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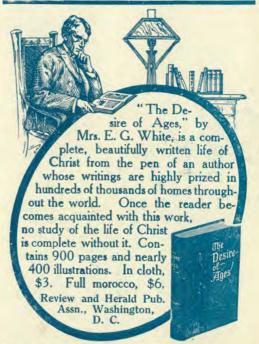
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OUR CONTRIBUTORS



T has been said that no man knows California better than George Wharton James. He knows her various moods in mountain, valley, and seashore, and he knows to love. One can not read Dr. James's descriptions without being himself drawn measurably nearer to nature.

Mr. C. M. Dexter has chosen the story form of giving information regarding plants used for food and medicine, and incidentally has attempted to overcome some pretty thoroughly grounded false notions. His "Witches of Hazel" is an amusing story intended to correct some superstitions and some wrong notions regarding witch-hazel.

Wm. C. Woodward, M. D., LL. M., health officer of the District of Columbia and secretary of the American Public Health Association, in his official capacity has seen much to convince him that mothers often ignorantly destroy the lives of their little ones in the attempt to quiet them. Readers may do good missionary work by passing this article to mothers who use soothing mixtures for their babies.

This is a time of warfare between the armies of capital and labor. Each army looks upon the other as an enemy and as legitimate prey. Each seems to feel that it gains by the loss of the other party. It is a relief to study conditions where there is a practical demonstration, as in the Cadbury Works, that the interests of capital and labor are identical. "The Factory in a Garden" tells of the Cadbury idea.

In nothing was the great Dresden Hygiene Exposition more progressive than in its attitude toward healthful dress for women. Not only in Dresden, but all over the continent of Europe, there is an awakening to the fact that constriction of the waist of women is criminal from a race standpoint. We give a brief account of the work for reform clothing in Dresden.

The article by Mr. Cornforth on the healthful and tasteful preparation of legumes is most timely. One of the great reproaches against a non-meat dietary is the frequent failure to furnish a sufficiency of protein in an attractive and digestive form.

THE NEXT ISSUE

George Wharton James: "The Non-Conformities of the Out-of-Doors." The First Garden Suburb - Bournville.

- Faulty Foot-Wear.
 - Dr. A. B. Olsen: "How to Escape the White Plague.".
 - A. G. Cromie: "Keeping Young in Looks."
 - George E. Cornforth: "Meat Substitutes."

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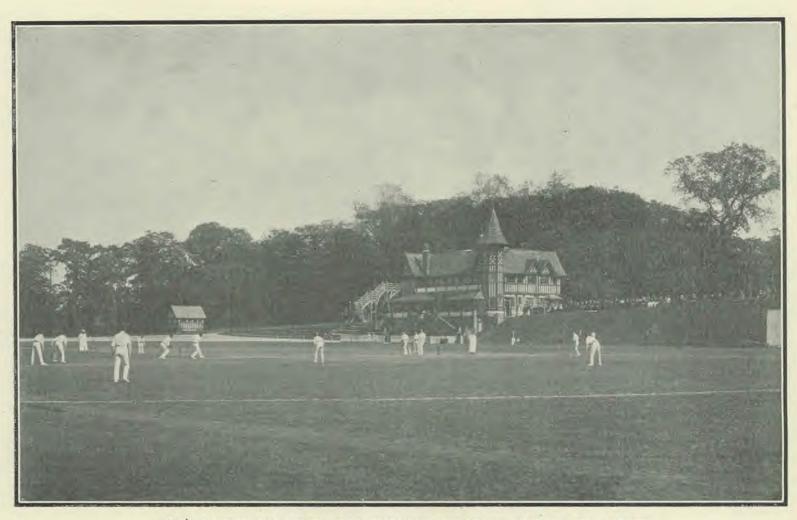
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THE FOGS AND CLOUDS OF GOD'S GREAT OUT OF DOORS

HO has not been impressed in one way or another by fogs, clouds, and mist? Sometimes we are thankful for them; and at others they are a source of annoyance, discomfort, and inconvenience, and even of danger and death. Some time ago I stood on the deck of a wrecked steamer, which had gone ashore in a fog. Fortunately,

no lives were lost, but a vessel that had cost in the neighborhood of. one hundred fifty thousand dollars was sold for less than its own weight would have brought on the market as old junk. The statue of Padre Junipero Serra, the founder of the earlier of the old Franciscan missions of California, stands looking over the bay where this wreck took place. The fog surrounds his statue in the picture, as it often

does in reality, for fogs are not uncommon, yet I have seen this same Bay of Monterey when the sum was radiant in its splendor, filling the whole scene with its brilliancy: the trees glistened in its beauty, the grass shone like emeralds, the sands were scintillant diamonds, and the waters of the bay gleamed with an amethystine glory that

GEORGE WHARTON JAMES



Looking over the bay where this wreck took place, stands the statue of Padre Junipero Serra.

was almost beyond belief. Indeed, when artists endeavor to paint the pure blue of the Bay of Monterey on such a day. even those who are familiar with its rich color can scarcely accept the artists' pictures as unexaggerated.

I have watched the fog steal over the hills beyond Sausalito, in San Francisco Bay, in a hurried, scurried, hasty manner, as if it were a flock of sheep being driven by wolves or bears, and, made silent by



VIEW FROM CARMEL HILL; SEVENTEEN-MILE DRIVE . I have seen this same Monterey Bay when the sun was radiant in its splendor.

their panic, they were just rushing wherever a pathway seemed to be open for them.

On the other hand, I lay in my bed at the St. Helena Sanitarium, looking toward the exquisite Napa hills, one perfect, starlight, moonlight night, and I saw two separate sections of fog pass through two rifts, or passes, in the mountains. They came silently, even as did the hurried fog-banks driven by the winds of the Pacific over into San Francisco Bay, but how gently, how quietly, how calmly, they moved along! The difference was so forceful and I was so impressed by it that I awoke in the night considering its significance. Some men go to their work silently, quietly, of their own volition, and they take intelligent pleasure in their work. Others have to be driven, and they go pell-mell, hurryscurry. helter-skelter, taking whatever comes, doing it in a haphazard and uncertain fashion. Those of the former



LAKE TAHOE FROM MT. TALLAC, CALIFORNIA This most exquisite and beautiful mountain lake in America is a wonderful region for clouds and fogs.



SUNRISE, MT. HAMILTON, CALIFORNIA "And the sunshine, warm and tender, falls in kisses on the rills."

type are able to choose their lives largely; those of the latter seem always to be the subjects of fate.

Again the comparison arose: some men are driven by their passions, their evil, lustful, sensual desires. Like the bay fog, they are driven helter-skelter. Other men follow the quiet, gentle, sweet leadings of the Spirit of God, and they are thus drawn into sweet fields and pastures green, where they may lie down beside still waters.

Up at Lake Tahoe, that most exquisite and beautiful mountain lake in America, which lies at an elevation of 6,200 feet on the border line, partially in Nevada and partly in California, is a wonderful region for clouds and fogs. I have sat at one end of the lake and watched a fog roll in over the distant mountains, and to my left the clouds lowered and a thunder-storm raged, while to my right the sun shone brilliant and clear, with but few clouds in the immediately near sky. No picture can do the beauty of the scene adequate justice,—the wonderfully varied effects, the contrasting lights and shadows, the equally contrasting colors and tints and shades, and then the sweet and glorious combination of the whole.

Have you ever thought that life as a whole to most of us is a combination of fog, cloud, sunshine, shadow? If you look at fog alone, you do not see the beauty of the whole picture. If you look at sunshine alone all the time, you lose all sense of contrast; the brightness blinds you. But if you look at the picture as a whole, how perfect, how complete, how satisfactory it is! God's vision is larger, more graspful, than ours. He sees all of our life; we see but part. If that part happens to be cloud, fog,

GENERAL ARTICLES



VIEW ACROSS VALLEY FROM NOR HILL. The fog in the Santa Clara Valley, California, cooling the air and giving needful moisture to the trees.

shadow, storm, perhaps we cry out and rebel. If we see only the sunshine, we become boastful, proud, and haughty, thinking, perhaps, that we are especially favored of God.

The fact is the fog is as much from God as is the sunshine. Both are alike necessary. Just as the fog covers the earth with its cool blanket and renders it habitable, at the same time giving moisture to plant life, so do the apparent fogs, clouds, and shadows of our own lives minister to us. They seem to us sometimes to bring nothing but discomfort, uncertainty, sorrow; yet without them our lives would suffer far more than we conceive. For they teach us humility; they compel us, at times, to go slowly, even as the vessels must sail cautiously when they are surrounded by fog. And more than all, they teach us dependence upon God. He is our guide. His Word will be a lamp to our feet. He will guide us with his eye, with his counsel. If the fogs and clouds that surround us lead us to turn for guidance and direction to him who alone can guide, who shall say they are any other than ministers of good to us?

But another thought comes to me as I think of the fogs we experience at my home in Pasadena. There are two kinds of fog there — the high and the low. The latter seldom rises higher than two thousand feet; the former seldom descends lower than six thousand feet. The low fogs come in quite often at night, and cool the air for us to sleep under blankets, even following the hottest days of summer, and they generally dissipate about ten o'clock in the moruing. Overshadowing Pasadena is the

Sierra Madre range of mountains, and by means of the Mount Lowe Railway. one can reach their summit in an hour. Scores of times I have been on Echo Mountain, 3,500 feet elevation, and looked down on the San Gabriel Valley, filled with fog, lying there like a vast, silent, immovable sea of white, fleecy foam. One morning a little girl who, with her parents, had come up the night before, seeing this wonderful sight for the first time, where the previous evening she had seen the cities of Pasadena and I os Angeles, and the villages of San Gabriel, Elmonte, Duarte, Puente, etc., rushed back to her mother's bedroom and cried out in alarm, "O mama, come out! Pasadena and Los Angeles are all drowned!"

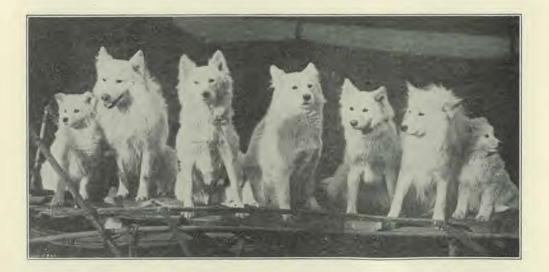
The people in those cities were not drowned, but they were enveloped in fog, and many of them did not know, what we knew, that the sun was shining bright above the fog, which would soon be dissipated. And there are those who look down upon the fog that covers others,— even as the little girl did,— and cry out that they are drowned. But God knows that his sun is shining upon them, and that the fog will soon dissipate and reveal his brightness.

I never see a fog but I recall Annie Herbert's exquisite poem:---

- "When the mists have rolled in splendor From the beauty of the hills,
- And the sunshine, warm and tender, Falls in kisses on the rills,
- We may read love's shining letter
- In the rainbow of the spray;
- We shall know each other better When the mists have cleared away."

When fogs cover the hillsides, we know a little patience will see them fade away, and the beauty of the fields and orchards will be revealed. Shall we be less patient with our friends? Wait, brother, sister, when fog surrounds another; it may be that God is giving the best kind of nourishment to that one out of that fog. It may be cooling the ground — taking away the heat of passion, of prejudice, of anger, of hatred, and giving the new flowers or blossoms on the tree of life a chance to bloom into fullest fruition.

"The earth is the Lord's, and the fulness thereof;" and the fog also fulfils his word. I lift up my heart in thankfulness, therefore, whenever I see one of God's fogs.





WM. C. WOODWARD, M.D.

RYING is a perfectly natural occurrence. On it the very preservation of the life of the individual and of the race depends. Back through untold generations of human beings, the cry of pain and of anguish has been a signal of danger. Sometimes

into youth, and thence on into manhood and womanhood, crying as the result of pain occurs less and less frequently. But this is merely because the physiological and social necessity for crying disappears. The infant cries to bring help. The adult has learned to help himself,

it has served to warn others to escape; sometimes, to bring aid to the sufferer. Always it has had, and still it has, a very definite purpose; and to silence the cry before its purpose has been accomplished is to do violence to nature.

An outery of some kind results from pain quite as naturally as does hunger result from lack of food, thirst from lack of water, and nervous exhaustion from lack of sleep. True, as we pass from infancy to childhood, and from childhood



WM. C. WOODWARD, M. D., IL. M., HEALTH OFFICER OF THE DISTRICT OF COLUMBIA or to find help in ways much more effectual and prompt than by crying, or to determine for himself that help is impossible and crying useless. Therefore the infant cries and the adult does not.

But although crying is a signal of possible danger and a call for help, yet it is quite possible to still the cry without either removing the danger or affording the help called for; just as the engineer may extinguish the burning torch on the track without seeing that

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the wreck ahead has been cleared away or the bridge rebuilt before he proceeds. And if an engineer who did so extinguish the warning blaze would be regarded as worthy of punishment, what shall be thought of the mother who stills the warning cry of her babe without paving a way to safety for it?

Yet this is nothing more nor less than what the mother does when she gives her little one soothing sirup or paregoric to quiet it: for the chief property of all these substances is to deaden the nervous system, not even to soothe the tortured nerve that is carrying the message for relief, but merely to stupefy the brain so that the message can not be perceived. And the mother who uses such a mixture merely stills the alarm; she does nothing to avert the danger there may be ahead, the nature and extent of which she knows nothing. It may be the little one is suffering with indigestion, but possibly with meningitis, earache perhaps, maybe an infected mastoid. The mother does violence to nature by stilling nature's cry for help. She puts into the baby's system a poisonous drug of which she knows nothing; a drug of whose very name she may be

ignorant; a drug that is bound to act upon the heart and lungs, to influence digestion and assimilation of food, and to benumb brain and nerves, in ways too subtle for her to understand. And then, if nature, despite such meddlesome interference, restores the child to apparent health, the mother is proud of what she has accomplished. And the process is repeated, and repeated again each time the baby cries. But if outraged nature fails to make the child well again, and, perhaps after medical aid has been summoned too late, the little one is numbered among those who have passed beyond, the mother is fortunate in her grief if she does not speculate upon the part that her own hand has played in the outcome. And if, though death may not mark the end, the mother finds some day that her baby is a victim of a drug habit, the situation is not much better. The sallow skin, disordered digestion, the failure of growth, the fretfulness when not under the influence of the drug,-all these remind the mother of her folly; and the patient care necessary to restore the baby to health and vigor and a normal existence will prove ample penance for her indiscretion.



REFORM CLOTHING IN DRESDEN

HE writer, though a "mere man," can not forbear to express his admiration of the general beauty of the women's gowns in Dresden; for he had with him one of the superior sex to check off his observations, and to delete any rash and blundering statements he might make.

In speaking of beauty, he does not refer to richness or plainness of attire, but to the success with which the garments of the women accentuate instead of hide the graceful contour of the female figure. And this, notwithstanding the garments were what Americans might style "horribly and vulgarly large waisted."

There were both plain gowns and more elaborate gowns, so made that the

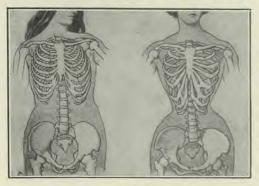


FIG. I

lungs, liver, and other organs were given full opportunity to functionate. But what was a pleasurable surprise to us was the real attractiveness of these suits,

comparing very favorably with what we had been used to in America.

GH HFAID MD

In the shop windows we found the same thing - a general prevalence of

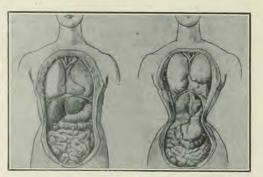
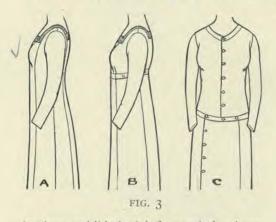


FIG. 2

large-waisted gowns, but always graceful, and suggesting that our American dressmakers might profitably spend some time studying the art of dressmaking in that country. It is refreshing to know that women's garments can be made absolutely free and non-constricting, and yet beautiful in outline. Some attempts at reform dressing in the past have caused in us feelings of admiration for the heroism, but not for the taste, of the innovators: it must require genuine heroism in a woman to wear a garment that is not becoming, especially if it is not in style; for, after all, the slavery to style is even stronger than the desire to appear beautiful, as any one can testify who will look over old fashionplates and observe what women have submitted to in order to be in fashion.

We did not learn to what extent the



hygiene exhibit had influenced the dress of the women,— whether it led or followed in the movement for freedom of dress; but we judge from the general adoption of the reform garments, that the practise is older than the exhibition. There is a society of about one hundred dealers in various cities of Germany known as the Society for Improving the Dress of Women. Apparently it is accomplishing excellent work. The exhibition, however, did good in the way of emancipating its visitors from the thraldom of foolish fashions.

In the "der Mensch" exhibit of the International Hygiene Exhibition there were anatomical models and pictures showing the result of tight lacing. These could not fail to impress the visitors. Then in the clothing exhibit, samples of hygienic garments were shown, and literature was distributed explaining the advantages of reform clothing. We



give herewith some of the illustrations displayed in this literature,

Figs. 1 and 2 show the compression of the ribs and of the internal organs by the customary fashionable dress. Fig. 3 shows diagrammatically the new forms of large waist (A, B) as compared with the older form (C). Figs. 4 and 5 show some of the less elaborate forms of the reform dress. A criticism might be made regarding the length of the dress in Fig. 5. No dress that drags the floors and streets can be truly hygienic.



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THE WITCHES OF HAZEL G THE STORY OF WITCH HAZEL C.M. DEXTER

HAT!" quoth the old knight. "Thou sprig! Thy wits are strayed away, methinks. Or has thy nurse been teaching thee a fear of the dark?"

"Nay, save your own tongue for the tasting of yon capon," quickly retorted the younger man. "I speak only truth."

"Why, thou saucy boy, I may not spit butterflies on my sword, nor provoke striplings by giving them the lie; else — . But why this prattle? you know not that there exist witches."

"But there are witches," insisted the young lord. They slink about the house and garden in the shape of cats. Terrible noises they make at night."

"Why, they are cats, like enough; they seek the rats and mice. Troth, for terrible noises "Nay, but I know better. T'other evening Crestone was late fetching home the cows from the field; and so when he had done milking, 'twas near nightfall. Hark you, now. When he was crossing the yard with the milk, what did he see but an old woman leaning on her stick, by the corner of the house? She was



When he was crossing the yard with the milk, what did he see but an old woman leaning on her stick, by the corner of the house? She was chewing and mumbling, and looking straight at him. c h e w i n g and mumbling, a n d looking straight at h i m. He s a w 'twas old Goody Blake, whom the whole countryside k n o w s to be a witch."

"Foh! a poor crazy beldame, no doubt come to beg or steal a crust or cup of milk," expostulated the old knight.

"He thought so too, at first, after the fright of seeing her; for 'tis rare any one is seen at the grange. But as Crestone was about to speak to her, she looked at him so evilly he

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remembered what the countryfolk say of her, and such a fright came over him again that he cried out, 'Avaunt in the name of God!' and flung the pail of milk at her. He heard a kind of whisk,— for he had closed his eyes as he threw, and when he opened them, there, instead of the old woman, stood a great cat, staring at him with the same evil eyes.

So he knew she must be a witch turning into a cat before h is very eves."

"But his eyes were closed, you say."

"Ay, she had bewitched him to close 'em, no doubt, so he might not see how she transformed herself."

"Pooh!" was the vehement exclamation. "Why, 'tis all clear. The whisk he heard was of the old woman's running away from his milk-pail. The cat had been there all the while, belike, but he had not

seen it. Your senses, boy! know you not that witches are supposed evil spirits? Recall you, then, that good or evil spirits can have no influence on earthly affairs, for spirits can not act on matter. Your accusation, then, is unjust, and well against the honor of God and the advantage of man."

In 1683 a small English colony in Middlesex County, Connecticut, was much wrought up over the claim of witches' power. Some there were who believed in the power of Satan over humans; some there were who sought the excuse of witchery to present damning accusation against some facts, imagined or real, the motives frequently being sectarian rancor, private hatred, or political spite, the branding of one as a wizard being the easiest way to dispose of him.

The common belief in witches supposed Satan to be in rebellion against

> God and in warfare against the church, and to exercise a malevolent influence through the agency of human beings, who by formal compact had agreed to become his subjects and serve him. Such persons were supposed to become possessed of supernatural powers,- the ability to injure others, read their thoughts, call up the spirits of the dead, to transform themselves into animals, to be present in apparition at a distance from the actual location of the body,

Flung the pail of milk at her, heard a kind of whisk; and when he opened his eyes, there, instead of the old woman, stood a great cat, staring at him with the same evil eyes.

> and to be able to soar through space on a steed no more material than a broom. All unknown diseases, extraordinary occurrences, and unexplainable circumstances were commonly attributed to the agency of witches and the influence of the devil.

> Prior to the opening of our story, Betuta, an Indian woman, had been tried as a witch before a special court of oyer and terminer. Betuta pleaded her innocence, but her story was not believed; and, as was the custom of the period,

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she was sentenced to the torture of peine forte et dure, to force either a confession or prove a right to the verdict of "not guilty." In carrying out such a sentence the unhappy victim was stretched on her back, as much iron was laid on her as she could bear, then more, and still more, she being fed on bread and stagnant water through alternate

days till she pleaded or died. Should she remain mute through all this torture, she would be allowed a plea of "not guilty."

Betuta was servant to an official of the colony. Her employer lay sleeping on a divan one sultry afternoon when he was suddenly aroused by a mysterious but unmistakable shower of small shot on face and body. Thoroughly alarmed, he grasped his rapier, and prepared to defend his very life; but nowhere could he note trace of a foe. Betuta, coming into the room, saw with surprise the attitude of defense, and soon learned

the reason of it. She calmly explained that the fusillade came only from a cluster of last year's seed pods of the witchhazel, a marsh shrub of the vicinity, which, becoming dry, opened and shot their seeds even to a distance of twentyfive feet.

"Witch-hazel, say you, devil's imp," he cried in a rage. "Wouldst kill me as I slept? Sooth, the 'witch pricker' shall tell me whether you are doing the evil one's work."

"Indeed, am I not a witch. It is as ence could become imbued in one sus-I said; the little seeds from the shrub ceptible.

of your own England blew from their pods. Dost not recall the witch-hazel of English marshes?"

"Silence, wench, or it shall be the 'witch's bridle' to stop your clatter. Do I not know that e'en for this you have associated with evil spirits, else why had you yestr' noon a circle of feathers? Witch-hazel," he said, as if

> trying to recall some thought long lost. "Ah! the devil's rod; now do I recall it. Know you that years ago when we landed on this ground, we feared to tarry for lack of drink? One of your tribe took him a forked stick, and holding it before him, walked along, incanting in his own tongue. Behold, after a time, and when much ground had been covered, the rod began queer actions. By all manner of action it turned hither and thither, always pointing toward a certain spot. Here the Indian, by sign, told us to dig, and there we found clear, cold water a-plenty

where we dug. Troth, it was a witch's rod, in truth, e'en it served us a good purpose."

In these enlightened days we know well how the witch-hazel branch has been declared successful as a divining rod in locating water underground, and many know the truth of the seeming phenomenon of the shooting seeds from the dried witch-hazel pods. But in the days of which we write, belief in the supernatural was rampant, and it is eas-

"Nay, master, not so," she pleaded. ily seen how suspicion of an evil influ-



soar through space on a

steed no more material

than a broom,

LIFE AND HEALTH

It was due to the accusation against Betuta that the argument between friends, as recorded at the opening of our story, bade fair to result in a downright quarrel. The old knight proclaimed his disbelief in witches and goblins, and a belief in the Indian girl's innocence, because he claimed a superior knowledge of the witch-hazel, the cause

of the girl's predicament.

"The name witch-hazel recks not of witches." he explained. "The name wych was brought from our own England, it being applied to our wych-elm, the leaves of which those of the witchhazel resemble. Know you also that the tree is called the wychelm because it is from this wood we make our wyches -chests and boxes in which we keep our provisions.

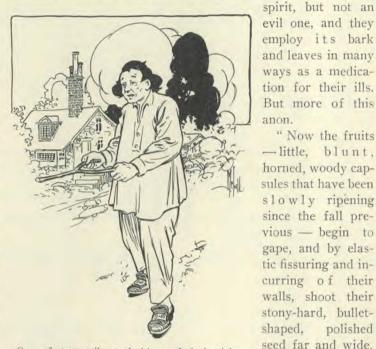
November, than the half-tree reclothes itself with a luminous vesture of filmy, feathery yellow, which turns out to be the long-delayed blossoms. In truth, whether the earliest or the latest flowers of the season none seem able to decide.

"'Twas the Indians themselves who told me most of this witch-hazel. They believe in its being imbued with a good

" Now the fruits

" And because of

this, nature's



One of your tribe took him a forked stick, and holding it before him, walked along.

"This witch-hazel," he continued, " is a tall, sometimes arborescent shrub grown in woodlands. It has a characteristic, horizontal, struggling growth; its spray, so jointed and angular, is not to be mistaken for any other. I have seen this shrub growing in profusion, and have noted its bark is pale gray. Its leaves are not above handsome, but they turn to a beautiful clear yellow in autumn.

"'Tis not a bewitched thing as some seem to think; but indeed has it many peculiarities. No sooner have the leaves of the witch-hazel fallen off, with the rest of the forest foliage, in October or

trick," continued the knight, prone to take up the quarrel again, "sap-brains would have burned at the stake an innocent maiden, who, perchance, is guilty only because she brought to the home a bundle of witch-hazel, with which to add to the room's decoration."

"But fear not; the girl Betuta shall be free. Never has she borne the witch's bark; e'en the witch pricker could find no calloused spot. I would but argue, that's all; let us not become ill friends." said the young lord, in a most conciliatory tone.

"Well, well, let it be so," answered

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the now-pacified knight. "But let me tell you more of this witch-hazel.

"The Indians put great faith in it as a sedative application to external hurts and inflammations. They still the leaves and bark, and bathe sprained joints and

muscles. They apply it for all their burns, bruises, and aches. It quickly takes out the smart and sting and allays the inflammation, lessening the swelling, and restoring the hurt to a normal condition.

"Likewise I have seen them use it for weak and sore eyes, sores in the ear, nose, throat, or mouth, and for sore throat, too. As a relief to the bites of insects most of us are familiar with it, while many of us have used it with good results for our lame backs and the rheumatism, which I reck few of us have escaped.

"It was this witchhazel with which the Indians rubbed the

stiffness from muscle and joint after their exhibitions of athletics. Remember you how we marveled at their suppleness and endurance?

"Their maidens, also, find a use for this seeming wonderful witch-hazel, which it might behoove us to explain to our own ladies. With it the Indian maiden mixes a quantity of oil or fat, and anoints her face, hands, arms, and chest. A beauty secret, they claim, the true secret of their skin's smoothness and purity of surface."

"'Twas a happy thought, Sir Knight, and we will broach it to our ladies,"

> laughingly exclaimed a listener. "We will show them how to enhance the beauty that adorns them, but methinks it would be best explained that the efforts would not result in the Indian girl's dusky color."

> "Hark, you gentlemen," spoke up one of the company briskly. "Know you not that 'tis time for the trial? Let us hasten thither: 'twill no doubt prove interesting. They do say all signs are against the girl Betuta, -that she has been away from bed at night; that she has been seen making cabalistic signs and communing with the moon; that they had found instruments of

magic in her belongings, not alone the feather circle, but wax figures transfixed with needles."

"A curse on your chatter," angrily spoke the knight. "There be no wizards or witches; there be no ghosts except of our own conscience. Come, let us to the trial; and I wager a magnum this girl will be sent away free."







She has been seen making caba-

listic signs and communing with

the moon.

A FACTORY IN A GARDEN

HERE were so many objects of interest in connection with the meeting of the British Medical Association that it was impossible to see all. There was one, however, that for several reasons we desired to see, namely, the Cadbury Works, at Bournville, near Birmingham.

We went. We saw. We were convinced.

Cadbury Bros., Ltd., manufacture cocoa and chocolate, but that is another question. What interested us is the care manifested by this company for the welfare of its employees.

The exhibition of games, physical exercises, swimming, etc., was carried out as announced, and we learned that this outdoor work is part of the routine required of all young employees. There are magnificent recreation grounds for the men, and other grounds for the girls. There is an excellent outdoor swimmingbath for the men, and an indoor swimming-bath for the girls.

We recently visited a food manufacturing plant which we shall not name. We were shown every courtesy, and conducted carefully through all of the plant having to do with the making of cartons and packages, the filling and labeling of boxes; were taken into the engine rooms, and were shown even the adding machine, which was a curiosity to us, as it had been taught to reckon in pounds, shillings, and pence, and even in farthings. But as to the rooms where the foods were made, their cleanliness, etc., we can say nothing; for, doubtless by some oversight, those rooms were not shown us. We of course noted the wooden floors, the odor of the rooms, the dust in some places, the girls of twelve at work, etc., and we knew that these men accept conditions as they find them. It is a case of competition, and the factory that can reduce its cost of production the most, stands the best chance to show a good balance-sheet. That is how it is usually regarded; and the health of the employees? O, that is a matter they should look after themselves. The factory is not a hospital.

G. H. HEALD, M.D.

But there are men who look at the health of the workers from a different view-point. There is no better proof of the interest of George Cadbury in the welfare of the working classes than his gift of a million dollars to found a model garden village from which he receives no revenue. In addition, there are in connection with the works of this company extensive recreation grounds and other facilities for self-improvement.

The Cadburys have always regarded two things as essential,— absolute cleanliness in the manufacture of their products, and the maintenance of the health of workers at the highest possible standard.

They have also recognized that the best workers are those who are happy



GIRLS' RECREATION GROUNDS

as well as healthy, a truth which many other manufacturers would do well to appreciate.

Among the circumstances which here conduce to the happiness and the health of the employees are a beautiful situation in a most picturesque part of England; no pains spared to beautify the factory and its surroundings; buildings constructed with the health of workers kept prominent; workrooms spacious, well-lighted, and well-ventilated; food furnished in commodious and well-appointed dining-rooms, at cost price.

Not only is everything possible done to prevent disease by hygienic measures, but the full time of two physicians, two dentists, and a corps of trained nurses is at the service of the employees. There is a dispensary and a consulting-room on the premises, a rest-room for those temporarily ill, and a convalescent home situated in the Herefordshire hills for those needing recuperation. There is also a well-trained ambulance corps composed of employees.

The combined area of the two recreation grounds laid out to meet the athletic needs of the employees is twentythree acres. There are six cricket teams, eleven football teams, and two hockey teams. Tennis and bowls have their allotments. Physical-culture work is required of all boys under eighteen on the time of the firm. The girls' sport, including cricket, hockey, tennis, net ball, and Swedish drill, is under fully qualified gymnastic teachers.

Employees are encouraged to obtain an education, and attendance at local evening schools is required of all under eighteen years of age, the fees being paid by the firm. The arrangements for the girls include a thorough training in housewifery, as most of the girls leave to be married. Gardening classes, for both boys and girls who cultivate their own allotments, are rented to employees at a nominal cost. The entire aim of the company is to increase in every way the efficiency of its employees, for it is realized that the interests of the employees are the interests of the company.

The employees are also encouraged to improve their musical talents. A firstclass orchestra, an excellent brass band, a mandolin band, and a large chorus of well-trained voices constitute part of the musical talent. During the season, concerts are held at which audiences often exceed two thousand.

But we must cease somewhere without attempting to detail all the activities of this company for the welfare of its workers. It may be stated, in conclusion, that a savings account is maintained,

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allowing five per cent on all deposits by employees. A pension fund is also maintained. By contributions to this fund, all male employees may draw pensions at the age of sixty. For every shilling contributed by employees, the firm contributes a like amount; it also contributed £60,000 to increase the pensions of older employees, coming on the pension roll early in its existence. A pension scheme for women employees has been inaugurated this year, providing pensions at the age of fifty. The company offers prizes for suggestions. About six thousand suggestions are received yearly (an average of twenty a day, or about three a year for each employee), a large proportion of which are utilized.

It should be remembered that the Bournville garden village was originated, and, in fact, given outright, by Mr. George Cadbury, a member of the firm. About forty per cent of the Bournville houses are used by employees of the Cadbury works.



THE GIRLS' SWIMMING-BATH

HEALTH AND COMMON SENSE EVA J DE MARSH

O you ever have colds? Of course you do, and of course you believe it is because you exposed yourself. Perhaps you did, and then again perhaps you did not. To some persons a cold comes easily; others seldom have one. There are many reasons for this. One's natural constitution and general state of health have something to do with it, but habits and training have more. Your careless or selfish neighbor may thrust a cold on you, or circumstances may compel you to remain under conditions which are

favorable to the production of one.

Many persons live in constant fear of drafts and pneumonia. A breath of wind, or news that a friend or an acquaintance has pneumonia or bronchitis, is to them as a red rag to a bull. Immediately they gasp and choke, coddle themselves, and often really develop some throat, bronchial or lung trouble. I have actually seen this occur.



Many elderly people have a horror of night air, and yet there is nothing like a shut-up room to stupefy the brain and clog the breathing apparatus. More colds and bronchial troubles are the result of breathing foul, heavy air than of an overdose of fresh air. People who live much in the open seldom have colds. They are full of health and vigor, and accomplish much more than those who live in an enervating atmosphere.

Of course one must use common sense. The feet must be kept warm and dry, and the body properly protected. Sud-

> den drafts and changes of temperature are to be avoided; and if one has been in the habit of being overcareful, he must make the transition from closed windows and a shut-up house a gradual one. When one is once accustomed to a clear, cool temperature, however, nothing can tempt a return to former conditions. I know a bright, happy little girl who, with her par

ents, has practically lived in the open air. Even in babyhood she enjoyed unlimited quantities of fresh air, and in warm winter clothing, or cuddled in her sleepingbag, she laughed to scorn the icy winds.

Have you ever, when wearied almost

to the point of exhaustion, boarded a trolley-car and swept out into the country? And have you realized how quickly a sense of exhilaration replaced the dull, tired feeling? Then fresh air as a tonic has a meaning for you. It means deep breathing, good circulation, blood warm and rich and red, clearness of brain, cleaner, sweeter thoughts, cheerfulness of disposition,

Even in babyhood she enjoyed unlimited quantities of fresh air.

and an unlimited capacity for doing things. Did you ever stop to think how healthfulness of body tends to a saner, larger outlook on life? how little, mean, petty, uncharitable feelings disappear before sound sleep and bodily health? People may talk about serenity of soul and poise all they like as the product of self-control, but how many of us can rise above ill health, overstrained nerves, jaded brains? Will is powerful, but God alone is all-powerful.

Genius itself would wither and die in a foul, fetid atmosphere. Many people can not even think clearly and connectedly where there are unpleasant odors;

> how much less when the brain is poisoned by foul air. Fire will not burn without oxygen, nor can the human brain and body work intelligently and capably without an abundance of this lifegiving element.

Nervousness may result from overwork and overwory, but the chances are that improper conditions of living are at the bottom of it all. One can do

a large amount of work in the open or under sanitary indoor conditions, but how quickly he will droop in a close atmosphere, how nervous and irritable he will become, and how all the world will go awry for him. Health is God's first, best gift, my friend. Keep it, if you have it; pursue it, if you have it not. With it, all earth is yours; without it, earth is dross.





THE COOKING OF LEGUMES

George E. Cornforth

ROM the study of the legumes in our last lesson we learn (1) that to prepare them properly for the table they require long, slow cooking in soft water so as to soften all the cellulose which they contain; (2) that a wholesome, easily digested fat should be used with them; and (3) that, when eaten, they should be thoroughly masticated. The legumes, with the exception of the soy-bean and the peanut, being deficient in fat, really need the addition of some kind of fat to make them a well-balanced food.

Since one of the objects to be attained in the cooking of the legumes is to bring them back as nearly as possible to their condition before they were dried, they should be soaked in cold water, that they may absorb as much water as they will before they are put to cook.

Stewed Beans

Thoroughly wash one pint of beans. Soak them overnight, then drain off the water in which they were soaked, and put them to cook in fresh cold water. Bring them to a boil slowly, after which allow them to cook slowly from three to five hours, according to the age of the beans. Add one large teaspoonful of salt, and a little cream or from two to four tablespoonfuls of vegetable oil.

The parboiling of beans is unnecessary as far as wholesomeness is concerned. Some persons prefer to parboil them to remove some of their strong bean flavor, which they find objectionable.

Salt should not be added to beans till they are done, as it hardens the beans and hinders the cooking process.

Bean Puree

Allow the beans to cook down dry at the last. Rub them through a purée sieve. Season with salt and rich cream or oil.

This purée may be pressed into an oiled bread tin and baked, when it may be sliced and served with chilli sauce, mint sauce, or gravy.

Ribbon Beans

Make purée of white beans and of kidney or black beans. Press in alternate layers, into an oiled tin; bake, slice, and serve with mint sauce. When sliced, this has the appearance of the layers of lean and fat meat.

Bean Patties

Seasoned bean purée may be shaped into patties, baked in a quick oven, and served on creamed macaroni, or with chilli sauce, or tomato cream sauce, or peanut-butter gravy.

Baked Beans No. 1

The food value in calories per ounce of the beans baked according to this recipe is given below. If the beans were baked down a little drier, their food value would be a little greater, but the proportion of the three different food elements would be the same.

> PRO. FAT CAR. TOTAL 6.3 5.1 17.1 28.5

Some time ago there appeared in one of the Boston newspapers "Boston's Official Recipe for Real Baked Beans." Using vegetable oil instead of the pork, and omitting the mustard, which we are told "may be omitted," the recipe is like this: —

¹ qt. California pea-beans

[‡] cup vegetable oil

² teaspoonfuls molasses

² teaspoonfuls salt (large teaspoonfuls on account of the omission of the *salt* pork).

Omitting what is said about the mustard and the pork, the directions read as follows: —

"Parboil beans until tender, but not broken; drain, put them into a bean pot; mix molasses (oil) and salt with one cup boiling water, and pour this over the beans; add boiling water enough to cover the beans; bake in a moderate oven eight hours or longer, add enough water during the baking to keep them moist."

This recipe says nothing about soaking the beans overnight, but that is usually done. The parboiling is unnecessary, but is generally done. The beans will be better if they are baked twelve or even twenty-four hours, but the heat of the oven must be moderate. Other peabeans than the California may be used. Sugar may be substituted for the molasses, but the molasses is necessary to give the real Boston baked bean flavor.

One pint or less of strained tomatoes may be used in place of part of the water with which the beans are covered when put to bake.

Baked Beans No. 2

Some people prefer to season the beans, after parboiling, with oil and salt, omitting the molasses, or using sugar, and then place them in a shallow baking pan, cover them with hot water, and bake for three or four hours, adding boiling water as necessary, having the top nicely browned when the beans are done.

Baked Beans No. 3

Use the first recipe, omitting the oil and molasses, if so desired; and after the beans are put into the pot, cover them with milk instead of water, and use milk to refill the pot as the liquid boils away.

Peas

Peas may be prepared according to all the recipes given for cooking beans. They even make an excellent dish baked according to the recipe for baked beans.

Lentils

Lentils have a stronger flavor than peas or beans, which is not generally liked till one has become accustomed to it. But they can be made into dishes having a more meaty flavor than the other legumes. They contain more of the protein element. Their hulls are tough, and while the lentils may be cooked in all the ways in which beans are cooked, they are better if made into soup. purée, or patties — some form in



RIBBON BEANS, WITH MINT SAUCE

which the hull is removed. In this form they are more easily digested than peas or beans.

Peanuts

Peanuts are legumes, and need cooking in the same way that beans are cooked. Roasting them is like frying them in their own fat, for, unlike beans, they contain a large amount of fat, nearly forty per cent. However, if they are lightly roasted at a temperature not much above that of boiling water, they are not so indigestible as when roasted at a high temperature. This may be accomplished by putting them, dry, into a bean pot, and setting the pot into a large pan of water in the oven, leaving them there till they are sufficiently cooked or lightly browned.

Baked Peanuts

FOOD V	ALUE IN	CALORIES	PER OUNCE
PRO.	FÁT	CAR.	TOTAL
12.9	44.4	12.3	69.6
	- 1 - 1		· · ·

The most wholesome way of cooking peanuts is baking them as beans are baked. They should first be blanched. To do this, pour boiling water over them, drain, spread on a pan, and dry in a moderate oven. Do not brown them. Soak them overnight, then put them into a bean pot, with one teaspoonful of salt to one pint of peanuts before they were soaked. Cover them with water, and bake in a moderate oven from twelve to twentyfour hours. A small quantity of tomato-juice may be baked with them if preferred, and a little browned flour and some onion and bay-leaf may be added.

Most persons like something sour to eat with beans, such as vinegar, pickles, chilli sauce, or catsup. Instead of these, lemon, a wholesome chilli sauce, or mint sauce made with lemon-juice may be used. But I prefer something sweet with beans. Perhaps some of the readers of this article would like to try a little maple-sirup or malt sirup on beans or baked peanuts, or a little jelly with them. Malt sirup on baked peanuts gives you "malted nuts."

In a future lesson we will tell how to combine legumes, nuts, and cereals in making meat substitutes.



BOSTON BAKED BEANS, CATSUP, AND LEMON



MEDICAL MISSIONARY WORK THE RIGHT ARM OF THE GOSPEL

D. H. Kress, M. D.

O ye therefore, and teach all nations," "and unto whatsoever city ye enter, . . . heal the sick that are therein, and say unto them, The kingdom of God is come nigh unto you." In the gospel commission, healing and teaching are inseparably combined.

Coming close to the people by personal efforts, helping them where help is most needed, is ever to be to them the evidence that "the kingdom of God is come nigh" unto them. Separated from this practical work of helping and healing, the gospel is, to a great extent, shorn of its power and influence for good. "Medical missionary work is the gospel in practise."

In Christ's day the religious teachers had evidently lost sight of this double ministry, their time was devoted almost exclusively to teaching and preaching. The individual and personal contact of heart to heart in ministry, a work that should have been done by priest and Levite, was left either undone or for others to do. The injured by the wayside, and the sick were passed by unhelped by them.

In the life of Christ we have a true representation of what every missionary should be, and the work he should do. Christ's methods of labor were wholly successful. More time was spent by him in ministering to the physical needs of the people than in preaching. He mingled with men as one who ever desired their good. This won their confidence, and the people were drawn away from the acknowledged teachers of that day, to him. The only accusation the priests could bring against him was, "This man receiveth sinners."

The record of his life-work is briefly given as follows: He "went about doing good, and healing all that were oppressed of the devil; for God was with him." This work of personal ministry was a witness to the people that God was with *him*.

When the first disciples were sent forth with the message, "Heal the sick, and . . . say unto them, The kingdom of God is come nigh unto you," tradition and theory had almost wholly taken the place of practical religion. A knowledge of God had well-nigh departed from the world, because all the people could know of him was what they saw revealed in the lives of his professed representatives. The minds of the people were stupefied through wrong habits of eating and drinking; thus the god of this world blinded their minds lest the gospel should shine in unto them.

In order for the people to appreciate Christ's ministry, God had to send them a message calling for reforms. A similar condition exists to-day. Through the use of drugs, alcohol, tobacco, tea, and through wrong habits of eating, minds have been dulled, and mental and bodily disease has been brought upon us. It is not God's will that this suffering . should exist. His desire toward every being is expressed in the following words, which can not be misinterpreted: "I wish above all things that thou mayest prosper and be in health." But "My people are destroyed for lack of knowledge" is as true to-day as it was the day it was uttered.

If we would raise the moral standard or help the people spiritually in any community or family, we must correct their physical habits. God could make of the children of Israel a healthy and holy people in only one way, by correcting their physical habits. He withheld from them harmful foods and drinks to which they became accustomed while in Egypt, and in their place manna was supplied, and pure water from the rock. The promise was made, "He shall bless thy bread, and thy water; and I will take sickness away from the midst of thee." This lesson is placed on record for our learning, that in our efforts to lift humanity in any country, community, or family, we may adopt God's method of labor, for it is the only method that will meet with success. A gospel that fails to correct the wrong physical habits of the people, and thus help them physically, will accomplish little for them spiritually.

Missionaries must therefore have a thorough knowledge of the laws of life and health, and be able to impart this knowledge to the people. This work of reform and healing was not a new addition to the gospel in the time of Christ; it has always been associated with it.

Anciently among the children of Israel if a man had a disease, he was instructed to present himself, not to a doctor, but to a priest. It fell upon the priest to diagnose disease. "The priest shall look on him [examine him]." Leviticus 13. The priest also gave instruction as to the precautions that were to be taken to prevent the communication of contagious or infectious diseases. He looked after both the physical and the spiritual welfare of the people. The priest was also their sanitary inspector; by him questionable dwellings were inspected, and directions were given to the inmates regarding improvement in hygiene and sanitation. The nature and communicability of germ diseases were well understood by him. He was taught by the Author of all true science. Through the priests this knowledge was communicated to Israel, and through Israel it was God's purpose to impart it to the heathen about them. In this way the church at that time was to be the "light of the world" and the "salt of the earth."

It was God's design to remove disease and feebleness from his people first, that through them he might remove feebleness and disease from the heathen about them.

The church should occupy a similar position in the world to-day. Every follower of Christ should be qualified to give instruction to the people in his community regarding the causes of disease, and should be able to suggest improvements in hygiene and sanitation. He should be able to diagnose ordinary cases of disease, and suggest the necessary precautions that should be taken. He should know how to use intelligently the simple agencies of nature within reach in aiding in restoration.

The promise made to ancient Israel applies with equal force to the present: "If thou wilt diligently harken to the voice of the Lord thy God, and wilt do that which is right in his sight, and wilt give ear to his commandments, and keep all his statutes, I will put none of these diseases upon thee, which I have brought upon the Egyptians: for I am the Lord that healeth thee." "Behold, I set before you this day a blessing and a curse; a blessing if ye obey the commandments of the Lord your God; . . . and a curse, if ye will not obey the commandments of the Lord your God, but turn aside out of the way."

There are many ways of practising the healing art; but there is but one way that heaven approves and can bless. God's remedies are the simple agencies of nature, which will not poison, tax, nor debilitate the system. The intelligent use of pure air and water, cleanliness, a proper diet, purity of life, and a firm trust in God will accomplish much for the sick. These simple agencies are within the reach of all.

Prayer has its place, but it is labor lost to teach people to go to God as a healer of their infirmities unless they are also educated to lay aside every wrong practise. Many have expected that God would keep them from sickness merely because they have asked him to do so. But their prayers have been unanswered because their faith was not made perfect by works. God will not work a miracle to keep those from sickness who are continually violating the laws of health, and make no effort to prevent disease. When we do all we can on our part to have health, when we meet the conditions upon which the fulfilment of God's promises depend, it is our privilege to ask God in faith to bless our efforts for the preservation of health. He will then answer prayer if it is for our good, and if his name can be glorified by so doing.

The prayer of faith does not command, but submits to an all-wise God who has the interest of all his creatures at heart; it says, "Not my will, but thine, be done." Worry ceases, and there exists peace of mind.

A knowledge of the laws of health, and obedience to them, prepare the way for the prayer of faith to be more fully answered. Should God answer every prayer in our way, often it would confirm us in a wrong course of life. He desires, first of all, that we should understand the causes of our illness, and see the need of forming right habits so that when healing takes place, he may be able to say, "Sin no more, lest a worse thing come unto thee." His constant desire is to raise us up to walk in newness of life.

AT THE ARGENTINA SANITARIUM, SOUTH AMERICA

G. B. Replogle, M. D.

E are just entering a season of bountiful harvest in this country. This relieves the depression that has hung over us since the failure of crops last year. So far we have had no grasshoppers. We have had an abundance of rain. The country looks fine. The sanitarium has a good garden, which is supplying that for which in the past we have had to pay high prices.

The patronage of the sanitarium is steady, within our capacity, and is gain-

ing if anything. We are having all sorts of cases, from all classes. There has been with us the family of an army officer, a friend of the former minister of war, General Receda, who is a friend of the institution. The officer had an incurable disease, and died at the sanitarium.

During the past few days we have had as a patient the wife of the senator from our district. We are having successful cases right along in major and minor operations.

EDTHRAL

CEREBROSPINAL MENINGITIS

POTTED fever, as it is often called because of the spotted rash which appears on the body in many cases, is essentially a disease of children, more than three fourths of the cases being under fifteen years. It is a grave affection, starting when and where least expected, and sparing the lives of but few of its victims.

Known for a little more than a hundred years, this disease has at intervals of a few years overspread parts of Europe and America in great waves or epidemics, although there is probably no time when there are not a few cases somewhere. In the very nature of the case it must be so, for so far as we are able to learn, the meningococcus, the organism which undoubtedly causes the disease, is unable to live for any length of time outside the human body. It is found in practically all cases of the disease, in the nasopharynx (the space back of the soft palate), in the blood, the membranes, etc., and also in many healthy persons, known as "carriers," where it also occupies the nasopharynx for a longer or a shorter period. These carriers are quite numerous in the immediate neighborhood of a case of the disease, and through a district where there is an epidemic, and only rarely where there is no epidemic. It is said that there are ten healthy carriers to every person who has the disease. Evidently many persons are not susceptible to the disease, but they may and do sometimes transmit it to others who are susceptible. In fact, the disease is far more apt to be transmitted by carriers

who are going round the community than by the patient who is ill in bed.

There is no evidence that the disease is contagious in the ordinary sense. Usually one member in a family is attacked, and when there are more cases than one, they are apt to come either at the same time or so far apart as to indicate that one case did not come from the other. Climate, soil, presence of water. etc., seem to have little effect on the prevalence of the disease. It is usually, but not always, more common in crowded and poor districts. Generally not more than one or two to the thousand population are attacked, sometimes even less: but as many as fifty, and even one hundred twenty-five, in a thousand have been attacked in some small towns in Europe. As to seasonal prevalence, 18% occur from December to February, 61% from March to May, 15% from June to August, and 6% from September to November. This shows that it is a disease of the earlier part of the year, with its highest point about April and its lowest about October.

The symptoms of the disease are: chill, severe headache, extreme sensitiveness of the skin, pain in back and thighs, muscles of the thighs often fixed. When the thigh is at right angles to the body, it is impossible to straighten the knee-joint; that is, when the patient is on the back, the leg can not be made to point upward. The muscles of the leg, back, neck, and arms may become very rigid. There may be cross-eye, delirium, and other brain symptoms; there is always fever, the temperature rising to 104° or 105° , and afterward dropping to 103° or 102° . In fatal cases the temperature may reach 108° or even 110° before death.

As a measure of prevention, it is better in time of epidemic to *keep out of crowds*, and it is the part of wisdom to dismiss school. Kissing, eating with utensils that have not been boiled, using a common drinking-cup or a common towel or a handkerchief used by another, using lead-pencils after another, etc., all are means by which the disease may be spread. Anything which has come in contact with the mouth or the saliva of another, may spread the disease. In time of epidemic one does not know who may be a carrier.

Those who observe hygienic carefulness — which means absolute cleanliness — in all these matters have a much better chance to avoid the disease.

The mortality runs as high as 80%. Home treatment is of little avail. Patients should be under good medical care. Regarding the use of serum, a recent bulletin (*Public Health Reports*, January 26) says:—

"The use of antimeningococcic serum in the treatment of this disease may now be considered to have passed beyond the experimental stage, and to have been established as a therapeutic measure of such well-proved efficacy that its use becomes imperative."

The chance for recovery is very much better when the case is properly treated from the beginning. With the first symptoms of uneasiness and headache, the patient should be placed under the care of a competent physician.

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They Say Comparisons Are Odious

A HEALTH official from one of the Southern States attended the meeting of the American Public Health Association in Havana, and returned a wiser man, but he was heartily ashamed, -ashamed for his own city, his own State, his own nation.

What had he learned? He already knew that an American, Colonel Gorgas, had gone to Havana in 1900, and taught the Cubans the value of sanitation. What amazed him was the intelligence and energy displayed by the Cubans in putting this knowledge into practise. Instead of an island infested with mos-, quitoes and flies, as one has a right to expect in the tropics, he found these insects practically driven out! Flyscreens are not used on the houses, because they are not needed.

What is the secret?— The Havanese have taken seriously the proposition that the protection of the health of the people is an important function of the government, and that a low death-rate is a valuable commercial asset, and they began their government with a national department of health. The patent-medicine fakers were not in evidence when the constitution was formed.

Cuba pays annually 46 cents per capita on her national health. Does any American State or American city or the entire government of the United States pay as much? Since the beginning of the new order of things the death-rate of Cuba has dropped from 17.35 per thousand to 13 per thousand, which means a saving on the island of 9,570 lives a year, or, more than 25 a day. If the death-rate of the United States could be reduced to 13 per thousand, and it could if we went about it as earnestly as the Cubans are doing, for our climate is at least as good as that of tropical Cuba,- it would mean a saving of 180,000 lives a year, or 500 lives a day!

We pose as one of the great civilizing nations of the world. We have some of the greatest scientists in medicine; and when we see that the saving of life has a commercial value, as in the building of the Panama Canal, we can save life and prevent disease as no other nation has ever done. But where life-saving does not show immediately in dollars and cents, there is no people more neglectful.

We can' not blame our congressmen and legislators. They are merely the representatives of the people, and give them what they want. When the people really want health protection, they will get it. The people are aroused on the subject of pure food,- spasmodically aroused .- and they are making some noise about the efforts to quash Dr. Wiley, but the health education must go deeper. Instead of a spasmodic impulse now and then, it must become a settled principle. We must realize more than we ever have that aside from its commercial interest the health of the community is one of its greatest assets, and that healthfulness is not the result of accident, but of careful scientific study, intelligent team-work, and a certain amount of personal self-sacrifice.

Here are some of the facts presented by the Southern health officer who visited Cuba. The capital of Cuba has a death-rate of II. The capital of his State has a death-rate of 23.5, more than double. The Cubans spend 46 cents per capita on public health; his city spends 2 cents per capita on public health! I forbear to mention the name of the city, but there are others that are in as backward and disgraceful a condition. We as a nation should place just a little less emphasis on the dollar, and a little more on life and health.

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Look at Its Officers

THE League of Medical Freedom, which has been particularly officious and pernicious in its attitude toward the Owen bill, providing for a national department of health, has as officers men who from their past history indicate the whole animus of the movement.

The president is an ex-president of a mail-order medical fake, and was formerly editor and proprietor of a certain magazine which advertised various medical frauds. The second vice-president publishes a newspaper that carries advertisements of such nostrums as Winslow's Soothing Syrup, Doan's Kidney Pills, Lydia Pinkham's Vegetable Compound, Pierce's Favorite Prescription. He is said to have voted, when in the Iowa Legislature, against the Pure Food bill, and other bills to protect the people against food and drug fakes; that is, he is a food and drug reactionist. A member of the advisory board, who has an M. D. after his name, is a notorious individual, who, while he was running a so-called health magazine carrying advertisements of some of the worst medical frauds, was in the employ of the Peruna company. Is it a wonder that such men do not want a national department of health? Is it a wonder that they keep in the background, and hoodwink the people about a medical trust?

If you know who are officers in this association, just look up their business connections, and you will find the cause for their antagonism. They want the people kept in ignorance as to the nature and cause of disease.

For those who want to know the truth, it can be emphatically stated that a department of health can not possibly have anything to do with the practise of medicine in the States. The work of such a department is, and always must be, in the line of prevention rather than the cure of disease, and so far as the work within States is concerned it can be advisory only as long as the Constitution stands.

In fact, the chief reason certain "interests" have for opposing the Owen

LIFE AND HEALTH

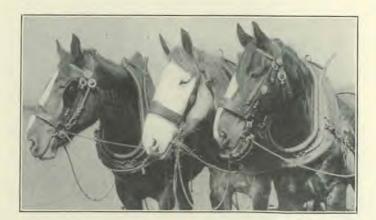
bill is that it would untie the hands of the Bureau of Chemistry and the United States Public Health and Marine Hospital Service. At present, these activities, being in departments mainly interested in the commercial welfare of the country, can easily be squelched by commercial interests, as was the first effort of the Public Health and Marine Hospital Service to eradicate plague in San Francisco. It was represented by short-sighted men, who had more eve to the pocketbook than to the good of the city or the nation, that the commercial interests of the city might be injured; and the attempt to eradicate plague was for the time checked. We all know the history, but just think what might have been the result had that policy prevailed!

The working of the pure food law has been well-nigh defeated at times because the Bureau of Chemistry is in a department more interested in the commercial welfare of a class than in the health of the people. Shall we, the people of the United States, stand for such a policy, or shall we have an unfettered department that will look after the health of all the people? Of course, so far as interstate conditions are concerned, such a department can have no say, except as it carries on an educational campaign. And it is precisely such an educational campaign, teaching the people how to avoid disease, something as the Department of Agriculture teaches the farmer how to avoid hog cholera, and warning against get-rich swindles, that the patent-medicine men and the fake-food men fear and hate.

By the provisions of the Constitution, Congress can not create a department with power to invade the State domains. The only way such a department could work within a State would be by invitation of the State, as the United States Public Health and Marine Hospital Service went into the South and stamped out yellow fever, and is now stamping out plague in California.

When the League of Medical Freedom tries to represent anything else as fact, it is throwing dust into the air to hide its own movements. The League of Medical Freedom works in the interest of swindlers and fakers, and is the enemy of every honest citizen of the United States.

Doubtless there are sincere people belonging to this league who do not know who are back of it and what are its real aims. Did they know, they would not for an instant give the movement their support.





Reopen the I HAVE been asked Canteens? to sign a petition to have the canteen restored to the army. Why? - Experienced men (and even some women) have testified that the abolition of the canteen has been followed by an increase of drunkenness and of vice in the army. I take it that these men are sincere in believing that the army is worse without the canteen than with it. On the same principle we would be justified in having government regulation and inspection of houses of illfame; and some fully believe in such a system. We have been told, till it is an old story, that the attempt to break up the red-light districts and outlaw the vice traffic would only scatter the evil into respectable districts and make it more potent for harm. This has been repeated and reiterated and again repeated until we have almost come to believe it. But there is no truth in it. The experience in Minneapolis, as shown by the report of the vice commission, has been the exact opposite.

There is only one reason why the abolition of the canteen has been followed by evil results, namely, that places worse than the canteen have been permitted to do their degrading work in the vicinity of army posts. Instead of making these regions dry, and enforcing the regulations with severity, the authorities have permitted the vilest of dens to hover in the vicinity. In order to draw the men from these dens of iniquity, it is proposed to reopen the canteens and give the men a diluted saloon under government auspices. Against the Restoration of the Canteen COL. L. M. MAUS, of the Medical Corps United States Army, *Journal of the Ameri-*

has written to the Journal of the American Medical Association, a letter in rebuttal of the arguments put forth by those who advocate the return of the canteen. A petition signed by numerous physicians and specialists has been presented to Congress, urging the restoration of the army canteen. Colonel Maus shows that these estimable gentlemen are entirely ignorant as to army conditions. He takes up one by one the various arguments; namely, that the abolition of the canteen increased (1) general sickness in the army; (2) venereal diseases in the army; (3) alcoholism in the army; (4) desertions in the army; (5) the establishment of vile saloons and brothels in the vicinity of army posts.

From statistics and from his own experience, he shows that these statements are the opposite of the truth. He says:---

"I remember well my service at Houston, Tex. (1893 to 1897), that the entire post was flanked by saloons and brothels, although the beer canteen was in full blast. . . . During my service at Fort Hamilton, New York Harbor (1897 to 1898), at which post the canteen officer was exceedingly active in the sale of beer to the men, giving them credit up to ten and twelve dollars a month of their pay, the garrison was surrounded by the worst kind of ginmills and brothels."

Here is an army medical officer who has been for years right on the ground, and who knows the facts. I have heard other army officers testify that when they attempted to prevent the working of the agents of these vile houses among the men of the post, they were warned by parties "higher up" to cease their activities. Does that smell of a collusion between the liquor interests and the War Department?

"Prohibition Is a Failure" WHEN you see this hackneyed expression in newspaper or other periodical, just turn over to the advertising pages and see how many liquor dealers are helping to supply the funds that inspire that expression.

Prohibition is a "failure" in one sense, that it has shown who are the potential lawbreakers of the community. The average liquor man has absolutely no respect for any law that runs counter to his particular interests. When the people, no matter by how great a majority, declare the sale of liquor illegal in a certain territory, it is the principle and the practise of the liquor dealer to break that law by any means in his power, by bribing the police, by corrupting the courts, by the use of secret doors, and in various ways.

Mr. Liquor Dealer has the same amiable conscience that the counterfeiter has. With him the only problem is to avoid getting caught. Of course, prohibition is a failure; and the law against murder and wholesale lynching is a failure; and the law against kidnaping pure girls for immoral purposes is a failure; and a lot of other laws are failures. The failure, however, is not in the law itself, but in the enforcement of the law.

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"We Get IN the construction More Men" of one branch of the Cape to Cairo Railway, we are told that every tie laid cost a human life. The construction superintendent being asked what he did about it, replied, "We got more men." There is nothing so cheap as human life. Even the life of a hog or a chicken is worth more than the life of a human being, if we may judge by comparing the Congressional appropriations to the Bureau of Animal Industry and to the Public Health Service.

Ask the saloon man what he does when he graduates his class into drunkards' graves, and he will tell you, if he tells the truth, "We get more men," or, rather, boys; for it is from the boys' ranks that the saloon class is recruited. What are the honor and the character and the life of a boy when the profits to the saloon-keeper, the wholesale liquor dealer, and the liquor manufacturer are in the balance? The cheapest thing on this earth is men and boys and girls,in the eves of unholy greed,-and they are exploited and betrayed and despoiled, that the owner of the liquor den, the brothel, and other hells may have good profit with which to shine in society.

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Dividends a Mighty As evidence of the Argument power of self-interest in deciding questions of right, and also of the foresight of the brewers of England in interesting this self-interest on their side, I quote the following from a private letter written by a prominent physician in England, who is well acquainted with the situation there: —

"I am confident that the forces against the drink evil in the States are better equipped, more active, and also more enterprising than over here in this country. But there is a reason, and that is, here every one has such great respect for what they call 'vested interests."

"The brewers and distillers in Great Britain have been wise in their generation, and succeeded in placing an enormous number of shares in their various factories in the hands of the general public, not excepting hundreds of clergymen of the Church of England. Consequently, all those people who hold shares naturally do not wish to do anything that will interfere with their value or lower their dividends. Through this and other influences brewers are looked upon with a very great

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amount of respect over here, and are not infrequently rewarded with peerages or other high honors. It seems such a disgrace, and yet such is the case."

Clergymen and editors are only human, and they are few who will cry down an institution that is putting money into their pockets.

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Drink andRAILWAY companiesSafetyare not bands ofhope.They are not in the world fora reform propaganda.They have aneye to the one thing, that is to make theroads pay.To this end they find itessential to do everything they can toprevent accidents involving damageeither to persons or property.

Realizing the fact that liquor makes employees unsafe, and vastly increases the risks of accident, the Lake Erie and Western Division of the New York Central lines has begun a campaign against the use of liquor by employees at all times, whether on or off duty. Nearly all railways forbid the use of liquor while on duty. The tendency, as business managers learn the close relation between drink and accidents, will be more and more to eliminate all drinkers, no matter how moderate, from positions of responsibility.

The man who takes an occasional glass is a potential drunkard, but as a sot, he would probably damage only himself and his family; as a moderate drinker, he is probably on the road to that nerve instability that makes for train wrecks and other "unavoidable" disasters. Railway managers are opening their eyes to this fact.

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A "Safe and Sane" THE Department of Department Agriculture, after an adverse decision regarding the harmfulness of saccharin in food, by the Bureau of Chemistry, had the matter referred to the referee board, and meantime allowed the food men to continue using saccharin in unlimited quantities. Finally the referee board pronounced against saccharin, and the department made a ruling that no saccharin should be used in food after July I, I9II. The food men did not relish having a big slice taken off their profits by being compelled to use honest sugar instead of saccharin, so they set up a howl, and the date was extended to Jan. I, 1912.

Near the end of the year, when the ruling was about to go into effect, these same men set up another howl and the date was extended to February I; then, at the last report, it had been extended to March I. The Department of Agriculture says in effect to the dishonest food men, "Ask, and ye shall receive." Is it a wonder that the people want the Bureau of Chemistry removed from a department which looks after the interest of the producer, to one that will have for its first object the health of the people?

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In the discussion of The Monday Evening Club a paper by Dr. C. H. Jones of Baltimore, on the tuberculosis problem at the Monday Evening Club, Washington, D. C., January 15, an interesting local condition was developed. Though the paper dealt largely with housing conditions, dispensaries, etc., the discussion was largely on the topic of tuberculous milk supplies. Dr. Mc-Gruder called attention to the fact that though the British and French governments, on the strength of investigations made in Washington regarding the danger of tuberculous milk, have passed stringent laws to protect the people against an infected milk supply. Washington itself is far behind in the matter of milk legislation.

Dr. Woodward cited the fact that the

municipality of Washington includes not only the consumers and the people, but Congress; and he was certain that Congress does not know the conditions and the dangers to which the people are exposed by communicable diseases, including tuberculosis, else they would not cut down the ridiculously low appropriation of 5 cents a person to 3 cents, as they have done. As congressmen are here only a few months, and are then more than busy with other matters, we can not educate them. He believed it was the duty of persons in the constituencies either to educate their congressmen on these vital matters, or to send men who are informed.

Dr. Woodward then spoke of the great importance of education in hygiene. He would have this educational campaign begun in our colleges, for the college graduate will soon be voter and legislator. The legislator who has an intelligent knowledge of the bearing of public health and hygiene, will be a constructive legislator.

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I TRUST Mr. Post There's a Reason has not copyrighted They seem particularly these words. apt under certain circumstances. There has been a strong effort to eliminate some of the vicious patent-medicine business, which has been taking millions of dollars from the American people without rendering an equivalent. And in the campaign, magazines and periodicals have been urged not to advertise these substances. Meantime it occurred to leading men of the American Medical Association that they ought to clear their own skirts by ceasing to advertise and use certain so-called "ethical proprietary" remedies (secret remedies prepared for physicians' prescription), which were little if any better than the "patent" medicines advertised to the public.

A committee was organized to pass on the merits of all the proprietary drugs offered to physicians, and this committee established a set of rules, which in brief are, that a remedy to be recognized by the association as ethical must be nonsecret in composition, and there must be no extravagant claims made for it. The association has published a list of remedies which they have found to come up to the standard, and the Journal of the American Medical Association has done away with the advertisements of remedies not coming up to this standard; and a number of other journals, particularly the State journals, have done the same.

Some influential private journals, as well as practically all the smaller fry, have not seen fit to do so, and the *Journal of the American Medical Association*, has more than once called the attention of members of the association to the fact, and suggested that a dropping of subscriptions would soon correct the abuse.

Latterly a number of journals have taken the defensive, and have waxed eloquent, particularly accusing the *Journal* of czarism, and telling it to "go to."

I am not in medical practise, and am in no way connected with the American Medical Association, and I do not even subscribe for the *Journal*, but I think it is in a good work, not only for the profession, but for the people at large; and when I read such a tirade against the *Journal*, I always turn to the advertising pages of the journal making the tirade, and then I feel tempted to use Post's expression, "There's a reason." There is always a fly in the ointment.



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.

Digestibility of Fruits.—" Can you tell me why it is, if fruits are so healthful, that I frequently have difficulty from eating them?"

You may eat them in wrong combinations, as with milk or vegetables. You may eat them at irregular hours, or late at night. You may not be careful to avoid underripe and overripe fruit. In some persons there is an idiosyncrasy which prevents their eating certain kinds of fruit; strawberries, for instance. You may eat them without removing the peelings.

Soda-Fountain Drinks,-"" What is your opinion of soda-fountain drinks?"

They range from questionable to very bad. The best beverages aside from pure water are the home-made fruit-juices, made from ripe fresh fruit. Good lemonade and orangeade are readily made from the fruit, and for wholesomeness can not be approached by any product of the soda-fountain.

Laxative Fruits.—" What fruits are most laxative? "

Dates, figs, and prunes are probably most laxative. To get much benefit from prunes, they should be stewed, and eaten daily in liberal quantity. Apples, eaten raw the first thing in the morning, or prepared by baking or stewing, are mildly laxative.

Pyorrhea Alveolaris.—"What can I do to relieve a condition of shrinking gums and loosening teeth?"

This is a very serious condition, and should have the attention of a competent dentist. Pyorrhea is apt to be followed by grave systemic disorders. The following has been suggested for relief: Apply occasionally a very dilute solution of chromic acid, by means of cotton wound on the end of a toothpick, to the gums and up on to the teeth. Even a dilute solution may be painful. Another recommendation is to rub the gums frequently with orange or lemon peel. Use peroxid of hydrogen, one-fourth strength, about three times a day as a mouth wash. But one is much better off to be in the hands of a good dentist than to attempt self-treatment.

Treatment of Biliousness.—" What dietetic treatment would you recommend for torpid liver and biliousness?"

Discontinue your ordinary food for twentyfour hours, and in its place take very freely of dilute lemonade (with very little sugar), orangeade, or other fruit drinks, and follow for a few days by a fruit diet.

Blistered Feet .- " Please suggest treatment for the following: During the spring and summer small blisters and bumps appear on feet around edge of the sole, on the toes, and especially on the pan of the sole of the foot where there is not much weight borne. They do not get sore, and itch very little. Have come now for three summers, and usually stay several weeks. Once or twice signs have appeared in cool weather. Have also been bothered with bumps breaking out on palms of hands and skin around nails on fingers, also along inner border of fingers. Drinking grape-juice and other acid drinks makes them appear; when no acid is taken into system, they appear very little on hands. Very little itching. Are the blisters contagious to other people who use same bath tub and towels?"

You evidently have some fault of nutrition. For some reason your system is manufacturing too much acid. I would have to know more definitely the condition to be able to prescribe intelligently. From what you have written I do not think the skin trouble at all contagious, but due entirely to the condition of your digestive apparatus. I believe the cure is a matter of diet. Avoid fruits as far

as possible. Use an abundance of water, and keep the intestines open by using laxative food or some laxative material. If you can obtain agar, the Japanese moss that is used in bacteriological laboratories, chop it up fine, and take, say, a tablespoonful once a day, or oftener if needed, without much chewing. It is a reliable laxative, and will help to clean out the bacteria in your lower bowel, which probably have much to do with your condition. After taking a bath, use some talcum powder on places that have a tendency to irritation, as under the armpits and in the stockings, and dip the feet once or twice a day in a weak solution of formaldehyd, and apply the same to other portions that have a tendency to manifest the skin- trouble. Do not have this solution strong, else it will harden the skin.

Gall-Stones.—" Periodically, or at least occasionally, I have a very severe pain under my right ribs, sometimes shooting up to my shoulder-blade. Sometimes the attack comes on after dinner (which is my principal meal), and may last most of the afternoon. Sometimes it seems as if I should die. I have a cold sweat, and frequently lose my dinner. In two or three days my skin becomes sallow. Can anything be done to prevent these attacks?"

The probability is that the patient has gallstones, and a surgical operation would be the only permanent relief that could be offered. The taking of olive-oil in large doses (three to four ounces) has been recommended, but can hardly be depended upon to give permanent relief. Hot fomentations over the stomach and liver, followed by the wet girdle to be kept on all night, might be tried. The wet girdle consists of one or two thicknesses of cheese-cloth wrung out of cold water and put around the waist, covered with a thick layer of flannel, shutting the air away from the damp cheese-cloth as much as possible.

J. H. N.

Feeding the Baby.—" Please tell me what to feed my baby. He is now fifteen months of age, and I wish to wean him. He has never been fed, and has but little interest in any kind of food except the breast, and absolutely refuses to take water. He is badly constipated. I pour water down him with a spoon, but still I must resort to the enenia nearly every day; I know it is a bad habit for him, but I do not wish to use drugs?"

The child will doubtless not take other food till weaned, but will eat all right as soon as weaned. At his age he ought to get along well

with three meals a day; though if you have been accustomed to feeding him frequently, he may want four meals at first. Use any well-cooked grains, but especially corn flakes, granose, or granola, with cream, toasted bread (zwieback) with cream, baked potato, a soft-boiled egg occasionally, all the good cow's milk he will drink (whole milk), stewed fruits, oranges if ripe. In fact, he can begin eating a good many things if a little care is taken to watch the effect on him, and not too many new things introduced at one time. Begin with the simple foods named above, and little by little add others till he is eating like other people. Avoid fried foods, highly seasoned foods, spiced foods, and foods rich in fats; also avoid combining too many things at one meal - not over two or three things. His bowels will regulate themselves when he begins to eat. Keep up the enema every morning at a regular hour until they do. There is a good training in setting him on a vessel every day at a regular hour. Use less water gradually, and after a while it will not be H. E. H. needed.

Remedy for Warts.—" Do you know of any remedy for warts which does not necessitate the use of acids or escharotics?"

The following has been sent in by a subscriber, and is worth trying. It at least can do no harm: "When in South Africa, I saw people with internal cancer who ate ripe raw figs, saying it prolonged their lives. Wondering whether there could be any virtue in the fig, I broke the stems and leaves of a figtree and applied the milk to a wart several times a day, and it was marvelous how soon that wart disappeared without the slightest unpleasant sensation. The same remedy afterward caused the disappearance of thirty-five or forty warts from the hand of a neighbor, without leaving a scar.

"MRS. E. B. HASKELL."

Suppurating Glands.—" While canvassing in the mountains, I came across a man who had the grippe two years ago, and then a lump like a wen formed over his right shoulder-blade; others formed above it, and began to discharge; they now extend down under his armpit, and all discharge. Can anything be done to help him?"

I am unable from your description to know just what the condition is. It may be tuberculosis of the glands. The only way to know whether the case can be helped is to have a personal examination made by some reliable physician. The patient should be in competent hands, perhaps in some hospital.



In this department, articles written for the profession, and public lectures on hygiene, which contain matter of interest to LIFE AND HEALTH readers, are given in abbreviated form. Sometimes the words of the author are given, but more often the passage is abbreviated, or else paraphrased in popular language. Technical matters and portions of articles having no popular interest are omitted. Credit the authors for what is good, and blame "us" for the rest.

MECHANICAL EFFICIENCY

T HE human organism is a delicately balanced machine, called upon to perform work varying inconceivably in nature and degree. Mental, visceral, and muscular work must be performed under varying conditions and changing speeds.

In health there is a minimum of friction and a maximum of efficiency. Any departure from this state of correlation, wastes energy and lessens efficiency. No part can be strained without affecting the whole.

For esthetic reasons the preferred standing posture has long been that in which the individual, without rising on tiptoe, makes himself as tall as possible, with head erect, chin in, shoulders back, chest high, and abdomen flat. A broader comprehension of anatomy and physiology has now taught us that this is the attitude of greatest efficiency. When the body is erect, the various viscera rest on ledges, or shelves, formed largely by portions of the abdominal walls. Their downward thrust is received by the lower portion of the anterior abdominal wall. Hence, the importance of firm abdominal muscles.

Deformities which are not congenital or the result of accident represent the extreme of some normal motion. The club-footed baby at birth is unable by muscular effort to make the foot take a natural position. If he uses his foot in the distorted position, the bones grow in permanently deformed shapes. An adult compelled to walk with foot artificially fixed in the clubfoot position, would in the course of months become permanently clubfooted. Deformity is the result of improper function.

Spinal deformities usually are the result of wrong living. Bad teeth, followed by poor digestion and poor nutrition with weak muscles, together with badly adjusted schoolroom furniture, cause slouching postures, which eventually result in curvature of the spine.

This fact impresses the duty to require at all times, an erect posture by the children, and to give them seats so adjusted that they can sit erect without strain. Perverted ideas of beauty and style are responsible for by far the greater number of bodily distortions, though some deformities result from mistaken notions of anatomy, as, for instance, the fallacy that a growing child's clothing should hang from the shoulders. The only bony attachment of the shoulder to the trunk is at the inner end of the collar-bone. Elsewhere it is attached loosely by muscles. Any pull on the point of the shoulder causes it to slip downward and forward, producing "round shoulders."

When I was a student of medicine, it was erroneously taught that the respiration of man was essentially abdominal, and of woman essentially thoracic. Since then it has been definitely shown that the normal respiration of woman when unrestricted is more abdominal than thoracic.

The corset is an institution of too great antiquity for me to speak disrespectfully of it. Nor would I ask those who have formed the habit of using it in early youth to discard it now. Moreover, I am prepared to admit that some corsets are worse than others. But I desire to lay before you some facts from which you can make your own deductions, to which I will add some based on my professional experience.

When one is confined in bed, the muscles progressively weaken. An arm in a plaster cast withers, or atrophies. On the other hand, in order to develop a part, it is necessary to use it. Corsets act as a support for the lower chest and abdominal walls; and besides hindering the descent of the diaphragm and thus causing thoracic breathing, they splint and thus weaken the abdominal muscles. We have already seen how important it is to the body to have a vigorous set of abdominal muscles. In this way the corset makes for inefficiency.

In Europe I saw women who worked all day in the fields, and others who as hodcarriers climbed up and down ladders, four or five stories, all day long, carrying brick and mortar. In Japan young girls coal the great ocean-going ships. These facts refute absolutely the physical inferiority of women; but these women do not wear corsets.

Medical men frequently comment on the ease with which barbarian women give birth to their young. No small part of the distress experienced by their civilized

sisters may be attributed to the fact that through weakening their abdominal walls by corset-splinting, this expelling power has become largely dissipated.

Finally it is upon women rather than men that abdominal surgeons grow rich. How often do you hear of a man having a floating kidney or a sinking of the abdominal or-gans? Why do women have them if not because of the relaxed abdominal organs caused

by the corset? If abdominal surgeons had a spark of appreciation, they would erect a monument to their true friend, the corset!

But it is not for you or me to discard our defective dress. The mischief has been done.

I doubt if most of us could get along without these things. Ephraim is wedded to his idols! But we should bear witness to our errors, or those of our parents, so that those coming after may profit by our experience. If we can persuade adolescent girls that the use of corsets does not transform them into women or render them more adorable, but makes for invalidism, we shall make for the happiness of the future generation.

The least harmful type of

corset takes its support from the pelvis, and keeps its place without the aid of garters or straps. It has a strong upright upon each side of the spine which follows the curves of the body behind. The front is straight. It must not decrease the normal waist measure over an inch. At its upper border it should be slightly larger than the body at this level. The lower, or pelvic portion, which is not more than a handbreadth, reaching from the iliac crests to the upper surface of the trochanter, or prominent upper end of the thigh-bone, should be laced with an independent lace. Tight lacing should be confined to this portion. The mischief done by such a corset will be confined to the weakening, through splinting, of the abdominal muscles. It will not cause displacements of the viscera.

The Egyptians wore pointed shoes, and their feet must have been deformed. Even with the Greeks, who studied dress with a

view to both efficiency and symmetry of the human form, there was an outward deviation of the four outer toes, caused by the sandal thong.

At the end of the dark ages the new civilization became loaded down with all manner

> of dress deformities, some of which, including the corset, have continued until the present day.

> Now I am not asking you older people to wear squaretoed shoes or to discard high heels. The time when your feet and mine could have been made anatomically perfect is past. Distorted feet can not be cured; they must be prevented.

> Ideally, shoes should be made over individual lasts; but with growing children this

is not practicable. Little children should wear loose non-shrinkable stockings, and wear shoes made on the sandal type of last. I prefer low shoes. Uppers are not strong enough

to support a weak ankle, and tend to check the up-and-down motions of the foot on the leg .- James T. Watkins, M. D., Orthopedic Surgeon to the Children's Hospital, the San Francisco Polyclinic, etc., in California State Journal of Medicine, January,

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Alcohol

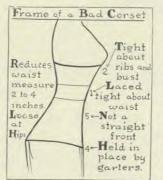
PRESIDENT HADLEY is quoted as saying that "when the American people know what alcohol is, they will banish every saloon from the land."

Alcohol is the liquid excrement of a microbe. We must make men know, not only that the saloon is bad, but that alcohol is bad. Alcohol injures health, and the saloon produces disease. We should antagonize not only the saloon, but alcohol.

1012.

The President has got as far as Solomon; for he says in action, "Wine is a mocker," by refusing to drink; but he has not got so far as Habbakuk, who said, "Woe to him who putteth the bottle to his neighbor's lips;" for he still serves wine to his guests.

The three largest arguments against alcohol are heredity, patriotism, and race degeneracy. Self-interest is a legitimate motive, but it is not the high motive. You can show men that alcohol ruins business, increases taxes, shortens life. These are true enough. And yet a man will risk his own life for what pleases him. But men, if they are men, will listen when the future generation is involved.



Frame of a Good Corset

General

Comment

Loose here

Should

not reduce

waist more

than one

Straight

front. Extra

Laced

Laces either

front or back

Holds position

wilhout garters

snug

support

inch

We are told by Dr. Holitcher that a single drink of alcohol has in several cases resulted in a defective child. Three fourths of the children of alcoholics are defective as against three fourths of the children of abstainers who are normal.

The second great argument is our duty to our country. The nation is endangered through rum. The statesmen of China are not fighting the opium evil because of the harm it causes to individuals, because of the despair of wives and children; they are fighting the opium evil that China may be strong. "Japan won against China and Russia," say the Chinese officials, "because it is antiopium." And the present movement for a newer China, a better China, would never have been born if the slavery from opium had not first been broken.

France, a dying nation, is now attempting to prolong its life by warning its people by every means in its power against the use of alcohol.

The German emperor is working for total abstinence among his people for patriotic reasons. "We must abstain in order to win in the great naval battles and in the great race for the world's market. The nation that drinks the least liquor is going to win."

The supreme temperance argument is the peril of race degeneracy from alcohol. The increase in city population is causing a rapid increase in the per capita drinking, and soon we will have no sturdy, sober, rural population with which to renew the dissipated stock of the city. Alcohol must be suppressed that the race may not perish.— Rev. W. F. Crafts, address before the Anti-Saloon League, Washington, D. C., December, 1911.

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The Detection of Eye Strain

It is possible to strain even normal eyes by continuous overuse, but there are some conditions in which eye strain is practically always present. Some neurasthenics bear fatigue of any sort badly, and consequently their eyes tire easily. Most neurasthenics suffer from eye strain as a symptom, and often as a cause, of their trouble.

The chief cause of eye strain, however, is the abnormal eye, usually the far-sighted, or astigmatic eye. Such eyes frequently have normal vision, and the patients are not aware that they have eye trouble. The muscular effort necessary to the sharp vision causes fatigue, which is followed by various sensory, motor, and secretory symptoms.

Among the easily observed external symptoms of eye strain are the elevation or depression of the eyebrow, the formation of abnormal wrinkles in the forehead or at the angles of the eye, constant blinking of the eyes, and holding the head in unnatural positions in order to see distinctly. But many cases have no definite signs especially indicating eye trouble. Often there is chronic headache; in fact, this symptom is said to be present in over eighty per cent of eye cases. The eye headache, as a rule, comes on gradually after the patient has been at work some time, and is made worse by the use of the eyes. It is more apt to be present in the afternoons, and absent holidays. The frontal and occipital regions are most commonly involved.

Many, if not all, of the migraines, or headaches involving one side of the head, are connected with eye trouble, and the same may be said of many of the habit spasms, incorrectly called chorea. Eye strain should always be suspected in neurasthenia and other fatigue neuroses, and correction of the eye strain in these cases will often give much relief to the sufferer.

All patients over thirty-five who use their eyes for continuous work are likely to be straining them more or less. Normal people begin to require glasses after forty, and in persons who are far-sighted this requiring of old-sight glasses is often necessary at an earlier date.

Such common ills as nausea, dizziness, and bilious attacks often come from eye strain. Many of the symptoms accompanying the change of life, particularly the headaches, are the result of the old sight which develops at the same age, and they can often be relieved completely by suitable glasses.

But many of these conditions may result from several causes, and it is necessary that the physician investigate these other causes as well.—Ellice M. Alger, M. D., Associate Professor of Ophthalmology, Postgraduate Medical School, New York, in the Medical Times, January, 1912.





A National Responsibility

T F additional arguments were needed for a national department of health, they would be at hand in the anomalous fact that our quarantine service is still attached to one of the bureaus of the Treasury Department. It is hard to see why the banker who is usually and very properly called to preside over the national finances should be thought to be especially qualified to deal with questions of public health. There is, to be sure, under him a surgeon-general, and there has gradually been developed a scientific staff in the Bureau of Public Health and Marine Hospital Service, of which any country might be proud. This bureau, however, and the bureaus in the Department of Agriculture, which are charged respectively with the inspection of foods and drugs, of meats and meat foods, and of insects in relation to diseases of men, would do far more effective work, and do it at less cost if they were grouped into a single department directly charged with the protection of the public health. It is not to our credit that we have approached the subject of poisoned food and condemned meat from the point of view of the interest of the farmer and packer and the manufacturer of food products rather than from that of the consumer.- Editorial in the Survey, Jan. 27, 1912.

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Government Aid for Cattle: Why Not a Little for Man?

It is understood that the federal government, which is able to support a twenty million Department of Agriculture, and to issue farmers' bulletins in editions of millions, is entirely too poor to pay adequate salaries to the officers of the Public Health Service, and to issue their valuable public health bulletins in editions of more than a few thousand. That it can not afford a department of health goes without saying. That is to say, the national government can not afford to give to the health of its citizens the attention it gives to live stock.

For our own part, we can not help feeling much more interest in the health and welfare of human beings than in that of cattle and hogs. This we admit is unstatesmanlike; it is a professional bias of which we are unable to rid ourselves, and we humbly realize our inability to justify it in those high spheres where appropriation schedules are formulated.

Yet after all is not a human being — even a child — worth something? Not so much as an Alderney cow, of course, but still something — enough to justify the expenditure of a few cents to save the life when dollars are spent to save the life of the cow! — Editorial, Journal American Medical Association, Dec. 9, 1911.

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Alcohol and Morphin

OF all narcotic drugs, that which is most frequently taken, and which most frequently leads to a drug habit, is alcohol. Alcohol is not a stimulant, though it will be a long time before people get over considering it so. It never stimulates anything or anybody. It always puts to sleep one or more of our faculties. It may put to sleep our sense of decency and our power of restraint, so that we become abnormally lively and vivacious. It may put to sleep our power of muscular control, so that we reel in walking, and mumble our words when we try to talk. Finally, it may produce an actual stupor, when the individual, as we say, is dead drunk. All these familiar changes are stages in one and the same process of stupefying ourselves, and many a poor sufferer has found out for himself that a drink of whisky will stifle pain, physical as well as mental. It drowns stomach-aches as well as heartaches, and I have known a number of alcoholics who acquired the habit through the effort to subdue pain sufficiently to let them work unhampered. . . .

The effects of opium on character are even more destructive than those of its twin narcotic, alcohol. Many an alcoholic remains truthful throughout his life, but practically every morphin fiend is a liar. We have all known alcoholics who were full of generous and kindly feelings, but most morphinists become selfish and mean. Both alcohol and morphin make people unreliable. Even though he may be able to conceal the habit, it becomes known of any person who takes alcohol or opium that he can not be relied upon to fulfil his engagements or to put through what he has undertaken.

Alcoholics get fat, and morphinists thin; and, on the whole, the sufferings of the morphinists are far the greater. Morphin is taken not because it produces any ecstatic delight, or indeed any positive pleasure at all, but merely because all life is hellish torture without it.— Richard C. Cabot, M. D., in Good Housekeeping Magazine.

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The Ultimate Victory in the Making

WHILE I am intensely interested in the cause represented by the present gathering, I am more interested in the Anti-Saloon League of to-morrow than in the one of to-day. That is why I am training the boys and girls in our Sunday-schools. I have wanted to see the day when there will be no saloon from Canada to the Gulf, from the Atlantic to the Pacific, but if I have to drop the work before it is completed, I shall have a well-trained band of young people to carry it on to victory.

Many temperance workers are working at the base of the precipice, picking up the wrecks. The Sunday-schools are working at the top, to keep the young people from falling over. Too much temperance work is done at the back door of the saloons, saving the wrecks. Our work is at the front door, to keep the boys and girls out. There are one hundred seventy-five thousand Sunday-schools in America doing good work. Those of this audience of Anti-Saloon League workers who are or have been workers in the Sundayschool, please stand. Yes, I thought so. It is the Sunday-school that has made the Anti-Saloon League.

Four times a year we have been giving a strong temperance lesson in all the Sundayschools, and now, in some of the States, beginning with Pennsylvania and soon with Ohio, we shall give, in place of a quarterly lesson on temperance, one lesson on this vital subject every month, using large charts, and shall give every pupil a small copy of the chart to carry home.— Dr. Joseph Clark, of Columbus (Timothy Standby), address before National Convention Anti-Saloon League, Washington, D. C., December, 1911.

ME

Alcohol and Insanity

THE most trustworthy experimental studies, among which may be mentioned those of Schneider, Mayer, Aschaffenburg, Smith, Kurz, and Kraeplin, show that even moderate indulgence in alcohol, though producing in the subject a sense of well-being and of increased physical and mental ability, in reality causes impairment of muscular power coordination and of mental efficiency. In persons of neurotic constitution comparatively slight indulgence has been known to cause severe mental disturbance.

Alcoholism is the cause of insanity in from twenty to thirty per cent of all male admissions to hospitals for the insane. From what has been said concerning the effect not only of excessive indulgence but also of so-called moderate indulgence in alcohol, it follows that the advice to the individual can only be total abstinence without compromise. Those who favor temperance rather than abstinence do so on the basis of the usefulness of alcohol as a food and as a sedative contributing to the recuperative effect of rest by promoting complete relaxation.

It is not to be disputed that alcohol does possess these beneficial qualities, but it is not possible to derive the benefit and yet escape the harm of using it. More moderate indulgence, if regular, leads too often to the development of uncontrollable craving, increase of dosage, and ultimately to chronic alcoholism. It need hardly be said that alcohol either as a food or as a sedative is not a physiological necessity.

Dissemination of correct knowledge of the effect of alcohol should constitute a part of the program of all public schools. It is necessary before all to dispel the prevailing notions that alcohol is harmful only when taken in excess and that in moderate quantities it is beneficial or even necessary to the laborer or artisan.—A. J. Rosanoff, M. D., physician King's Park State Hospital, New York, in Medical Record.

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Three Curious Facts

BREWER BUSCH is a Prohibitionist. He selected the prohibition city of Pasadena for his most palatial residence. He prohibits his men from drawing their pay on Saturday night for fear they will drink on Sunday and not show up on Monday. He pays them on Monday night.

Brewer Pabst has done all in his power to create a prohibition zone around his mansion on the leading boulevard of Milwaukee. —American Advance.

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The Safety of Oysters as Food

In a number of instances epidemics of typhoid fever have been traced to oysters taken from polluted waters. On account of their nature and composition, oysters seem to afford a good pabulum or medium for the preservation or multiplication of typhoid bacilli or organisms of the colon group. Their breeding-grounds are sometimes so located with reference to the sewage discharge of cities that the possibility of their contamination with pathogenic bacteria of the colon type is great. After the passage of the national Food and Drugs act, this was one of the first problems to receive consideration. It was studied systematically in its various phases. This resulted in rulings by the Food and Drug Inspection Board which made it unlawful to ship or sell in interstate commerce ovsters or other shell-fish taken from polluted beds, or to ship or sell shucked ovsters to which water or ice had been directly added. . . .

Bacteriologic examinations of thirty-three samples of shucked market oysters collected in January showed a maximum count of 4,-750,000 and a minimum of 15,500 organisms per cubic centimeter, with a maximum of 1,-000,000 of the B. coli type [indicating fecal contamination and danger of typhoid .- Ep.]. These oysters were opened under ordinary commercial conditions, kept in contact with ice in uncovered containers. Oysters may be contaminated from the following sources: contaminated grounds; polluted water in which they are floated; insanitary shucking houses; washing with impure water and contaminated ice; unclean methods in handling, packing, and shipping. Stiles therefore concludes that shucked oysters as ordinarily found in the market contain more bacteria per given volume of liquor than oysters opened directly from the shell under clean conditions: the bacterial content of open market ovsters may include numerous colon bacilli and streptococci, and not only is each of these organisms evidence of fecal contamination: but when they are present in large numbers, as in some of the instances noted above, their toxing may cause gastro-intestinal derangements of a serious nature if consumed raw. Even when grown in unpolluted water, because of unclean methods of shucking and handling, they may be contaminated and rendered unfit for food .- Editorial, Journal American Medical Association, Dec. 30, 1911.

M

Dietetic Treatment

THE study of dietetics is at once the most important and the most neglected part of medicine. In fact, at this late day we can not say truthfully that there is any rational system of dietetics employed either in the treatment of disease conditions or in supplying the normal body with the material to maintain itself in its proper functional activities. The most important work of the dietitian is not infrequently shifted to the cook, who is not only master of ceremonies in regard to the preparation of the daily food. but also directs its selection in both quality and quantity. The guide to the choice of food is thus not what the body needs, but what tickles the palate. Even in so grave a malady as tuberculosis, it is not uncommon to find the invalid supplied with a menu from which only the digestive organs of a laborer could extract nourishment. It is true that dietetics presents no opportunity to bring about sudden cures, and it does not appeal Critic and Guide.

to the imagination like pink pills and medicated vapors. The greater my experience, the more I am convinced that the really progressive physician of the future will pay more and more attention to the study and regulation of the diet of his patients, particularly those who are suffering from any chronic malady, like tuberculosis.

The successful treatment of tuberculosis, perhaps more than is the case in any other disease, requires a complete mastery of details. The physician must not only be patient, watchful, and possess a knowledge of the various manifestations of the disease, but he must have the confidence, cooperation, and control of the patient himself. The period of time over which the treatment must necessarily be extended is so long in many cases, and the task of correcting improper habits and overcoming erroneous ideas is so great, that, unless the patient lends himself freely to the work of regeneration, no good results can be brought about, nor should they be expected .- Theo. Y. Hull, B. S., in Dietetic and Hygicnic Gazelle.

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Licking Stamps

THE adhesive stamp is a sanitary blunder, but it is a business convenience for which it is hard to suggest an alternative. No persons need lick a stamp if they seriously make up their minds never to do so, but unfortunately the use of stamps has created a habit which, once contracted, is difficult to avoid.

There are several devices which are intended to obviate the licking of a stamp, but their adoption is comparatively rare. . .

We are prompted to raise three considerations in view of the provision in the National Insurance bill, which requires the servant and master weekly to affix a number of stamps to a card that is left for the inspectors to examine. .

It will be interesting to learn the medical officer's attitude when he finds cards of licked stamps in the houses in which there is infectious disease. . . .

Licking envelopes is equally objectionable, and it is time that human ingenuity found a convenient way of sealing a paper cover or of attaching a stamp which shall not require the aid of the saliva .- The Lancet (London) Nov. 25, 1011.

ME

Consumption Not Routed

To hear some of our antituberculosis workers, one would be led to think that death from consumption is a thing of the past. Unfortunately the consumptives don't seem to be aware of it, for they go on dying just as cheerfully-or cheerlessly - as before .--



ATHLETICS IN EDUCATIONAL INSTITUTIONS

N his report for 1911 the surgeon-general of the Navy, Dr. Charles F. Stokes, took a position against the playing of the game of football by the naval academy cadets, on the basis that the game unfits young men for the best naval service, especially by the "disabling after-effects which make it questionable as a sport to be encouraged where future naval officers are being trained." He continues: —

"The prolonged rigorous course of physical exercises necessary to excellence in physical sports is believed to be dangerous in its aftereffects upon those who indulge in athletic sports sufficiently to excel therein.

"When, under the conditions of service at sea, it becomes impossible to continue rigorous exercise, the individual easily falls prey to degenerative changes, tends to become obese, to lose physical stamina, and in the end he fails to render as many years of efficient service under service conditions as does his less athletic, but symmetrically developed classmate."

The New York Medical Times, desiring to know the opinions of college men thoroughly conversant with athletic affairs, sent out a questionnaire, which incited replies given at length in the February issue of that journal.

Dr. William G. Anderson, director of the Yale University Gymnasium, who has for years made a scientific study of athletics, gives as a result of the careful study of the history of Yale graduates, a summary of his views, from which the following is taken: —

"Comparison of the mortality of the specialized athletes with the general graduate who has not distinguished himself in athletics to the extent of winning the Y, still shows in favor of the athlete. Of 10,922 students in academic and Sheffield classes from 1855 to 1905 inclusive, 1,406 are dead, and 9,516 are living. The percentage of deaths at this university is 12.9. Of the 807 athletes from 1855 to 1905 only 58 are dead, a percentage of 7.2, or only a little over half of the general graduate. Of course the comparison here, as it was in the general mortality table, is somewhat misleading, in favor of the athlete, for it must be remembered that he is a triply selected man; first, by his membership in college; second, by his membership in the athletic group; and third, as the pick of the athletic group."

Among his conclusions are the following statements: ----

"The Yale athlete does not die young, nor is heart-disease a leading cause of death."

"My conclusions show that the athlete is not short-lived, but I do not state that he owes his longevity to athletics."

Dr. Dudley A. Sargent, director of the Hemenway Gymnasium, Harvard University, says, among other things: —

"I have no hesitation in saying that, in my opinion, a considerable number of the students in our colleges who participate in athletics do injure themselves, but I should hardly attribute this injury to the same cause as the surgeon-general does.

"The injuries that are received in the practise of athletics are due largely to accidents, and the vast majority of these may be attributed to the American game of football."

He notes that numbers of athletes die from infectious diseases, and admits that it is possible to overdo in athletics as in business, but does not believe that for that reason we should do away with athletics. He says, Not less athletics, but more athletics.

"The remedy that I would suggest, therefore, is not less athletics, but more: less of the intensive, narrowly constructed, and highly laborious forms of athletics; more of the diffusive, widely extended, and much more enjoyable forms of sports and physical exercises."

He thinks, however, that the character of the games should be changed.

"The so-called group or class contests in athletics, which have been introduced into some of our schools and colleges, seem likely to solve the problem. Some of the advantages of this method are: It gets all the students into the contests, instead of the favored few; it cultivates the cooperative and altruistic spirit, instead of the spirit of intense individualism; it improves the health and general efficiency of the whole student body, and does away with the evils of overstraining as well as overtraining."

Dr. A. H. Sharpe, school physician and football and baseball coach, William Penn Charter School, naturally enough, is a strong believer in football. Here is how he puts it: —

"We may abolish football, but we can not abolish human nature; and therefore we must take into consideration the superabundant energy with which every healthy young man is endowed, and turn this loose into a good channel, or there is going to be trouble. Football is the best outlet we have for such lusty youths, and certainly there is no other game which presents such attractions. These fel-lows demand something with a 'tang' to it. They are aching to try themselves out, to see if they really have got good stuff in them. as far as courage, strength, and 'sand' are concerned. This is the only game we have that demands the best a man has physically; and as we have plenty of other games suited to all ages and strengths, I can see no good reason why we should not have one limited to the strong."

But Dr. W. L. Estes, lecturer on physiology and hygiene, and consulting physician Lehigh University, looks at the matter from a different view-point: —

"I venture to give it as my opinion that,

as ordinarily conducted in these modern times, both training for athletic sports and indulgence in the several 'athletic games are improperly conducted and conducive of great evils. I can not say that it is due so much to actual injuries as to the ulterior effects of overexertion, especially on the part of boys who are undeveloped, and whose training as a rule is too short and desultory to withstand the tremendous and sometimes prolonged efforts of the athletic contests.

"Systematic, regular, and graduated exercise as a part of a course in college I believe is good. What I object to is the strenuous tests without proper training, and the necessity of a man's continuing his muscular exercise after college life, if he has trained himself to the condition of an athlete. In short, the history of college athletes and our physiologic knowledge indicate that athletes should belong to a class, and that mental training for intellectual pursuits can not go on simultaneously with excessive athletic training without injury to any young man.

"It seems to me that it will be necessary to have two classes of students; one, of those who are willing to make athletics a profession, and will continue their muscular development after they leave college; and the other, of those who will take up athletics simply as an aside, and not indulge in prolonged contests, but simply develop their muscular systems coincident with their nervous growth.

"Then, too, I believe that the feeding of college students for their athletic contests is improperly conducted. The excessive quantity of nitrogenous matter usually given to the student who is in training is very apt to provoke a uric acid diathesis, which in turn leads to rheumatism, and gout later on. I think, therefore, that the system of athletics as now practised in our colleges is an improper one, one which ought to be modified, else it will lead almost inevitably to greater harm than good."

Dr. Paul C. Phillips, professor of hygiene and physical education, Amherst College, believes that as practised to-day athletic exercises are a physical benefit. He thinks, however, that —

"the greatest benefits do not always, perhaps not generally, come to the greatest athletes, neither do they come in the contests themselves, but to the squad at large in the preliminary training and practise."

Of the other men quoted we take the following brief extracts: ---

"A long and arduous season of training undoubtedly does produce a tendency to nervous strain, cardiac hypertrophy, and even fibrous development."— Dr. James A. Babbitt, Medical Director, Haverford.

"Without doubt, a smaller percentage of athletes go wrong physically than of their non-athletic fellows, but this proves nothing, since the majority of the athletes come, in the first place, from the strongest and the healthiest. . . .

"I believe the problem of preparatoryschool athletics to be physically vastly more important than that of college athletics. In the examinations of freshmen who have participated in violent athletics in preparatory schools, it is coming to be almost the rule to find slightly enlarged, irritable, and overacting hearts."—Dr. Dudley B. Reed, Medical Examiner, University of Chicago.

"I do believe in football. Every class should be divided, and every man in the college or university should be compelled to play, but only against his physical equals. Open-air gymnasiums should be established, and every student should indulge in some open-air exercise, using the indoor gymnasium only in the most inclement weather."—Dr. Gwathmey. former Physical Director, Vanderbilt University.

"In my practise I have never seen any disabling after-effects of football or any other game whatever, nor have I known of any such."—Dr. M. H. Richardson, Professor Surgery, Harvard University.

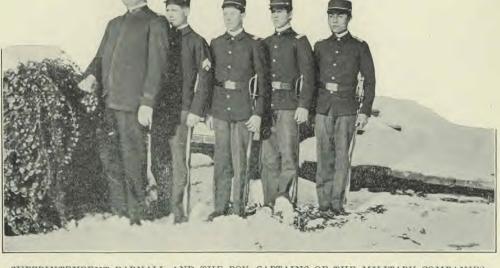
"I can not approve of the game of football

as played now in intercollegiate contests. It demands overtraining in preparation for the games, and overstraining to play them. I personally know of a number of fine young fellows who have been seriously injured and their usefulness impaired by injuries received in pursuit of football.

"I am strongly in favor of steady vigorous physical exercise, and in my opinion it would be better in every way if our young men developed their muscles by working with the ax, hoe, and other implements of helpfulness instead of wasting their time in strenuous play." — Dr. John A. Wyeth, Professor of Surgery, New York Polyclinic.

"It is my belief that football, rowing, and track athletics, especially long-distance running, have a deleterious effect on the health of the average man who participates in them." — Dr. G. G. Ross, Instructor of Surgery, University of Pennsylvania.

"I have long felt that men who went into athletics in college, and then gave them up for sedentary occupations, or who on leaving college to study a profession, neglected to take a proper amount of exercise, were more prone to tuberculosis than other men. Possibly the change from outdoor to indoor work is the cause of this, but then I have always felt that the large pulmonary expansion which they developed during their athletics was a source of some danger to them when they went at once into a sedentary occupation."—Dr. Lawrason Brown, Adirondac Cottage Sanitarium.



SUPERINTENDENT DARNALL AND THE BOY CAPTAINS OF THE MILITARY COMPANIES, NATIONAL TRAINING SCHOOL



International Congress of Medicine.— There is to be an international congress of medicine in London, Aug. 6-12, 1913.

Are the Beer Men Getting Busy? — A large number of wives of army officers have petitioned Congress for the return of the canteen.

Utah Banishes Drinking-Cup.— Beginning February I, the public drinking-cup was prohibited on railway trains, in railway stations, and in educational institutions in Utah.

Work With Congress.— During February the W. C. T. U. made a brave attempt to convince Congress that it ought to pass bills forbidding the interstate shipment of liquor into dry territory.

Wood-Alcohol Barred.—The New York City Board of Health has prohibited the use of wood-alcohol in any mixture intended for internal and external use, including not only foods, but also hair tonics, face lotions, etc.

Health Day.— In accordance with the proclamation of the governor, February 9 was observed throughout New Hampshire as "Health day." In the schools there were given programs in which the children took part. The programs included instruction regarding preventable diseases, personal hygiene, etc.

Are Animal and Plant Tumors Similar in Nature? — The retiring president of the Botanical Society of America recently read a paper showing some striking resemblances between crown gall of plants and human cancer; and as these crown galls are caused by a very minute parasite, suggesting that cancer is parasitic in nature, this pointer may direct cancer research into profitable fields.

Consumption Notifiable in England.— An order has been issued which went into effect January 1, making pulmonary tuberculosis a compulsory notifiable disease. The decrease in tuberculosis in England has been in proportion to the amount of segregation of dangerous cases, and it is believed that notification and more careful segregation will still further lessen the mortality from this disease. According to the provision of the National Insurance bill seven and one-half million dollars is to be dewoted to the erection of sanatoriums. Goiter-Producing Water.— Since the city of Vienna has had a new water-supply from the Alps, there has been a very great increase in the number of cases of goiters. Recently a well in the Alps was discovered, the water of which caused goiters in rats and other animals; and a well not far from Vienna causes goiters in animals and persons who drink its water regularly. It is said that if the water is boiled, it does not produce goiters.

Best Bread Baker.— The best bread baker in Iowa, as shown by a State-wide contest, a little girl of eleven years, was sent to Washington as a reward for her skill. She expected to be allowed to bake a loaf of bread for President Taft, but that would have broken all precedent. A loaf from an insurgent State might have given the President acute indigestion. The little girl was not much discomfited, however, for she had all she could do seeing the sights of the great capital city.

Wiley Exonerated.— The Congressional committee appointed to investigate the charges against Dr. Wiley completely exonerated the doctor, and showed up a disorganized condition in the Department of Agriculture. It appears that in every way the doctor was hindered in his attempt to give the people a fair deal in the matter of pure foods. It stands to reason that a department established with the one purpose of furthering the interests of producers will not make itself conspicuous in its efforts for the consumers. The Bureau of Chemistry ought to be a part of a national health department.

Tuberculosis and Children.— An examination in Paris by experts, of 1,226 children taken from all classes of society, showed a steadily increasing proportion of tuberculosis infection with the increase in age. Few under one year old reacted to the tuberculin test. More than fifty per cent reacted between the ages of one and five, and 81 per cent reacted between ten and fifteen. About ninety per cent of those over fifteen reacted. And yet, only about one fourth showed any lesions of tuberculosis. The investigators believe that practically every one is infected with tuberculosis early in life, but that the majority recover without showing any sign of the disease, and that in this way the race immunity to the disease is increasing.

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Tuberculosis Greatest From Ten to Fifty Years of Age.— Tuberculosis caused by far the largest proportion of deaths at each 10year-age period from 10 to 50 years of age. At 10 to 19 years, it formed 24.5% of the total deaths; at 20 to 29 years, 35%; at 30 to 39 years, 28.5%; and at 40 to 49 years, 18.3%.

Experimental Measles.— It has recently been found possible to inoculate certain kinds of monkeys with measles; and by this procedure it has been shown that the blood of a child taking measles is infectious during the first of the eruption, and even for twentyfour hours before the eruption appears. That is, measles is contagious before the time when it is usually recognized.

Humidity and Health.— Dr. Goldsbury, in the Boston Medical and Surgical Journal, attributes the bad complexions of women in our Northern latitudes to the low relative humidity due to our heating systems. He says the beautiful complexions met with in England and in our Southern Coast cities, are due to the fact that the atmosphere is damper, and that the women live more of an outdoor life. The Irish women, who live in a more moist atmosphere, have even fresher complexions than the English. Such a Blunder Is Without Excuse.— Recently, we are told, a water-main burst in Philadelphia, necessitating the temporary use of unfiltered water in a certain section of the city. In a short time there was an outbreak of typhoid fever in that section, ninety-nine cases being reported in one week in two infected wards, and only forty-eight cases in the other forty-five wards of the city. It is asserted that the authorities gave no warning to the inhabitants to boil the water.

Typhoid Fever in Milwaukee .- While officers of the present administration in Milwaukee have endeavored to show what the Socialists can do for the health of the people, they have apparently overlooked the very important item of typhoid due to contamination of its water-supply. Recently the local medical society issued a warning to the people to boil their water. In 1910 Milwaukee had the highest typhoid rate (45.7) of any city reported in the Census Bureau. It takes its water from Lake Michigan a few miles from where the typhoid-infected sewage is poured into the lake. Bacterial examinations of the . water-supply show by the presence of colon bacilli that it is contaminated with sewage. What is the board of health going to do about it?

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Ozone Therapy.— When it is used strong enough to have a germicidal action, ozone is injurious to human beings, according to Prof. Leonard Hill, the celebrated London physiologist, who in conjunction with Dr. Martin Flack experimented on the action of ozone. When there is only one part of ozone per million of air, it is irritant to the respiratory passages, and a concentration of from 15 to 20 per million inhaled for a period of two hours "is not without risk to life." Thirteen parts per million are required for efficient germicidal action.

Typhus Fever a Menace.— We are informed by members of the Public Health Service that typhus fever is always present in the United States, being brought here by immigrants, and that it is present all along the Mexican border. They do not understand why we do not have epidemics of the disease. For some years we have had cases of what was supposed to be a new disease, called, from its discoverer, Brill's disease. Now it appears from careful study that Brill's disease is none else than the old typhus fever, which we supposed to be confined to Europe.

Causes of Death by Age Periods.— For infants under 1 and those 1 and 2 years of age, diarrhea and enteritis were the most important causes of death in the registration area in 1910, the percentage being 29, 28.9, and 12.9, respectively. Diphtheria and croup caused the largest proportion of deaths of children 3 and 4 years of age, the percentage being 16.4 and 18.2, respectively. For the entire group of children under 5 years of age, the leading causes were diarrhea and enteritis, 26.3%; and for children from 5 to 9, they were diphtheria and croup, 16.4%. Diarrhea and enteritis caused 24.5% of all deaths among children under 10 years of age.

Stupidity.— Right on the scene of our greatest triumph,— the triumph over the tropics, which was rendered possible by medical science showing the cause and the means of prevention of the tropical diseases,— right in the Panama Zone we have the amazing spectacle of Christian Scientists being allowed to practise,— a sect that denies the existence of yellow fever; denies the relation between mosquitoes and disease; denies, in fact, that diseases can be contagious, for it denies all disease. This sect, which flouts its mummery in the face of an intelligent people, has been given the right to practise on the Isthmus of Panama. Ask President Taft what he knows about it if he comes up for reelection.

Conference on Conservation of Schoolchildren.— Under the auspices of the American Academy of Medicine there will be held in Lehigh University, South Bethlehem, Pa., April 3 and 4, a conference on conservation of schoolchildren which will give careful consideration to such topics as "Deficient and Backward Children," "Teaching Hygiene," and "Medical Inspection of Schoolchildren." The American Academy of Medicine is an association of physicians confining its discussions to sociologic questions having relation to medicine or to physicians. It has emphasized the necessity of making the medical profession truly a learned profession more than any other single subject, and has endeavored to live up to its convictions by limiting its membership to those who possess a liberal education in addition to the medical course. For further particulars regarding the conference write Charles McIntre, Easton, Pa.

Beer Is a Commodity.— So rules the Supreme Court, and railways can not refuse to carry it from one State to another. A railway refused to carry beer from Indiana into "dry" Kentucky counties. The brewing company sued, and finally carried the case up to the Supreme Court, and won it. This is one more reason why we should urge the early passage of the Kenyon-Sheppard bill, or some similar measure destined to check the interstate shipment of liquors into dry territory.

Dr. Doty Awarded.— A gold medal was recently presented to Dr. Alvah H. Doty at the meeting of the American Museum of Safety, "for progress and achievement in the promotion of hygiene and sanitation and the mitigation of occupational diseases." Professor Hutton said that the reward was made to Dr. Doty as "the man who had achieved more than any other in securing public health, preventing disease, and providing safety for us, our industries, our homes, and our children." And Dr. Doty is the man whom the governor of New York recently removed, evidently on political grounds.

Death of Lister .- " One of the greatest men of the nineteenth century-of the world in any age, if we may measure a man's greatness by the lives he has saved rather than by those he has destroyed or the misery he has caused "- died February 11, in London, at the age of eighty-four. When he first applied carbolic acid in surgical operations for the prevention of hospital gangrene (the bête noire of the surgery of that day), he was bitterly opposed by the medical profession of his own country. He was first recognized in Germany and France, the countries of Koch and Pasteur. He was afterward recognized by both the physicians and laymen of his own country, and was given the title Baron Lister. or Sir Joseph Lister,-a rather questionable honor when a brewer and a pill manufacturer can now get the same distinction. Lister's distinction rests in what he did for mankind; the cheap honors conferred upon him, in company with brewers and pill-makers, were merely incidental, and will in no way mar the luster of his great achievement.

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"A Sedentary Race"

"The sedentary tendencies of the age are without doubt a chief cause of the physical deterioration which is so much discussed in these days. Diseases multiply among us because men's bodies are too feeble to resist them. . . . To get more life we must go where it is dispensed, out under the open heavens."

"The Young Man's Needs"

"The country needs a hardier and more virile type of manhood. . . . How much easier the perplexing problems of business and of every-day life can be solved when, after vigorous exercise, the blood tingles in every organ of the body, and the whole man is alive to his finger-tips. . . . The outdoor man, too, has staying powers. . . Physical bankruptcy comes not to such a man, for he works with good reserve on hand. He is the 'man of cheerful yesterdays and calm to-morrows.''

"More Fresh Air"

"Consumption alone accounts for something like one eighth of all the deaths, and the chief cause of this disease is acknowledged to be foul air."

"Too Much House"

"'Too much house,' was the laconic diagnosis of one old Indian chief. His words would make an epitaph which might truthfully be inscribed over many graves in our crowded cemeteries.

"Sleeping in the open is now recommended by a number of physicians, especially in the case of sedentary persons who lack bodily tone and vigor."

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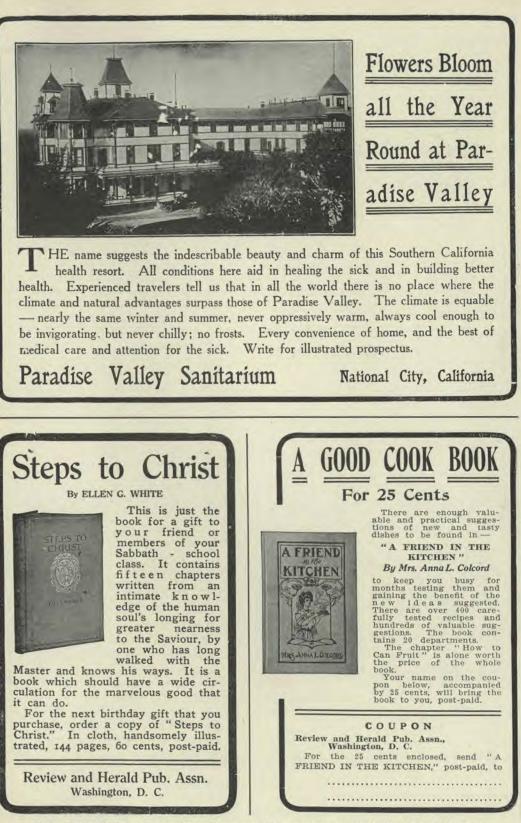
"As you thus cultivate a healthy outdoor spirit, and seek to encourage it in others, you will be doing something to stem the tide of physical deterioration, and to build up a nation pure, strong, and virile, loving freedom, powerful in defense of the right, and beautiful in its manhood and womanhood."

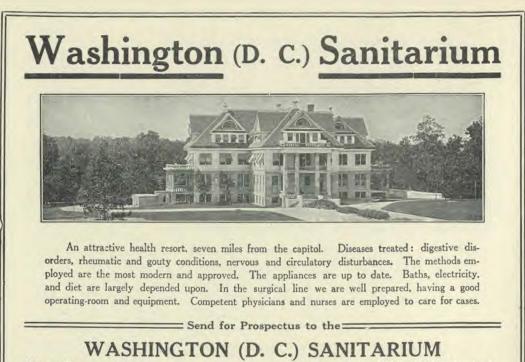
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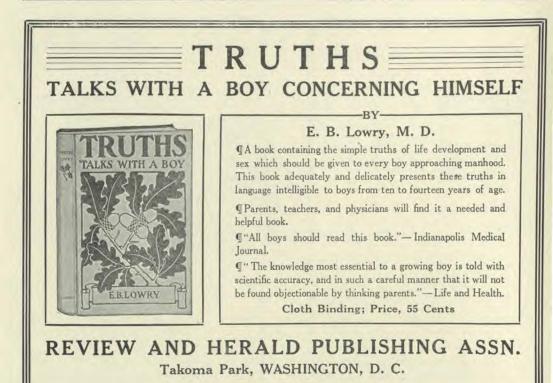
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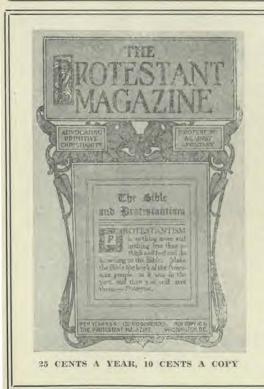
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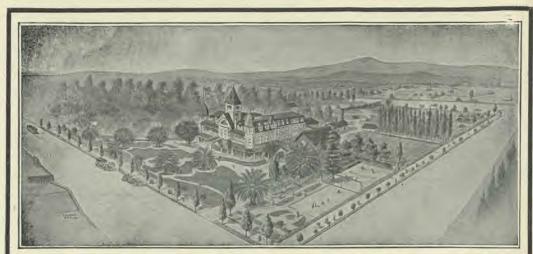
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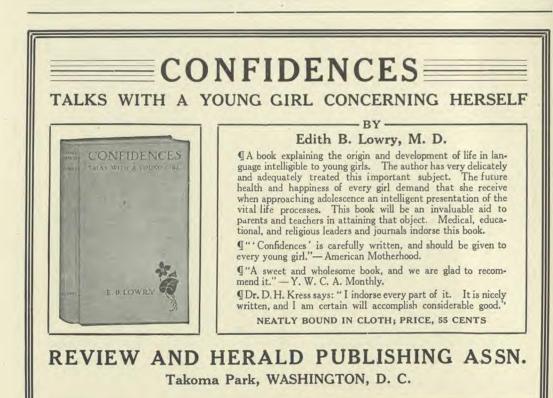
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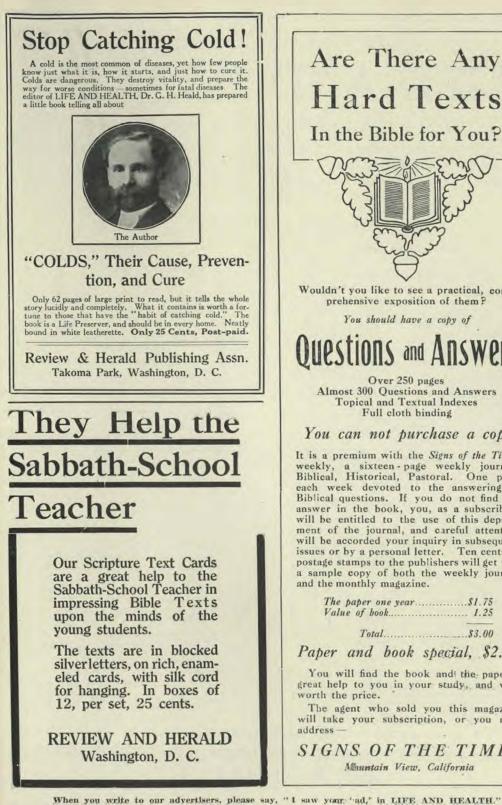


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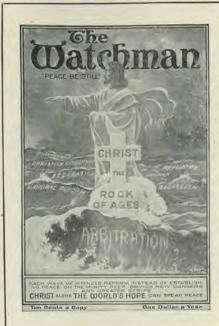
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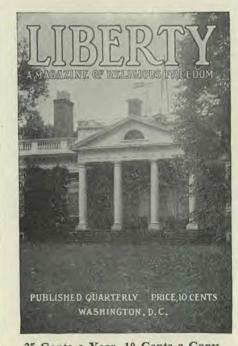
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