ago. Few other of the common infectious diseases flourish at this season; measles, scarlet fever, and diphtheria always fall off in prevalence after the spring season. These are diseases of the school-time of the year. Typhoid fever comes in the fall season.

Summer-time should be the healthiest period of the whole year. We get out of doors and into the open air more. Save in the extreme periods, which are sure to come every year but which seldom are of long duration, we are in the natural environment of our bodies. To be sure, the frost quickens our pulses; and in this climate we are happy that we have the year's round of variety which makes us of this temperate zone the virile people that we are. But, after all, we can by due adjustment make the variety that summer brings our most wholesome time, and we are all of us loath to have it go.

HEALTHFUL COOKERY

A Few Wholesome Breads

George E. Cornforth

BREAD is such a valuable article of diet, and fills so important a place in the diet, especially of those who do not use flesh foods, that I venture to write again on the subject; and another reason for writing again on this subject is that I may tell the readers of LIFE AND HEALTH about several new breads which we have discovered since the previous articles were published. I say "*we* have discovered," because I did not originate all the recipes that I shall give. Some of them came from the fertile mind of one of my valued helpers. In this article I shall confine myself to explaining the making of beaten biscuits, and variations of beaten biscuits, and in the article following shall give recipes for a variety of other breads.

Maryland Beaten Biscuits

For several years I desired to know how to make Maryland beaten biscuits. I had known of such biscuits by reputation and had read recipes for making them, but knowing neither what they looked like nor what they tasted like, nor whether they should be hard or soft, solid or spongy, I did not know what to make from the recipes. But one day a circular came to me advertising some foods of which the store that sent out the circular made a specialty, and among the things advertised were Maryland beaten biscuits. I at once determined that I would have some of those biscuits, and at my first opportunity I visited the store. On inquiring their price I was told that they were thirty-five cents

BISCUIT BRAKE, AND DOUGH ROLLED AND CUT INTO "BEATEN BISCUITS"

a dozen, that is, three cents apiece; and when I received them, I found they were a little larger around than a twenty-five-cent piece and a little more than half an inch thick. Then I realized that they had a reputation. And when I got home to further test them, I ate one (for "the proof of the pudding is in the eating"), though I was sure they contained lard because the recipes for making them call for lard. Then I went to experimenting, knowing what I wanted to produce, and was not long in making something which was fully equal to the sample, but which did not contain the lard; and now I shall give my readers the benefit of my experience. For fifteen biscuits the ingredients are as follows: —

1 pint sifted bread flour
¼ cup cold cooking-oil
⅔ cup ice-water
½ slightly rounded teaspoon salt

A smaller proportion of oil and a little more water may be used, if desired, but the biscuits will not be quite so tender.

And this is the method of making the dough: put the oil and salt into a mixing bowl and beat the oil vigorously with a batter whip while the ice-water is slowly poured into it. As the water is beaten into the oil, the mixture turns white and becomes somewhat thick. Have the flour all ready, sifted and measured, in another bowl. Pour a little of the oil-and-water mixture into the flour and mix into a dough with a fork. Then pour on a little more of the oil and water, and mix to a dough. Continue thus till the oil and water are all added and you have a ragged dough formed. Gather these pieces together and knead them into a ball. This makes a very stiff dough, which is as it should be. The dough must be just as stiff as can be worked, and it will make very good biscuits if it is thoroughly kneaded and then rolled out and cut into biscuits, pricked with a fork, and baked in a slow oven. The dough may also be kneaded, as Mrs. Perkins suggests in her new cookbook, by grinding it several times through a food chopper. But the original method of working the dough was beating with a wooden mallet, and I think this gives the nicest texture to the biscuits. The dough is placed on a solid block, and with a mallet, wooden potato masher, or rolling-pin, beaten out into a sheet. It is then folded up, beaten around the edge to hold the air in, and then beaten out flat again. This process is continued till the dough is thoroughly kneaded and will snap when a little piece is quickly pulled off. The dough is then rolled out one-third inch thick and cut into small biscuits, pricked with a fork, and baked in a moderate oven. If they are baked in too hot an oven, they will be done on the outside before they are baked through, and will be soggy inside.

When properly made and baked, they will be hard but tender and crisp and easily masticated. Their hardness is a quality that is in their favor, because it compels mastication. But before one has tried them, they may seem somewhat formidable and not very inviting, especially to one who has long been used to eating soft bread. They drop on the table with a thud, which suggests that their interior can hardly be worth the effort required to explore it, but once one has "broken the crust," he finds something which invites him to masticate and taste still further. While we were experimenting on the making of these biscuits, some were made which did require some

CORN MUFFINS, AND BEATEN BISCUITS AND ROLLS

effort in order to get at their contents. One of our young men found some of the biscuits lying on a shelf, and after several efforts at cracking one, said, "Where are the directions that go with these things?" It was said that the carpenter kept another in his shop to sharpen his tools on. But we soon learned to make them so that they would invite one's investigation rather than repel it, especially after one once gets a taste. If this recipe is followed, no fears need be entertained that the results will be anything but satisfactory.

To make whole-wheat beaten biscuits use a scant pint of sifted whole-wheat flour in place of the white flour. To make oatmeal beaten biscuits, grind rolled oats through a coffee-mill or a food chopper with a sufficiently fine cutter to pulverize the oats. Use three-fourths cup of the ground oats and one and one-half cups of sifted pastry flour. If these mixtures seem very dry and crumbly, do not think something is wrong. With a little kneading, they will stick together into a dough.

In the factories where rolls of this kind are made, what is called a "dough brake" is used to knead the dough, which is a set of rollers through which the dough is rolled several times, the dough being folded up after each rolling.

Small "biscuit brakes" for home use are made, which are very convenient to use in making beaten biscuits and crackers made without soda, the rolling taking the place of the beating. I once made what was a fairly satisfactory substitute for a biscuit brake out of an ordinary clothes-wringer, by taking out one of the bars at the top so as to allow the rolls to separate farther.

The unleavened bread, or "cakes," of Old Testament times was, no doubt, a bread after the order of beaten biscuits. We read of the "barrel of meal" and the "cruse of oil" which sustained Elijah and the widow of Zarephath during a famine.

Coconut Rolls

½ cup ground coconut
¾ quart sifted pastry flour
¼ cup oil
½ cup ice-water
½ teaspoon salt

Grind the shredded coconut through a food chopper. Proceed as in making beaten biscuits, kneading the dough well, not beating it. With the hands roll the dough out into a long roll three-fourths inch in diameter. Cut into pieces two inches long and bake.

Date or Fig Rolls

For the dough use —

1¼ quarts sifted pastry flour
1 slightly rounded teaspoon salt
⅓ cup oil
⅞ cup ice-water

Combine the ingredients as in making beaten biscuits. Knead the dough well. Roll out into a sheet one-eighth inch thick. Cut into strips two and one-half inches wide. Lay stoned dates along the middle of the strips of dough. Moisten one edge of the strip. Roll the dough around the dates. Press the edges together. Cut into two-inch pieces and bake.

For fig rolls place the following mixture along the middle of the strip of dough in place of the dates: —

1½ cups fig marmalade (made by putting steamed figs through a food chopper)
¼ cup brown sugar
1 cup water
1 tablespoon rice-flour or corn-starch
Few grains salt

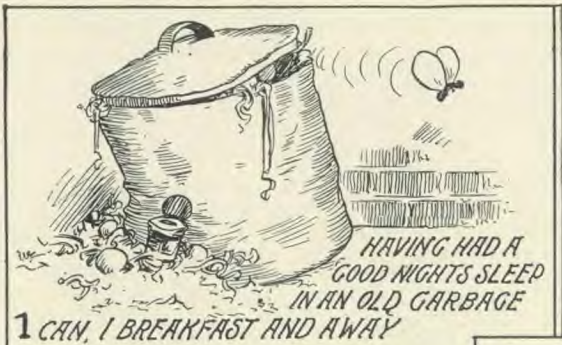
Cook the fig marmalade, sugar, water, and salt in a double boiler till the figs are well softened. Stir in the rice-flour or corn-starch, and cook fifteen minutes. When cold, it is ready to use in making the rolls. Or plain steamed figs cut into strips may be used in the rolls instead of this marmalade mixture.

By using rich cream instead of water and oil in these recipes, biscuits and rolls can be made which are even nicer, and thin cream will make them fair, though not so tender. Pastry flour can be used, the following being the proportion of ingredients: —

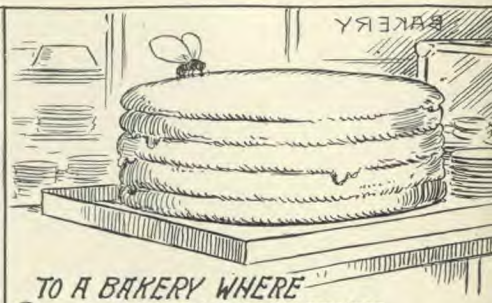
½ cup thin cream
2¼ cups sifted pastry flour
½ teaspoon salt

These may be made in the form of rolls, thus making "cream rolls," or if made smaller they will be "cream sticks."

Instead of using cream in this recipe, one-fourth cup cold oil and one-third cup ice-cold milk may be used, beating the milk into the oil according to the directions for beating the water into the oil.



1 CAN, I BREAKFAST AND AWAY



TO A BAKERY WHERE
2 I HAVE SOME DESSERT

GO FOR A
WALK AROUND
5 THE EDGE OF A DRINKING GLASS

FLY A

If at first you don't succee
Flies, as well as bad water
Screens in the windows pr
A fly in the milk may mea
Flies in the dining-room u
It is a short haul from the
fly route.

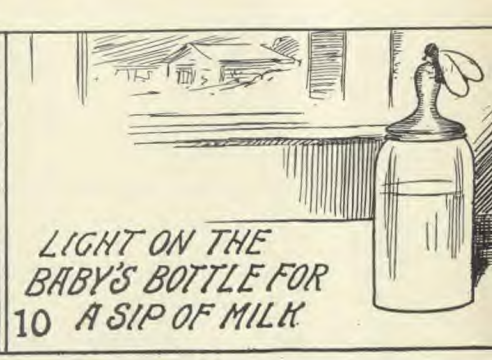
It costs less to buy a scre
a month.

A fly has natural enemies;
should be man.

It is better to screen the
the precaution and wear mourn

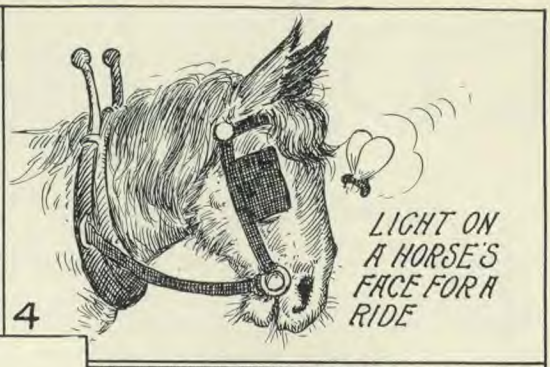
FIND A DOG ASLEEP
AND TEASE HIM
AWHILE
7

AND FIND THE TABLE ALL
9 READY FOR DINNER



LIGHT ON THE
BABY'S BOTTLE FOR
10 A SIP OF MILK

3 TAKE A DRINK AT A POOL IN THE GUTTER



4 LIGHT ON A HORSE'S FACE FOR A RIDE

ORISMS

at again.
ead typhoid.
crape on the door.
ember of the family in the grave.
precede nurses in the sick-room.
age can to the dining-table via the

or than to get sick and lay off for

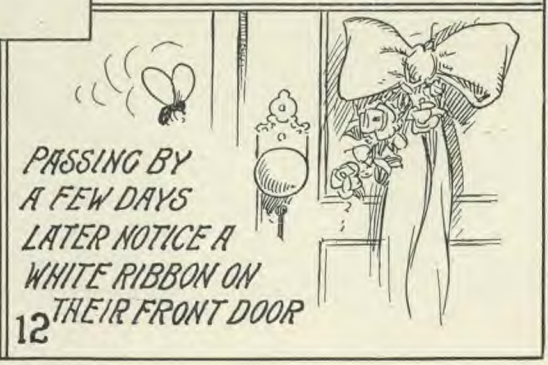
most effectual and most persistent

and wear a smile than to scoff at

6 SEE AN OLD STABLE DOOR OPEN

8 GO IN A WINDOW IN A NICE LOOKING HOUSE

11 CRAWL AROUND THE BABY'S FACE — FIND IT VERY SWEET



12 PASSING BY A FEW DAYS LATER NOTICE A WHITE RIBBON ON THEIR FRONT DOOR

EDITORIAL

BACTERIA AND THE DIGESTIVE TRACT

FOR a few issues we have been studying the views of various medical writers regarding the relation of the digestive processes to health, particularly those processes as modified — as they always are — by bacterial action.

We have seen in the work of Bouchard, of Metchnikoff, and of Combe a general agreement as to certain fundamental propositions which we may summarize somewhat as follows: The intestine is a great source of body poisons; these poisons are the result largely of bacterial action; the body can dispose of reasonable amounts of poisons, but the greater the amount of intoxication the more rapidly the defenses break down and the nearer invalidism results; the quality of our food and the manner of eating determine largely what will be the condition of digestion, and consequently of the general health.

We now take up a work of Herter,[1] an American who wrote numerous articles on the subject for the medical profession, and who was one of the famous "Referee Board" that disagreed with Wiley as to the effects of sodium benzoate. His book is hardly such as would be understood by the average reader, but we shall attempt to sketch in a brief way the most important of his findings.

Before beginning this study, it may be well to describe briefly, in simple language, certain groups of bacteria which may inhabit the human intestine.

Bacillus bifidus: the most predominating germ in nursling stools, which does not attack proteids, and seems to prevent putrefaction.

The colon group: a number of allied bacilli, known by the general name colon germs, which have much in common, are found in the intestines of cow-fed babies more than in nurslings, and are present generally through life. They seem to be the normal inhabitants of the intestines. They do not attack native proteins (as meat and milk), but when these have been partly broken down by the action of other germs, the colon germs can still further break them down into indol and other poisonous substances; so under some circumstances the colon group may become poison producers. Of this, more later on in this series. To some extent, the colon group antagonizes the putrefactive germs.

The putrefactive bacteria, the most harmful organisms that ordinarily infest the human intestine, producing poisons which cause much disability, hasten old age and death, are anaerobic, that is, they grow where there is practically no free oxygen; and as they are spore formers, they are destroyed with great difficulty. But as they do not grow in an acid medium, the acid-forming bacteria, such as the lactic-acid formers, have been used in the hope of antagonizing the putrefactive process. This, in reality, is the rationale of the use of sour milk, buttermilk, sauerkraut, and sour rye bread. The difficulty has been to find an acid-

[1] "The Common Bacterial Infections of the Digestive Tract and the Intoxications Arising From Them," C. A. Herter, M. D., professor of pharmacology in the Columbia University. The Macmillan Company, New York, 1907.

forming organism that will maintain itself in the lower levels of the intestines long enough to accomplish any permanent change in the bacterial conditions.

Herter finds that the most prominent organism in the nursling intestine is *B. bifidus,* which is found largely in the colon. Colon germs in smaller numbers are found in the small intestine, and the putrefactive germs are extremely rare.

In babies fed on cow's milk, the number of bacteria is very much greater, and the number of kinds of bacteria appears to be greater, as one might naturally expect. *B. bifidus* is present, but the colon types are more numerous. In addition, there are a number of other varieties, including a few of the putrefactive germs, but these latter are not at all plentiful.

In the period of adolescence *B. bifidus* is much less numerous, the putrefactive bacteria are more numerous than in the infant, still they are not numerous enough to make the putrefactive processes active.

In adult life the picture changes, and Herter's own words here are so significant that I quote freely: —

> " Great differences exist in the habits of different persons at this time of life, and these differences are in a degree reflected in the nature of the bacterial processes that hold sway in the digestive tract. In adult life the individual experiences new responsibilities, new ambitions, new dangers, an enhanced emotional life, and in very many instances a marked change in the direction of more sedentary habits incidental to a larger proportion of indoor life.
>
> " The dietary is apt to undergo an alteration in the direction of increased and frequently injudicious liberty and the use of tea and coffee, also the use of tobacco and alcoholic drinks is either increased or begun. For a time these influences may not make themselves definitely felt, but sooner or later they lead to slight derangements of digestion which manifest themselves clinically.
>
> " There are, of course, the greatest individual differences in respect to these manifestations. One sometimes meets with persons more than fifty years of age in whom the bacterial conditions in the intestine do not differ materially from those observed during the period of normal adolescence. These persons are usually well nourished, muscularly strong, and capable of sustained mental and muscular work. They have a high percentage of hemoglobin, and their red blood-cells approximate the upper physiological limit in regard to number. The volume of blood is large. These persons are remarkably free from nervous disturbances, even under trying conditions of work. They generally have at their disposal a surprising amount of reserve energy."

But these persons who have an intestinal flora like children, are the superbly robust. The larger proportion of people, with only " fair " health, who nevertheless " are able to do large amounts of work without excessive fatigue, and most of the time feel well," have a more demonstrable number of putrefactive bacteria in the intestines, and chemical examination shows that some putrefaction is going on.

> " In short, then, we find in middle life a number of persons whose health is good or fair, but in whom the putrefactive processes in the intestine are distinctly more active than is the case with most younger persons who are representative of normal health. These persons, though in good health, are not robust. A period of sustained hard work is followed by considerable and perhaps annoying mental and physical fatigue. Moreover, these persons have found by experience that they

must be more careful than formerly in respect to food and drink, emotional and sexual excitement, etc. Dining out and the use of alcoholic drinks are indulgences quickly followed by unpleasant consequences. Physical exercise out of doors becomes more and more a necessity to this group of individuals. They are conscious that it requires careful living to keep them in a condition compatible with the performance of their duties."

With the more aged he finds that the health depends more upon the condition of the intestinal canal than on the age in years.

"The age of an individual must be measured rather by the physiological potential of his cells than by the number of his years. There are men who at seventy have cells with functional capacities superior to those of other men who are little beyond forty, and who show their superiority in the ability to work without fatigue, to digest without any consciousness of the digestive processes, and to make large outputs of mental and muscular energy without ill effects. These persons retain soft arteries, are well nourished, and exhibit little atrophy of the subcutaneous areolar tissues, and hence show little wrinkling of the skin. They are, in short, candidates for an advanced age.

"If we examine the intestinal bacteria and the urine of such people, we find conditions wholly in harmony with the unusual preservation of general functional powers and with the freedom from signs of disordered digestion."

To sum up, then, the bacteria in the intestinal tract seem to determine very largely the health, the efficiency, and the longevity of the individual; and these changes from the normal in the bacterial content of the intestines, result from the dietary and other habits of the individual, and may begin comparatively early in life.

We must admit that the evidence presented here may not seem sufficient to demonstrate these propositions. We have attempted merely to touch the high points without entering into the details, which are rather too technical and certainly too lengthy for an article in this magazine. But the more we study the subject, the more we are inclined to think that more of man's ills are attributable to his alimentary tract than are usually supposed.

Pellagra and Its Causation

SURGEON R. M. GRIMM, of the United States Public Health Service, gave, in *Public Health Reports,* March 14, a careful report of an extended study of pellagra conditions made by him in certain districts in the South, from the summary of which the following quotations are taken: —

"More cases developed in persons living in small towns and villages than among those living in rural districts."

"More cases developed in the immediate vicinity of other cases than otherwise."

"The relationship existing between the cases of pellagra in this series and the character of their food supply admits, at present, of no conclusion."

"Pellagra seems to have been on a gradual but constant increase in the districts visited, with the probable exception of the year 1912."

"Pellagra is more prevalent than is ordinarily supposed, even by the physicians practising in pellagrous communities."

Following this summary he admits that he has been able to draw no definite conclusion regarding the cause of the disease. But though he admits that "the possibility of some insect playing a part in the dissemination of the disease does not seem inconsistent with the facts presented above," his observations lead him to favor the belief that —

"the relationship between food and pellagra seems to be a real one; but whether the character of the food may act only in predisposing to conditions that favor the development of pellagra, or whether certain articles of food act as the real exciting agent, or whether they act only as exaggerators of the symptoms (as the sunlight, for instance) is an open question. It is possible that some articles of food may act in all three ways. In the present state of this question no investigation of the etiology of pellagra can entirely ignore the character of the food supply used by the people among whom the disease is prevalent."

After Disaster Men Are Wanted

THE *Journal A. M. A.* in its issue of April 5 has an editorial article entitled "Doctors in Time of Peril," which, if true, ought to set people thinking, and — are they not true? Stating that after every great calamity the first men on the scene of disaster are physicians performing the sacred work of saving life and relieving suffering, it quotes, from a letter sent by an Omaha correspondent after the cyclone, the statement: "I have personal knowledge of physicians whose houses were destroyed, yet the moment they knew that their families were not injured, they left them and worked all night ministering to the maimed and dying," and states that from almost all the flood-afflicted regions there soon came the statement that "a special train, carrying physicians, nurses, dressings, and medical supplies, is on the way to the scene of the disaster." The *Journal* comments as follows: —

"At such times, what becomes of the innumerable sects and cults which, under ordinary circumstances, are constantly trying to usurp the place of the scientific medical profession and undermine the confidence of the public? Apparently they sink into obscurity and silence. When the emergency arises, what have they to offer? Suppose a despatch from Ohio last week had read: 'A special train containing one hundred osteopaths is on the way to Dayton. All the sufferers will be given spinal adjustments as soon as the train arrives;' or, 'It is reported that two hundred people are dead and thousands rendered homeless and in danger of their lives through exposure during the floods in Columbus. A special train of one hundred chiropractics is being sent to the scene at once. Those suffering from injury and exposure will be given immediate treatment for nerve impingement.' Or let us even suppose that those who disdain all material methods should emerge from their state of self-absorption long enough to do something practical: 'Senator Works tele-

graphs that he has arranged for a special train containing one hundred Christian Science healers to be sent to Omaha. This train has been given the right of way over all the railroads. All persons injured in the cyclone and blizzard will be given mental treatment as soon as the train arrives.' No such items have appeared in any of the newspapers. They would be greeted with laughter all over the country. The peculiarity common to all the unscientific and irregular cults and fads is that *in times of need and real peril they have nothing to offer.* When lives are in danger and when death rides on the wind and waters, the people want the men of scientific training and experience, of cool judgment and steady nerve, who can carry them all the aid the human intellect in its centuries of struggle has been able to discover. Fads and isms may be followed by some of our people in times of peace and safety, but they fail when real danger threatens." (Italics ours.)

And this does not mean, to my mind, that non-drug methods do not have their place, if they find it and are content to stick to it. And by this last sentence the writer does not mean to uphold drug-therapy. But he believes the regular, or "old," school is the most eclectic, the most progressive, the most open to the reception of ideas from the outside; and the schools founded on some narrow, exclusive dogma, by that very fact, have set a bar to their own advancement, and must necessarily be absorbed sooner or later in the school of non-sectarian medicine.

Manual Adjustment

PERHAPS the osteopaths and other non-drug practitioners have a reason to pat themselves on the back when members of the regular profession in their annual gathering declare that medical schools will be compelled to establish departments of physical therapeutics, because of the wide-spread lessening of faith in medicine by the profession and the laity, and *last but not least,* because of the phenomenal growth of osteopathy and other non-drug methods of treatment.

The osteopaths have this to their credit, that they adopted the slogan that *stimulation* is not cure. They adjust on the principle that *something is wrong,* and if this something wrong is corrected, nature will "do the rest," and strangely enough, nature seems in many, many cases to bear out their assertion. They antagonize not only drugs, but every form of treatment which acts merely as a stimulant, whether hydrotherapy, or massage, or what not. Whether this slogan, "Stimulation is not cure," will eventually be shown to be the truth, remains for the future to disclose. But the osteopaths are at least consistent in their contention and appear to be winning out at it.

In a paper read before the annual meeting of the American Association of Clinical Research, Academy of Medicine, New York, Nov. 9, 1912, entitled "Therapeutic Possibilities of Manual Adjustment," Dr. R. Kendrick Smith says:—

"What palpatation is to diagnosis, manual adjustment is to therapeutics. When all is said and done, does not the skilful diagnostician finally resort to the court of last appeal, his fingers? Does he not feel of the patient, again bearing in mind all the laboratory findings and the past history, in order finally to size up the situation and form his conclusion? Conversely, is it not instinctive actually to take hold of an ailing body and attempt to fix it?

"Anatomy and physiology are mechanical, and the microscope shows us that pathology is nothing more nor less than the mechanism of disease. So it can be argued most logically that the scientific treatment for faulty mechanical conditions by macroscopic or microscopic means should be mechanical."

He quotes Richard Cabot's "Case Histories:"—

"The masseur or osteopath sometimes cures or greatly relieves patients whom regular practitioners have failed to help. We are much in need of further light in this direction."

He tells of the Drs. Cyriax, of London, who, by mechanical means, have relieved a very large number of thoracic and abdominal complaints by working on the abdominal sympathetic. Dr. Smith, commenting on their work, however, says he prefers "the adjustment of the skeletal structures which are found often to cause interference with the nerves at their spinal origin, or to create vasomotor interference with the arterial or venus supply of the sympathetics."

Dr. Rogers, at the clinical Massachusetts General Hospital, had never found

a case of primary sciatica, every case being secondary to sacroiliac strain. This virtually admits the contention of the osteopaths.

The most severe case of renal colic that Dr. Smith had ever seen, and that a large number of prominent physicians supposed could be relieved only by operating, was cured instantly by manual adjustment of the ninth dorsal vertebra, which was palpably out of its normal position, and there was no recurrence during the five years, and the patient is still in good health.

Smith, on the basis of these observations, advises physicians to take a bird's-eye view of the body as a whole, under the classical method of inspection, but from the viewpoint of the mechanics of the body, rather than from the conventional standpoint of so-called physical diagnosis, which means an attempt to name the disease rather than to endeavor to find errors of static or motor mechanism.

Breadwinning Children

WE are so used to it that we have not appreciated the shame of it,— the shame of the industrial condition which compels tender children to enter the ranks of breadwinners and help support their families.

At the ninth annual conference of the National Child Labor Committee, held at Jacksonville, Fla., March 13-17, Florence Kelley, secretary of National Consumers' League, stated the problem so plainly that any one ought to understand it, even though at first thought it may seem revolutionary. "Why are parents dependent?" asks Miss Kelley, and answers: —

"Chiefly because industry does not pay its way, because fathers are killed or disabled by the accidents or diseases of industry, and the family is left, through no fault of its own, without the normal breadwinner. Often the normal breadwinner is transformed into a bedridden invalid, an unwillingly cruel burden upon the family instead of the support he would gladly be."

This condition is so almost universal, and we have been so accustomed to it, that we have hardly realized the injustice of it, not only to the persons and families involved, but also to the nation as a whole and to posterity. Miss Kelley says: —

"It is only in recent years that this truth has come to be recognized. Formerly many honest people believed that it was good for children to work at an early age for the noble purpose of helping dependent parents. Now we know that the child breadwinner is doubly the victim of industry, robbed of his parent, burdened with a dependent mother or an invalid father, and robbed of the joys of carefree childhood, and the opportunity of education now and advance in the future."

Contrasting with this dark picture, Miss Kelley looks forward to the time when "in the near future workmen's compensation, minimum wage boards, pensions for widows and disabled fathers, will take the place of child breadwinners; and our American children will all be schoolchildren."

Censorship of Woman's Dress by Men

A BILL was presented to the Ohio Legislature providing that a commission composed entirely of men shall censor woman's dress. Such a law is absurd on the face of it and ought to be defeated, but considering the fact that the suffrage amendment was defeated in that State, there may be enough men in the legislature who believe that this is a government not "*by the people*," but by the *male half of the people* to carry it. The very fact that any one could think of proposing such a commission composed entirely of men, shows the need of a suffrage amendment.

Perhaps the promoter of the bill thinks the subject of immodest dress and its effect upon susceptible men could not be minutely discussed in a committee of mature people of both sexes. Then it had better not be discussed.

We have no plea to make for immodest dress on the part of woman, and we have spoken freely regarding some of the prevailing fashions, but we think the better class of women are fully aware of the evil; and a commission composed entirely of women, or at least of women and men in about equal numbers, would appeal

more strongly to the sense of right of the women.

It is not at all surprising that there is an indignant protest on the part of women all over the State, and it doubtless includes many who are themselves convinced that woman's dress should be regulated in some way.

The day is fast passing in this country when men can legislate as lords of creation, expecting the women to assume the attitude of submission that England expected of our colonies. We may be certain that American women will never assume the militant attitude of their English sisters, but they will quite surely get their political rights, and that in a comparatively short time.

The attempt to pass such a bill as this dress censorship bill, with a commission composed entirely of men, only emphasizes the importance of the suffrage movement, and will doubtless help to advance it.

The Philosophy of Mastication

In the *Journal A. M. A.*, March 29, Dr. Geo. M. Niles, in a paper under the title "The Philosophy of Mastication," has some very good things to say regarding Fletcherism; for whatever may be said in favor of careful mastication, it is possible to carry this doctrine to an extreme, and in some cases it seems it has resulted in harm. Dr. Niles in a somewhat sarcastic manner divides chewers into two classes. He says: —

"As some people can perform a stated task and perform it well in half the time required by slow-moving individuals, and as some people move quickly, speak quickly, and think quickly, so they also chew quickly but well. By those ardent and strenuous spirits who are happiest when in the busy turmoil of competitive struggle, the act of mastication is naturally performed briskly but none the less adequately. To that other class who desire to meander through life in a leisurely way 'far off from the maddening crowds' ignoble strife,' to those semivaletudinarians whose gastronomic powers are under constant mental scrutiny, Fletcherism promises a fountain of youth."

Evidently his paper was written because of some experiences he had had with disciples of Fletcherism. He relates the following: —

"A short time ago there consulted me a cadaverous-looking dyspeptic who informed me that up to his retirement from active business five years ago he had never experienced digestive discomfort. During his laborious years he ate his breakfast hastily so as to get to the store betimes. His lunch was snatched at a near-by restaurant, while his evening meal was frequently rushed for some immediate engagement. The finer details of mastication never entered his head, neither did he realize that 'he was digging his grave with his teeth' until so informed by an overzealous friend, acquired in his new life of leisure. The small seed once sown took root in his idle mind, and with little else to do, he devoted himself assiduously to Fletcherizing his food and safeguarding his health. The result of this was a morbid introspection which transformed a robust, alert business man into a puny, whining invalid, full of pains and obsessions, and with every waking thought short-circuited on his stomach. That this is not an uncommon case any observant physician will testify."

Possibly this is too severe an arraignment of Fletcherism and introspection. Certainly many persons would do better by more careful attention to mastication, but there is a possibility of making a fetish of a good thing, and that is the tendency of every fad.

THE MEDICAL MISSIONARY AT WORK

LEST WE FORGET

Percival J. Laird

MANY years ago a sacred writer asked the question: "Is it nothing to you, all ye that pass by? behold, and see if there be any sorrow like unto my sorrow, which is done unto me." Lam. 1:12.

The contingencies that brought into existence the Chinese Republic seem to have affected the customs and characteristics of the people in some of the remote inland districts of China but very little beyond the abolishing of the queue.

A recent report from Nanning, China, says:—

"Thirty-nine lepers recently were put to death in an atrocious manner by order of the provincial authorities of Nanning, Kwang-si. The sufferers were shot and their bodies burned in a huge trench. These advices were received here to-day from the —— Mission, at Nanning, dated Dec. 14, 1912. They said the lepers lived in the woods a few miles outside of Nanning. The mission sought permission to build at its own expense a lazaretto for them, and the provincial authorities, pretending to consent, dug a pit in which was placed wood soaked with kerosene. At the point of the bayonet the lepers were driven into the pit and shot, and the pyre was lighted and their bodies burned in the presence of a large crowd. The authorities offered rewards for the discovery of other lepers, and this resulted in the shooting of one man afflicted with the disease. The governor, after the massacre, issued a proclamation in which he accused the lepers of having committed outrages. The letters from the mission say there is no foundation for this charge."

But let us follow the river course from Nanning, Kwang-si, until we reach the province of Kui-chau, from which a friend writes:—

"The Chinese province of Kui-chau, in the northwest corner of which I am writing this, has a population estimated at seven millions. There is not a doctor in the whole province. Missionaries are working in nine centers, and although several of them are married women, there is no medical missionary in the whole number. The sister province of Yunnan, ruled by the same viceroy, and having twelve millions of people, is a little better off, for normally there are three medical missionaries working in it. At present, however, two of these are on furlough, and the woman doctor at Chao-tung is the only medical missionary in the two provinces among about twenty millions of people.

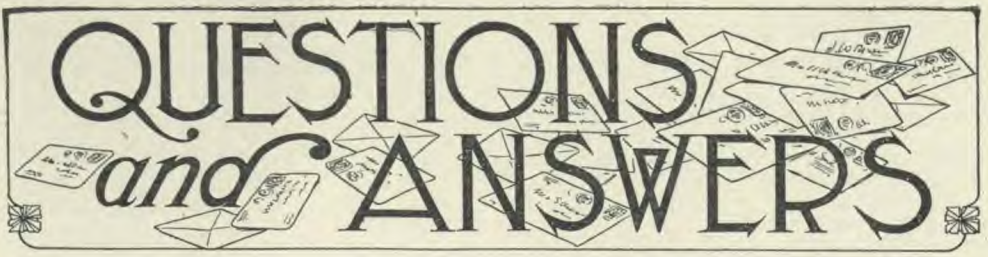
"In connection with the French consular service at Yunnan Fu and with the Chinese imperial customs at three centers, there are official doctors who in the latter case care for the foreigners, and in the former for natives as well. In Yunnan, therefore, one can get medical help in four of five different places. In Kui-chau, however, no medical help is obtainable. Seven millions, and no doctor!"

Then the writer draws a picture representing "London without medical help."

"A few weeks ago I heard of a family near my home where fever was raging. I walked the few miles to the village where the sick people lived, and then through mud and snow made my way to the poorest house in the very poor village. Pushing my way through the half-open door made of bamboos, and quite incapable of keeping out the wind or cold, I found myself in one of the poorest homes I had ever visited. There was but one room and that was partly underground. The hillside and some rocks came right into the room. A few sheaves of bracken were piled up on one side of the door to help keep out the cold, and on the other side of this bracken were a man and his wife and three children on the mud floor, all typhoid fever sufferers. There was no bedding at all, and the almost-naked mother, burning with merciless fever, was trying to feed at her breast a thin, half-starved baby, who was shriveled up with the heat of the internal fire. No one dared come in to nurse them, for all the villagers were terribly afraid of the 'black disease,' as it is termed. A brother of the father used to bring a jug of water each day and place it outside the bamboo door. No one else would come near. As I sat down by the side of this group of poverty-stricken, typhoid-smitten people, my heart was full of sympathy and of fierce rebellion. How I wished I could telephone for a doctor and a trained nurse! But I was in Kui-chau, a province bigger than England, and no doctor in the whole province! Why all this suffering and all this terribleness in the twentieth century after Christ? I shall not forget how that sick mother, with the sick baby, looked at me as she sat on the mud floor in her dirt and nakedness. I wished I could make every Christian in England feel that look, with its burning dread and terror. As the mother looked at the little one, she said, 'He never smiles now, teacher.'

"A few days ago one of my friends, a Miao preacher, came into my study in distress. He had been visiting a village about thirty miles away, and had found a mother who had just died. She had given birth to a little daughter, and then complications ensued. A doctor could, I think, easily have saved the mother, but the doctor was not to be had. The mother died, but the little girl lives. Then came the problem what to do with the little one. There was no one to feed it, and it was proposed to bury the baby with the mother. My friend stopped this tragedy, and now came to know what could be done with the rescued little lassie.

"About ten miles from the same place a mother died in similar circumstances. The friends were apparently helpless, and when the grave was dug and the coffin pieced together in the grave, while the dead body of the mother was lying on the ground by the side, there was a motherless baby lying near by, hungry and helpless. The dead mother was lifted into the coffin, and then the living little girl was placed by her side. The lid of the coffin was placed firmly on the top, the grave was filled in, and a few brambles were thrown over this to keep away marauding wolves or ghoulish dogs, and the men went home. Who heard the cry of the little one? The children are suffering and the mothers are dying, and there is the cry of pain in the land, and the terrible, desolating cry of poverty, loneliness, and great agony. And this is the twentieth century after the Great Physician broke his heart for a sinful, suffering world!"



THE editor can not treat patients by mail. Those who are seriously ill need the services of a physician to make a personal examination and watch the progress of the case. But he will, in reply to questions sent in by subscribers, give promptly by mail brief general directions or state healthful principles on the following conditions: —

1. That questions are *written on a separate sheet* addressed to the editor, and not mixed in with business matters.

2. That they are *legible and to the point.*

3. That the request is *accompanied by return postage.*

In sending in questions, please state that you are a subscriber, or a regular purchaser from one of our agents; or if you are not, accompany your queries with the price of a subscription to LIFE AND HEALTH. This service is not extended to those who are not regular readers.

Such questions as are of general interest will, after being answered by mail, also be answered in this department.

Acid Stomach.—"I am troubled with acid stomach, also have uric acid. Will a little soda and water help my stomach, or is the soda injurious to the stomach? I take about half a teaspoonful in a glass of water twice a week. Is this too much?"

It is probable that a little soda will not do any particular harm, although it is only a makeshift, and its aid is merely temporary. Like all makeshifts, it simply perpetuates itself.

It is possible that by the use of certain classes of foods you may be able to relieve the condition; for instance, milk is a food that does not tend to produce acid, but neutralizes the acid quite largely; whereas carbohydrates (starches and sugars), especially the breads, stimulate to the production of acid, and have a very small neutralizing power. For this reason I should think that you would be particularly troubled after eating such foods as potato and other starches and sweets. Very often the use of oils, such as olive-oil, or ripe olives, will bring more or less relief, probably from the mechanical effect of the oil in coating the stomach, and thus limiting the irritation and the stimulation to acid production. You may therefore do best to take your fuel food largely in the form of fats instead of carbohydrates.

Meats generally tend to stimulate acid production, although they also neutralize, or at least combine with, the acid. If raw milk disagrees with you, try scalded milk.

Drowsiness.—"I am twenty-nine years of age; medium physique, good vitality (having taken part in nearly all outdoor sports and done well), appetite good. Digestion good as long as I eat those things which agree with me, although I have to be careful. Outdoor life with just a right proportion of hard work to keep me healthy; bowels regular; general health splendid. I eat only those things I believe good for the body; sleep well, and freely; do not drink, smoke, nor chew; live a moderate life, and am energetic by nature; in fact, owing to God's goodness, am really enjoying life; but as sure as I go to church or other meeting where the air is warm, off to sleep I must go, and the same at home after supper. I do not think it is caused by heavy eating, for if I eat lightly, I go to sleep just the same. The only way I can keep awake in church on Sunday nights is to have two hours' sleep before I go; this should not be needful, as I get an average eight hours or more every night."

I have read your letter carefully, and it seems to me that hygienically you are doing about all that can be done. There may be some factor in your life you have not mentioned which has to do with the condition of which you complain. At the same time, I am inclined to think that possibly your digestion has something to do with it, because, as you say, your digestion is good as long as you eat those things that agree with you, which means that your digestion is not perfect. A person with first-class digestion finds no foods that "disagree" with him. He has no way of telling, from the effect on him, whether any ordinary food disagrees or not. When one knows that certain foods disagree with him, it is evident that his digestive apparatus is damaged to a certain extent. It is possible that you harbor bacteria which produce poisons that would cause the symptoms which you mention, and which would not cause any digestive symptoms under ordinary circumstances.

This is a problem I have worked over for a long time without very satisfactory results. Sometimes it looks to me as if this were a rebellion of nature against such an unnatural thing as sitting for a long time in one position and listening to some one else. Naturally we are made for an active life, and are not intended to be housed up in any such way.

The question of eye strain is one that is not without the range of possibility. I think

if you went to certain specialists they would tell you that your trouble is eye strain, and that you can not hope to have any relief until you get a pair of properly fitted glasses. This may be an extreme view, but on the other hand, some are apt to overlook eye strain when it really exists.

I have been frank with you in going over the possibilities, but more than this I can not do in your case, because it would take a very careful and thorough examination, and perhaps repeated examinations, to be able to determine just what is the cause of your trouble.

Catarrh With Crusts.—"I have been a sufferer from catarrh for about ten years. I have consulted many doctors without permanent relief. It seems to assume another form of late; hard scabs, difficult to be removed, form in the nostrils. I have tried vaseline with a camel-hair brush, but only part is removed. When there is rain or damp weather, breathing through the nose is impossible. I have to breathe through the mouth."

I would try the use of water containing a little soda or common salt. To a pint of water a little warmer than new milk add a rounding teaspoonful of either salt or baking-soda. It is well to have a tin cup or can for this purpose, something like a tomato-can. Bend the can so that the top of it is more egg shape than round, then placing the narrow part directly under the nostrils, bend the head down, and as you tip the cup to bring the water into contact with the nostrils, breathe in very gently. You will soon learn how to do it, and will feel the water dropping back into the throat, and can eject it from the mouth. By doing this carefully one can run a pint of water through the nose in a short time, and thoroughly cleanse out the scabs. After this has been done, the vaseline ought to act as a protection until the next treatment.

You must be extremely careful about blowing the nose violently after using this treatment, else you will blow some of the water containing infectious matter from the nose up into the ears, and cause permanent deafness.

For the difficulty of breathing in bad weather, inhale menthol dissolved in chloroform. Into a dram of chloroform have your druggist dissolve as much menthol as possible. A drop on a handkerchief, inhaled, will give marked relief.

When to Take Oil.—"If a person is going to take oil regularly, when is the best time to take it, before or after meals, or with meals?"

I am not certain from your letter as to what object you have in using oil. If it is as a food, as olive-oil or purified cottonseed-oil, I think the best form is to take it on salads or other foods. Otherwise perhaps it is just as well to take it after meals.

Adenoids, Tonsils, Deafness.—"My boy, who is nearly six and one-half years old, has been afflicted with enlarged tonsils for several months. A physician urged taking them out. I took the child to a hospital in this city, and the surgeon there said he was too young to have his tonsils removed, especially since they are not diseased. He took out the adenoids, which the boy had in his throat. His hearing is affected. The adenoids were taken out two weeks ago. Now what would you advise me to do?"

I desire to express to you my appreciation of your great confidence in me in that you expect me to be able to tell what is good for your boy whom I have never seen, when the physicians who have seen him are unable to agree. I possess no such magic powers.

When I was in sanitarium work, I used to take out tonsils in children, or burn them out, when they were quite young, as young as five years old. It is possible that if I were in the work now, I should not do it, as fashions change in this as well as in other things, and a doctor's opinion is very apt to be based upon where and when he was graduated.

It seems to me that it might be well for you to wait awhile. There is a possibility that the removal of the adenoids may have an effect also on the tonsils, and certainly ought to have some effect on his hearing. I would expect the removal of the adenoids to have more effect on the hearing than the removal of the tonsils. It is possible that some local treatment may need to be given in order to remedy the deafness, or partial deafness.

Indigestion.—"My wife does not eat any one thing day by day. She eats nearly all lawful foods, and that which she eats to-day with perfect comfort, may distress her the next time she eats it. We use plenty of good home-made buttermilk. Our bread consists of Graham rolls, corn bread, and white-flour bread."

This is not a case that will readily yield to home treatment. She should have the benefit of a course at a sanitarium. However, if this seems impracticable, you might try her on milk and zwieback quite largely for a time, that is, zwieback made by drying the bread in an oven until it is quite crisp, but not very brown. She ought to be able to eat rice and macaroni if they are carefully masticated, without much trouble. But bread in the form of zwieback can be so thoroughly masticated that it will be handled much better in the stomach than these other foods. Potato I should prefer to have mashed and beaten until white, and then slightly browned in the oven.

Be sure that her teeth are sound; it makes all the difference in the world to one having a condition of this kind if putrefactive germs are being carried down with the food from decaying or loose teeth. And it is also quite important to use the brush with some alkaline solution before and after each meal. Perhaps for home use a teaspoonful of baking-soda in a cup of water will answer the purpose, although if you desire something a little more elegant, you might obtain a package of alkaline antiseptic tablets from a druggist and use them as directed.

Half an hour to an hour of *complete rest* after each meal will do her as much good as any other one thing.

IN THE MAGAZINES

RECENT ARTICLES WORTH A CAREFUL READING

[N. B.—Figures refer to names of periodicals in foot-note.]

Are We Doing as Much for the Tuberculosis Patient as We Should? by F. M. Pottenger, A. M., M. D., LL. D., in 3, April.

Taking the Rest Cure While Working, by Eleanor J. Smith, in 6, May.

A suggestion well worth trying by those who are "all nerves," or who are tending that way.

The New Hope in Cancer, by Samuel Hopkins Adams, in 8, May.

A popular presentation by one who has done excellent work in popularizing medical knowledge.

What Is the Matter With Mexico? by John Kenneth Turner, in 9, May.

Mr. Turner is an authority in Mexican affairs. Probably no other American writer is so well prepared to explain conditions in Mexico.

Bacterial Vaccine Therapy, Its Indications and Limitations, in 7, beginning April 26.

A series of carefully prepared articles that every practising physician, in view of the astounding claims made by the manufacturers of vaccines, should consider.

Cigarette Smoking, Injurious Effect on Boys, by F. H. Barnes, M. D., superintendent Barnes Sanitarium, in 10, May.

What the cigarette does to the boy, told by a man who comes in contact with numberless cases of nervous and mental diseases.

Laziness, by H. Addington Bruce, in 8, May.

Active Children Who Became Lazy—Great Men Who Were Lazy—Organic Defects That Tend to Produce Laziness—Idleness Easily Becomes a Fixed Idea—How Darwin Overcame Laziness—Advice to the Lazy.

Some Newer Problems and Some Newer Phases of the Antituberculosis Warfare in the United States, by S. Adolphus Knopf, M. D., in 1, April.

This article by a recognized authority should have a wider reading than it is apt to be accorded in a technical periodical.

What the Smoker May Pay for His Indulgence, in 12, April.

This issue, devoted almost entirely to tobacco, is a valuable paper to place in the hands of young persons.

Trachoma, by C. M. Harris, M. D., in 4, April.

Now that we have learned that this dangerous and formidable disease, often known as granulated lids, has a strong foothold in various parts of this country, articles like the above are timely.

Alcohol in Relation to the Home, by Gen. and Mrs. Bramwell Booth, in 2, April.

A powerful arraignment of the liquor evil by the Salvation Army leaders, who have for years been on the "firing line" and who know at first hand the effects of liquor on great masses of the people.

Alcohol and the Undergraduate, by Prof. G. Sims Woodhead, M. A., M. D., LL. D., in 2, April.

Professor Woodhead, universally recognized as an authority on medical subjects, is careful of his statements, and what he says can be accepted without reservation. The present paper should be read by students who believe that an occasional drink will not harm a normal person.

The Truth About Bone-Setting, by H. A. Barker, in 5, March.

A fifteen-page article by one who pleads for the recognition of all that is scientific in spinal adjustment or osteopathy, and the establishment of a chair on this subject in the medical schools. It seems that Dr. Bryce in the *British Medical Journal,* in an article, "Mechanotherapy in Disease With Especial Reference to Osteopathy," pleads for "the admission of this new form of bone-setting among the recognized methods of treatment practised by the medical profession." "What I desire," says Barker, "is to bring the methods before the faculty as a whole, secure their place in the curriculum of medical schools, and either establish osteopathy as a separate branch of surgical science—as dentistry is established—or obtain for the entire body of students a thorough and practical training in the work."

Our Facile Mastery of English, by F. B. R. Hellems, Ph. D., in 14, February.

A well-written plea for purity of style, well worth reading by every writer and would-be writer.

Why Is the Pauper? by George Thomas Palmer, M. D., in 13, April 5.

Suggestive facts as to causes and prevention of destitution revealed by a study of a mid-Western almshouse. A constructive and optimistic criticism.

"U. S. Inspected and Passed," by Caroline Bartlett Crane, in 11, March, April, May, and June.

These articles show that secret orders given by our government officials enable meat packers to give meat to Americans that is rejected for export trade,— the meat of diseased animals. The published regulations do not allow such meat to be approved. No magazine depending on its advertising columns would dare to publish such articles as these by Mrs. Crane.

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1. *American Journal of Public Health,* 289 Fourth Ave., New York, 20 cents.
2. *British Journal of Inebriety* (quarterly), 8 Henrietta St., Covent Garden, London.
3. *California State Journal of Medicine,* San Francisco, 15 cents.
4. *Dietetic and Hygienic Gazette,* New York, 15 cents.
5. *Fortnightly Review,* London, 2s. 6d.
6. *Harper's Bazar,* New York, 15 cents.
7. *Journal of the American Medical Association,* Chicago, 15 cents.
8. *McClure's Magazine,* New York, 15 cents.
9. *The Metropolitan,* New York, 15 cents.
10. *New* York *Medical Times,* New York, 15 cents.
11. *Pearson's Magazine,* New York, 15 cents.
12. *Scientific Temperance Journal,* 23 Trull St., Boston, 60 cents a year.
13. *The Survey,* 105 E. Twenty-second St., New York, 15 cents.
14. *The University of Colorado Studies,* Boulder, 50 cents.

Physical Education.— Delegates from many countries assembled in Paris on March 17 to attend the First International Congress on Physical Education. The sessions, which continued several days, were held under the auspices of the faculty of medicine of the University of Paris.

Soda-Fountain Warning.— Word comes from Dr. Lederle, of the New York Department of Health, that the soda-fountains of this country are using soapbark (a poison) in order to make the drinks foam. One living in a town where the drug stores are not subject to careful inspection will be on the side of safety to avoid the use of foaming drinks.

Oleomargarin Quiz.— Judge Landis, federal judge of Chicago, has instructed the grand jury to inquire into the alleged frauds in escaping the federal oleomargarin tax by manufacturers. The alleged oleomargarin frauds have been the subject of litigation for several years, and the drastic action taken by Judge Landis is expected to result in many exposures.

Commission on Vaccination Reports.— For two years the Pennsylvania State Commission on Vaccination has been attempting to collect facts for a report, but owing to irreconcilable differences of opinion, after having heard the testimony of fifty-eight witnesses (thirty of them physicians, only four opposing vaccination), there were three minority reports, the most drastic favoring the abolition of vaccination laws, the prohibition of quarantine of persons refusing to be vaccinated, and legal redress for injuries resulting from vaccination. The majority report favored continuance of the present regulations.

Chinese Branches of American Medical Colleges.— The University of Pennsylvania has a medical college in Canton; Harvard Medical School, in Shanghai; and Yale University, in Changsha. Doubtless these medical schools, inspired by the highest ideals of American medicine, will do much to raise the standard of medical education in China.

Militant Suffragettes Insane.— The suggestion that the militant suffragettes be declared insane, that is, "in a condition in which the subject is so mentally out of harmony with the general environment as to be unable to control conduct and to become a public danger," and incarcerated in an asylum for the criminally insane, would seem to be a good one. Asylum doctors would know much better than prison officials how to treat a person who had gone on a "hunger strike." They are used to dealing with these wild irresponsibles and could do it humanely.

Typhoid From the Country.— Dr. Bolduan, who has been for ten years investigating the causes of typhoid fever in New York City, asserts that more than fifty per cent of the cases are infections from the country, including that brought by milk and out-of-town visitors; and he believes that with the exception of cities having an infected water-supply or whose sewer system is such that flies can carry infection from the sewage, most cities get the greater part of their typhoid from the country. The problems of the cities, then, must be enlarged to include the sanitation of the rural districts from which they obtain their supplies of milk and water, or to which they send their summer vacationists.

Common Diseases, by Woods Hutchinson, A. M., M. D. $1.50 net. Houghton Mifflin Company, Boston and New York.

If one takes up a book by Dr. Hutchinson expecting to be entertained, he will not be disappointed. The doctor's method in writing is, first entertain, next instruct. Possibly he recognizes the pedagogical fact that what is entertaining is more likely to be remembered. Treating of such disease conditions as dyspepsia, catarrh, baldness, worry, sea-sickness, deafness, old age, etc., in his usual racy style, he has produced a book that will appeal to the common man.

Particularly interesting are some of his utterances in the chapter "The Passing of Pills and Powders." Tracing the first use of our common drugs in prehistoric ages, he shows that one reason why these remedies, originating in gross superstition, have not been thrown over long ago, lies in the fact that "any drug which is used with sufficient constancy and indiscriminateness in any disease will score eighty-five per cent of cures, providing it is not positively harmful." This fact, that the drugs used get the credit for the cures performed, when nature has done the work, is the secret of the strong hold of drugs on the people. And the author ventures the prophecy, "Next after the fight against disease, the biggest struggle that the coming doctor has on his hands is with drugs and the deadly grip which they have upon the confidence and the affection both of the profession and of the public."

Another great difficulty as seen by Dr. Hutchinson is that "the oldest, most highly prized, and most universally used drugs are unfortunately the most dangerous and poisonous."

Mentioning the fact that out of the hundreds of drugs in use Osler goes so far as to speak of "six or seven *real* drugs," Hutchinson continues: "Even this small group of 'real' remedies is looked upon merely as a group of tools, whose results will depend chiefly upon the skill with which they are handled; moreover, as edge-tools, which will cut both ways and do harm as well as good." And he concludes: —

"We no longer believe that any drug, of itself alone, will cure any disease. It must, like Turner's colors, be 'mixed with brains;' and those same brains, applied to a search for and removal of the cause, will cure far more diseases without any drug at all. Food, rest, sunshine, exercise, bathing, massage,— these are the sheet-anchors of our new materia medica."

Regarding "home doctoring" he says: "Any remedy, or procedure, that involves hot drinks or baths, sweats, and rest in bed, is safe to score a high percentage of cures."

Regarding dyspepsia he says: "By far the commonest and most potent cause of dyspepsia is lack of exercise in the open air, and the second commonest is lack of rest. Very few people overeat, but a great, great many people, particularly business men, indoor workers, and women of the well-to-do classes, underexercise. It is not too much fuel in the fire-box that makes clinkers, but poor coal and the lack of proper draft."

These few quotations show that Dr. Hutchinson stands squarely in the line of preventing, and if necessary, of curing, disease by rational measures.

Healing Influences, by Leander Edmund Whipple. $1.25. American School of Metaphysics, New York.

Another of the books by the "New Thought" people. One must grant that the mind is potent in the relief and cure of disease. The charm of the medicine-man, the virtue of amulets, the healing power of a horse-chestnut in the pocket, all attest to this fact. Even physicians who are loath to admit that there is anything to mental healing, will get around the cures by other sects,— the osteopaths, homeopaths, etc.,— by saying it is the result of "suggestion." To admit that any one is cured or measurably relieved by suggestion is to admit that the mind has some tangible power in the improvement of the physical condition; and the merest tyro knows how bad news, grief, disappointment, despair, etc., may unfavorably affect the digestion and other functions.

But the sane man is the one who perceives the limitations of these mental processes, who realizes that there are other and very important causes for disease, which must be considered as well as the mental cause.

Muscle Training in the Treatment of Infantile Paralysis, by Wilhelmine G. Wright. Paper cover, 32 pages, 25 cents. W. M. Leonard, publisher, Boston. 1913.

This reprint from the Boston *Medical and Surgical Journal* explains why and how muscle training is advantageous in infantile paralysis, and gives a carefully prepared system of exercises for developing the various muscle groups.

Housing Problems in America, Proceedings of the Second National Conference on Housing, Philadelphia. Dec. 4-6, 1912.

Dickens sagaciously said: "I have systematically tried to turn fiction to the good account of showing the preventable wretchedness and misery in which the masses of the people dwell, and of expressing again and again the convic-

tion, founded upon observation, that the reform of their habitations must precede all other reforms, and that without it all other reforms must fail."

There is no problem before us more important than the housing problem, for with it are connected poverty and disease, not only to families but to municipalities and nations. Every slum is a cancer eating at the vitals of the community that harbors it.

The Second National Housing Conference was a gathering of able, earnest workers who have had a vision of better things, and who are working for the fulfilment of their vision.

Beginning with the masterly address of Ambassador Bryce, the book is a compendium of the best that has been said on the housing question. Among the topics discussed are: "The Menace of Great Cities," "Room Overcrowding and the Lodger Evil," "What Are the Best Types of Wage-Earners' Houses?" "Financing the Small House," "Garden Cities," "The Factory and the Home," and "Rural and Suburban Housing."

Copies of the proceedings may be obtained from the National Housing Association, 105 E. Twenty-second St., New York City. Postpaid, $2.

Quiet Talks About Our Lord's Return, by S. D. Gordon. Net, 75 cents. Fleming H. Revell Company, New York and Chicago.

In his boyhood days, Mr. Gordon says, he heard much from Mr. Moody's lips about our Lord's return. Later he became confused over the different teachings regarding it until it was practically pushed out of his working program. Studying the subject later in the Bible, he arrived at results which profoundly affected his outlook as a follower of Jesus Christ.

A few quotations may whet the appetite of the reader for more: —

"The way in which the Bible is written is a good deal like a mosaic of which the pieces are not yet fitted together. The gathering of the different pieces of the mosaic, finding their relation, and fitting them in place until all are accurately together, each piece next to its fellow, is a fascinating task, yet requiring much patience. The more homely, more familiar thing of the same sort is the geography game of blocks by which young children are taught first lessons in geography. It is the fascination of the old mosaic turned into practical use in child-training.

"So it is with the Bible. A full statement of its teaching on any one subject is never found all together in one place. The revelation of truth is gradual."

"The humblest, busiest Christian has the enormous help of possessing a book from God. It is not large; it is written for the most part in simple, direct language; it comes to us in our own mother tongue. By agreement of all it contains the highest ideals. And, even more, it brings to us the Man who lived those ideals amid circumstances just like ours. And it does yet more, it gives the secret of power in living these ideals. And that is something no other book of West or East does, or can do."

"In the beginning of the Patmos revelation our Lord says, 'The things which must shortly come to pass.' At the very end of it he says three times, 'I come quickly.' And midway a voice comes breaking abruptly in between the sentences, 'Behold, I come.' And you almost look up thinking to see some one. Our Lord Jesus is speaking from the glory side here, and of course he knew all these centuries would run out before he did come. How do you explain it? It seems an unanswerable puzzle."

Men, Manners, and Medicine, by Medicus Peregrinus. W. M. Leonard, publisher, Boston. 1913.

"The essays and sketches which make up this collection originally appeared from time to time in the columns of the Boston *Medical and Surgical Journal,* for which they were written. They represent the random observations of a doctor, from his personal and professional point of view, on men and books and other phenomena, especially in relation to medicine."

The author, in republishing these, expresses the hope that those who read them, physicians and laymen, may realize that a doctor's life, like all other modes of human existence, affords abundant special opportunities for contact with larger interests outside the day's work.

Michigan the Ninth.— Michigan is the ninth State which has passed legislation authorizing the sterilization of habitual criminals.

Washington the Sixth.— Washington is the sixth State to abolish the death penalty for crime, the other States being Kansas, Maine, Michigan, Rhode Island, and Wisconsin.

Must Support Family or Break Rock.— Washington has passed a law providing that a man who deserts or fails to provide for his family may be compelled to work on the public roads. It will be the duty of the county commissioners to pension the family. Doubtless this latter proviso will stimulate the commissioners to reform these shirking husbands as soon as possible.

Purity Congress.— Under the direction of the World's Purity Federation, the Seventh International Purity Congress will be held in Minneapolis, November 7-12. Topics considered will be abolition of the white slave traffic, suppression of public vice, instruction in sex hygiene, and social, civic, and moral reform.

Aigret Plumes to Go.— The importation of aigret plumes, or the skin or feather of any kind of wild bird, domestic or foreign, except ostrich feathers, is absolutely prohibited in the Wilson-Underwood tariff bill. The slaughter of beautiful birds for the sake of fashion has almost annihilated them, and if the new administration succeeds in passing this measure, it will be, if you will permit the atrocity, a "feather in its cap."

A Long Hospital Record.— One patient in a Philadelphia hospital has been an inmate of the institution since 1854. She entered when she was twenty-one years old, and now is eighty.

Abstinence Versus Moderation.— For the five-year period, 1908-12, the Scottish Temperance Life had death claims as follows: General section, 186 deaths out of 271 expected, or 69%; abstinence section, 356 deaths out of 770 expected, or 46%. That is, abstainers are much better risks than moderate drinkers.

Ancient Surgery in Egypt.— Dr. F. M. Sandwith, consulting surgeon to the khedive of Egypt, in a lecture in London, said that the earliest surgical instruments so far as known were bark splints used in Egypt to hold in place fractured limbs. In one case, a thigh was held in place by splints and bandages which were applied with as much skill as we now possess. The doctor believes these splints date back to 4000 B. C.

Life-Insurance and Tobacco.— Some years ago I wrote to various insurance companies to learn whether they had statistics showing that the use of tobacco had appreciable effect on longevity, and in every case the reply was to the effect that there were no such statistics. In other words, the life-insurance companies would as soon insure a smoker as a non-smoker. Some companies, while they receive both abstainers and moderate drinkers, list them separately, and because of the smaller death incidence in the abstaining class, they are able to give them insurance at a lower rate. I know of no company that so favors non-users of tobacco. The Postal Life-insurance Company of New York, which issues health bulletins to its policy-holders, says in Bulletin Seven,—and we can be sure that this is prepared in the medical department,—"We believe that the attitude of the medical profession is rapidly changing toward tobacco as it has changed toward alcohol." This would indicate that the medical men connected with this insurance company believe that tobacco is definitely injurious to the human organism. This bulletin contains a supposed conversation between a native of Mars and a cold-blooded scientist, and in this conversation it is pretty clearly shown that the use of tobacco is a practise that would not commend itself to an unprejudiced visitor from another world, and the scientist does not have very much to say in defense of the habit. In fact, what he says is only what has been absolutely proved in the laboratory, but it makes out rather a bad case for the intelligence of those who persist in using the narcotic.

Booze by Parcel-Post.— A Minnesota liquor dealer is in trouble for sending a demijohn of whisky by parcel-post into prohibition territory. It was discovered on the way by an inspector, who went back to investigate. It is a serious offense to send liquor by post, and the man probably faces a penitentiary sentence or a heavy fine.

Liquor in England.— During the three last half-decades, or five-year periods, there has been a steady decrease in the average per capita consumption of spirits, beer, and wine in Great Britain. Undoubtedly the educational propaganda showing the injuriousness of liquors, and the temperance organizations, are in part to be credited with this result.

Some Deserve Illness.— *Collier's* is authority for the statement that the village of Greenwich, Conn., having fifty-seven millionaires and the highest property value in the country, is infested with the anopheles mosquito, and last year had 900 cases of malaria, which doubtless means chronic invalidism for life to many of the victims, among whom were not only the families of the poor, but also the rich. The regular health officer did nothing; perhaps he was elected for political reasons rather than for efficiency. One or two physicians with more modern ideas, for the sake of humanity and the community's good name, asked the town committee for a fund of $5,400 to exterminate the mosquitoes. It was refused because, of course, it is extravagant to spend money on health. The fifty-seven millionaires, when appealed to, responded with the magnificent sum of $280. And this in a State where we are told the people are shrewd enough to sell wooden nutmegs and wooden oats; but their shrewdness does not seem to be developed in the line of disease prevention.

Gasoline Poisoning.— A recent issue of the *British Medical Journal* tells of a boy of sixteen who, cleaning out the pit of a private garage, was overcome by the petrol (gasoline) fumes, and was lifted out unconscious. He vomited violently. Being removed to his home, he came under the care of his physician, who observed such symptoms as shallow breathing, thready pulse, marked cross-eye, reduced temperature, chattering teeth, and absent reflexes, showing a very serious, if not alarming, condition. Three hours later the patient aroused and complained of violent headache and pain in the stomach. The physician believes that a little longer exposure would have been fatal. A Canadian medical journal has reported forty-two cases of poisoning from gasoline in the construction of the Montreal tunnel.

Parish Doctors and Dentists.— The Second Avenue Baptist Church of New York City has arranged to have physicians care for the health, and dentists care for the teeth, of the members of the parish. Workrooms, offices, laboratories, and even interpreters have been furnished for the doctors and dentists.

Temperance at the White House.— The edict has gone forth that the Wilson administration shall be a white ribbon affair, in regard to serving wines and liquors at any entertainment. Not only are the President and his family opposed to wine drinking, but the same can be said of Vice-President and Mrs. Marshall and nearly the whole Cabinet.

Germany Souring on Beer.— The number of total abstainers is rapidly increasing in Germany. This may in a measure be due to the attitude of the emperor, who has realized that the use of alcoholics does not make good soldiers and has urged the men to abstain. The average per capita consumption of spirits, beer, and wine is steadily decreasing, each five-year period since 1895 showing a smaller consumption of each of these classes of beverages than the previous period.

Aluminum Cooking Vessels.— Dr. John Glaister, regius professor of forensic medical and public health, Glasgow University, has recently made a report of the results of extensive experiments which were performed for the purpose of determining whether in using aluminum wear for cooking, sufficient aluminum was taken up by the food to be injurious to the body. His opinion was that the amounts taken up in ordinary food are not enough to be harmful. This verifies the work recently done by the London *Lancet*.

Work of the New York Health Department.— During the past year nineteen food inspectors of the New York Department of Health condemned approximately 24,000,000 pounds of food as unfit. This means about two tons of food condemned a day for each inspector. There were 2,200 arrests for violations of the food regulations of the Sanitary Code, resulting in $14,070 in fines, and 195 days' imprisonment. The use of unsound eggs has been discouraged by the arrest of 120 persons, and the imposition of fines aggregating about $5,000.

Insurance Act and Nostrums.— One effect of the British Insurance Act has been to decrease materially the sale of nostrums. Inasmuch as the beneficiaries of the act may obtain medicines free on the prescription of a doctor, whose services are also free, they are not so apt to pay for proprietary preparations. If the act would result in driving to the wall a large proportion of the preparations intended for self-dosing, it would at least have accomplished some good. But the nostrums die hard, or rather when one dies, there are a dozen new ones ready to take its place. This is too rich a vein of ore for a certain class of individuals to give up without a struggle.

Leprosy in London.— The Metropolitan Asylum's board (London) has refused to make leprosy a notifiable disease, for the reason, as given by the medical officer, that although there are always a number of lepers in the country, there is only one instance on record (in Ireland) of a previously healthy person developing the disease in the British Islands. In that case the man who contracted the disease was in the habit of sleeping with his leper brother, and when the latter died, wore his clothes. For this reason he concludes that though leprosy is contagious, it is very slightly so, and intimate contact is necessary in order that the disease may spread.

Chiropractor Comes to Grief.— A chiropractor in Rhode Island, being convicted of practising medicine without a license, appealed, and the Supreme Court affirmed the decision of the lower court. This man had left school at the age of thirteen or fourteen, and thought he had attended for two terms some institute, the name and location of which he did not disclose. After his schooling he followed the occupation of bricklayer until, at the age of forty-four, he attended a *three or four months' course* of chiropractic. Is it any wonder that courts are determined to punish such work? Suppose some man had worked for a few months around a donkey-engine, and then should set himself up as a capable engineer and obtain employment on an ocean liner or a railway train! Should the court wait until he had caused a disaster, or would it be better to discourage all such makeshift preparation? Four months to study the human body!

Wood-Alcohol Again.— Notwithstanding the frequently published reports of poisoning from the use of wood-alcohol, the New York Board of Health has passed an ordinance providing that "no preparation or mixture containing methyl alcohol intended for external use by man, or so used, shall, when offered for sale, sold, or used, be especially labeled as follows: 'This preparation contains methyl (wood) alcohol.'" There seem to be two explanations: (1) The health board, notwithstanding they know of the extreme danger connected with the use of this drug, nevertheless are playing into the hands of the manufacturers of wood-alcohol; (2) the sentence above quoted was written beginning with the word "every," which before passage was changed by some wily and unscrupulous friend of the wood-alcohol interests, who cares more for a few dollars in the hands of the manufacturers than for the eyesight and lives of the users of these products. We prefer to believe the latter. As it now stands, the law is certainly a joke on the health board, and what is worse, is a terrible menace to the public, for it permits the most flagrant use of this dangerous alcohol without the fear of punishment. Wood-alcohol, or columbian spirits, has just one legitimate use, that is as a fuel. It should never under any circumstances be used in the preparation of any substance to be taken inwardly, or applied to the outside of the body.

"Damaged Goods."— A successful performance of this play before an intellectual audience in New York raises the query, How long will it be before we are able generally to apply the principles of the pure food law to individuals intending to marry, so that each marriage license must be accompanied by a "guaranteed under the pure man law," at least to the extent that men potentially capable of conveying virulent infectious diseases will be prohibited from marriage?

Public Health Changes in New York.— Governor Sulzer, following the recommendation of the special committee appointed by him some time ago, recommended to the legislature that certain changes be made in the sanitary control of the State, among which are the abolition of the town and village health boards, and the substitution of expert district sanitary commissioners, who must give their entire time to the work. The salary of the State commissioner of health is to be increased from five to ten thousand dollars, with the understanding that he must devote his entire time to public health. The creation of a public health council of seven members, with power to adopt public health rulings, is another provision of the new measure. The governor's recommendation is certainly in the right direction. If any employed by our government should be experts, it is those who have charge of the public health. As it is now, this work very often, if not usually, falls to some one who has never had any adequate qualification for the work.

Cocain Seized.— In April the San Francisco police seized in a hotel 800 pounds of cocain, which had been smuggled in from Mexico. It was valued at $50,000. At say 3½ grains to the dose, 2,000 doses to the pound, this would represent 1,600,000 doses.

Fight Against Bovine Tuberculosis.— The (British) board of agriculture has issued an order for the destruction of every cow suffering from tuberculosis of the udder, or found to be giving tuberculous milk, as well as all emaciated, tuberculous animals. The government will share half and half with the local authorities for the compensation to be paid for the animals destroyed.

American Cities Seen by Englishman.— Mr. Vivian, the great apostle of copartnership housing, on his return from an extended tour in this country, said: "I came away impressed more than ever with the evils of the tenement system. No municipality or company ought to encourage any further erection of tenements. You can not get out of the individual a strength of character, an outlook and imagination, if the man or woman is brought up in a tenement. You do not see the effect in one generation. The workman comes into the great town from the country. He is living on the physical energy of the past. The effect is seen on the children. They lose the capacity for self-development and carving out their lives. They become dependent on some one else. The tenement system tends to crush the strong character."

Something Unique in Garbage Disposal. — Paris is to replace its old insanitary wagons with low, air-tight electrics, the current of which is to be supplied by the burning of the garbage collected the day before. A great advantage of the new system will be that the garbage will all be gathered before 5 A. M., permitting cleaner work by the street-sweepers.

Leprosy Cured.— A report from the Hawaiian Board of Health indicates that leprosy is positively curable, if the initial lesion is early removed by surgical means. Usually leprosy is at first a localized disease, appearing possibly as soon as five days after the first exposure to infection. This initial lesion may remain localized for years, or even for a lifetime; but on the other hand, it may spread more rapidly; and the safe course is to have the local lesion removed as early as possible.

Final Report of the (English) Commission on Tuberculosis.— This commission, which was appointed by the government to report on the prevention and treatment of tuberculosis, has recently rendered its final report, in which it states the belief that by means of treatment and education the risk of infection even from persons in the more acute and advanced stages of the disease, who live in intimate contact with others, may be largely diminished. This is a hopeful report. It means that the transmission of tuberculosis is not absolutely necessary even to members of the family of the consumptive, provided they can be taught the necessity of care.

Sterilization in Minnesota.— April 1 Minnesota was added to the States having a law which provides for the sterilization of defectives and habitual criminals.

Dangerous Hypnotics.— Inasmuch as many deaths have occurred from the use of veronal and other hypnotics, steps are being taken in England to prevent the abuse.

Purification of Swimming-Baths.— The London *Lancet* speaks approvingly of the method of purifying the water of swimming-baths by the addition of "electrolytic fluid," a cheap disinfecting and oxidizing fluid obtained by the electrolysis of magnesium chlorid. The experiment was first tried on the dirty, used water of the baths of the borough of Poplar, under the direction of the medical officer of health. By this treatment the water was cleansed, freed from taint and odor, and from the tendency to deposit an objectionable slime. The method has been in operation for three years, and a recent visit by a member of the *Lancet* staff confirmed the previous good impression of the method. The *Lancet* thinks that "though there is little direct evidence that public baths act as disease-spreading centers, mere common sense suggests the desirability of keeping the water as clean as possible. There are at all events pathological potentialities possible in a pond of unchanged water frequently used by bathers, and the heavy cost of constantly supplying fresh water for the bathers renders a cheap and efficient method of purification necessary."

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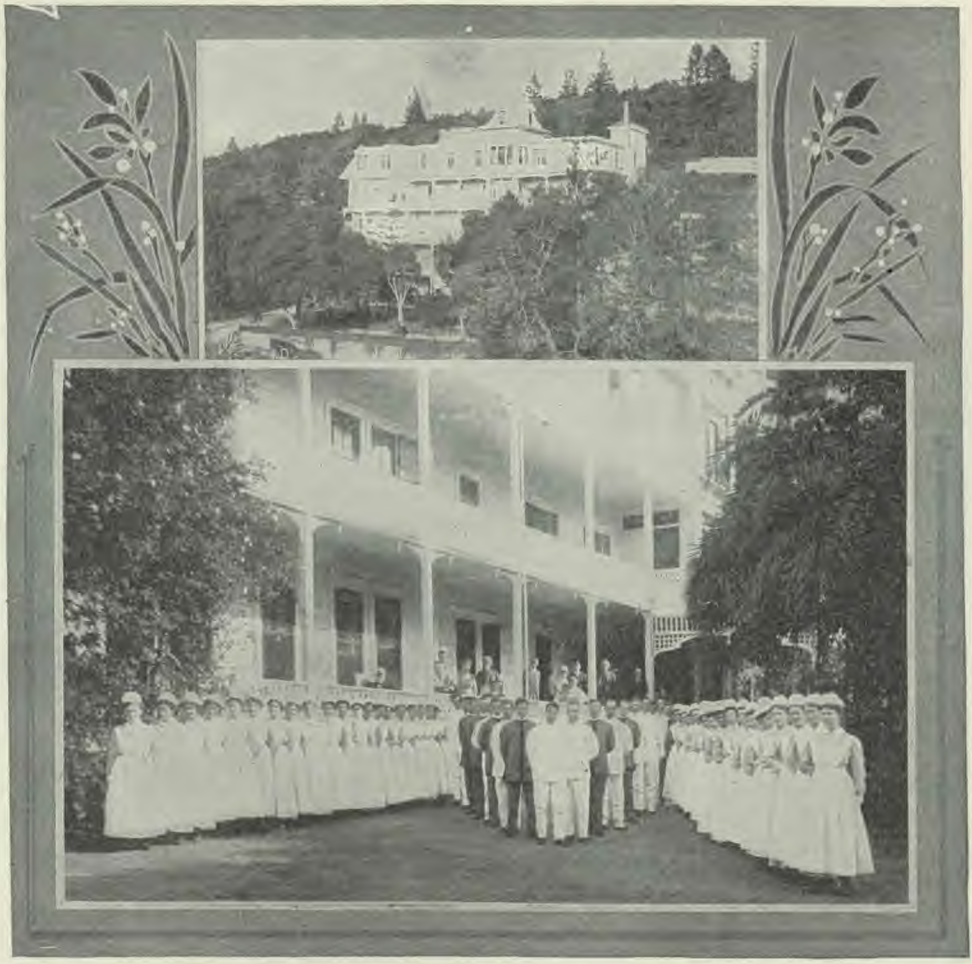

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