



OK Falstaff
Jan 87

GOOD HEALTH.

A JOURNAL OF HYGIENE.

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DEVOTED TO
PHYSICAL AND MORAL CULTURE

A SOUND MIND
IN A SOUND BODY

HEALTH IS
WEALTH

PROPER CLOTHING
AMPLE EXERCISE
ADEQUATE REST

CLEANLINESS NEXT TO
COURTESY
TEMPERANCE IN ALL THINGS

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9.15	4.22	9.15	3.15	5.25	Jackson,	12.03	10.55	7.15	11.30	4.32
7.57	3.10	8.22	1.53	4.17	Marshall,	1.04	11.55	8.22	12.46	4.42
7.31	2.27	8.01	1.30	3.50	Battle Creek,	1.30	12.22	8.52	1.08	4.40
6.45	1.50	7.23	12.35	3.03	Kalamazoo,	2.35	1.12	9.45	1.50	5.15
.....	12.15	6.14	11.14	1.30	Niles,	4.18	3.03	3.22	6.35
.....	11.11	5.17	10.18	12.02	Mich. City,	5.40	4.35	4.35	7.32
.....	9.00	4.30	8.15	9.55	Chicago,	8.05	7.00	6.40	9.30
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.....	am	am	pm	pm	Dep.	Port Huron	pm	am	am	am
.....	6.15	7.15	8.15	4.10	Lapeer	10.20	1.25	7.35	10.40
.....	7.43	8.31	9.34	5.40	Flint	8.41	12.07	6.15	8.57
.....	8.17	9.05	10.30	6.40	.....	Darand	7.05	11.03	5.03	8.17
.....	8.50	9.35	10.48	7.20	.....	Lansing	5.20	10.14	4.00	6.09
.....	10.00	10.30	11.50	8.25	.....	Charlotte	4.42	9.43	3.25	5.32
.....	10.40	11.00	12.25	9.07	A	BATTLE CREEK	3.45	9.00	2.35	4.35
.....	11.35	11.45	1.30	10.30	D	Vicksburg	2.45	8.55	2.30	am
8.40	am	12.05	1.25	pm	.....	Schoolcraft	1.35	8.15	1.43	.....
9.45	.....	1.45	2.21	.....	.....	Cassopolis	12.47	7.20	12.43	.....
9.55	.....	12.55	4.32	Val.	.....	South Bend	12.00	6.52	12.01	.....
10.40	Pass.	1.42	3.19	Acc.	.....	Haskell's	10.45	5.40	.....	pm
11.40	.....	2.28	4.07	.....	.....	Valparaiso	10.30	5.32	10.20	8.40
1.02	3.43	Chicago	8.05	3.25	8.15	1.15
1.38	7.35	4.00	5.32	6.05	Dep.	pm
4.05	10.00	6.30	9.10	8.40	pm
pm	am	pm	am	am	Arr.	pm

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GOOD HEALTH

A JOURNAL OF HYGIENE.

MENS SANA IN CORPORE SANO.

Volume XXI.

BATTLE CREEK, MICH., NOVEMBER, 1886.

Number 11.



"THE cup that cheers and not inebriates" has been the song of poets and the solace of millions for more than an hundred years, and its innocence has been almost unchallenged during a greater portion of this time; but within the last quarter of a century there has been a growing suspicion that the steaming decoction has something besides comfort in it, and now there are hundreds of scientific physicians who are speaking out plainly against the use of both tea and coffee, on the ground that they are stimulants which are capable of producing effects upon the nervous system different only in degree from those which arise from the use of alcohol, opium, tobacco, and other narcotics and stimulants.

Startling as the fact may be to those who have never had their eyes opened to the real character of these common but by no means harmless drugs, it is even asserted that there are persons to be found who are veritable tea-drunkards. Dr. Arlidge, an eminent English physician, states that there are thousands of tea-drunkards among the lower classes in England, and he very forcibly remarks as follows:—

"A portion of the reforming zeal which keeps up such a fierce and bitter agitation against intoxicating drinks, might advantageously be diverted to the repression of the very serious evil of tea-tipping among the poorer classes. Tea, in anything beyond moderate quantities, is as distinctly a narcotic poison as is opium or alcohol. It is capable of ruining the digestion, of enfeebling and disordering the heart's action, and of shattering the nerves generally. And it must be remembered that it is not a question of narcotic excess merely, but the enormous quantity of hot water which tea-bibbers necessarily take is exceedingly prejudicial to both digestion and nutrition. Our teetotal reformers have overlooked, and even to no small extent encouraged, a form of animal indulgence which is as distinctly sensual, extravagant, and pernicious as any beer-swilling or gin-drinking in the world."

The term "tea-drunkard" is well known throughout Russia, where tea is used much stronger than is common in this country. A dozen cups of strong tea taken after the Russian fashion, without cream or sugar, simply flavored with a little lemon juice, in the course of a couple of hours, will produce effects as distinctly intoxicating as an equal quantity of light wine or lager beer.

The leaves of the coca tree are used in South America in the same way that tea leaves are used in this country, and are found to possess the same properties for which tea is used. Many of the natives acquire the habit of chewing the leaves and swallowing

the juice, instead of steeping the leaves and drinking the decoction. The coca-chewer asserts that his habit is a harmless one, and affirms that by means of it he is able to work and to travel long distances with little food, which he could not do without it. However, Dr. Hartwig, an eminent writer and distinguished traveler, asserts that the coca-chewer is affected by his practice not less injuriously than the opium-eater. In his interesting work, "The Tropical World," we find the following description of a coca-chewer:—

"He is known at once by his uncertain step, his sallow complexion, his hollow, lusterless, black-rimmed eyes, deeply sunk into his head, his trembling lips, his incoherent speech, and his stolid apathy. His character is irresolute, suspicious, and false. In the prime of life he has all the appearance of senility, and in later years sinks into complete idiocy. Avoiding the society of man, he seeks the dark forest, or some solitary ruin, and there for days together indulges his pernicious habit. While under the influence of coca, his excited fancy indulges in the strangest visions, now reveling in pictures of ideal beauty, and then haunted by dreadful apparitions."

Theine, the active principle of tea and coffee, when taken in any but the smallest doses, produces all the symptoms of intoxication.

The eminent Dr. Edward Smith, of London, in making some experiments with tea and coffee some years ago, took, with his assistant, an infusion of two ounces of coffee, containing so small a quantity of theine as only seven and one-half grains. Both fell to the floor unconscious, and remained in this state for several hours.

A prominent official in the British army, when doing service in Africa, lost his favorite horse in a manner which was both singular and instructive. The cook left a few pounds of tea in the sack which had contained it, which was filled with corn by a Kafir groom who knew nothing of the presence of the tea. Upon serving out the corn to a troop of horses, of course the last one received the larger share of the tea, which was eaten greedily by the hungry animal

along with the corn. The result is thus described:—

"The animal plunged and kicked, and ran backward, at intervals galloping madly around, finally falling into a donga, where it lay dashing its head on the rocks, and was dispatched by an *assegai* thrust through the heart. The post-mortem appearances indicated extreme cerebral congestion."

In view of these facts is it not evident that the poetic eulogy of tea should be modified by the change of one little word, so that it will read, "The cup that cheers and *yet* inebriates"? and is it not apparent that a thoroughgoing temperance reformer will wish to abstain from the use of these beverages when he becomes aware of their real character?

HEALTHY HOMES.*

THE condition of the homes of a nation forms the best index to its rank in civilization. In healthy, happy homes there will always be found good citizens. Great indeed must be the provocation which will lead the owners of pleasant dwellings to any revolutionary measures. The ideal government is that where every citizen has a pleasant and healthful place of abode. . . . If a pleasant home receives the working man when his day of labor is finished, he will be contented and happy. He will hasten to that home, and there remain until duty calls him away. The capital which employs his labor will thrive; the community in which he lives will be improved by his residence in it; the State will have in him a patriotic son, and his life will add to the material resources of the State. He will be interested in education, and, dying, he will leave intelligent sons and virtuous daughters.

On the other hand, if the home of the working man is filthy, filled with foul air, impregnated with smoke and noxious gases, and if in this place dwells his sickly family, so that he has not where to rest his weary body in peace, he shuns that home,—he

*A paper read at the Sanitary Convention held at Kalamazoo, Mich., under the auspices of the State Board of Health, by Prof. V. C. Vaughan, of Ann Arbor, Member of the State Board of Health.

spends his idle hours in saloons and other places of vicious resort; the hard-earned money goes for drink, and at the gaming table; poverty becomes more grinding, naked Want soon cries for shelter, and gaunt Hunger begs for bread; discontent deepens into a constant brooding over the ills of life, and desperation leads to acts of crime. Of such men communistic and nihilistic societies are formed. By such men the peace of the community is disturbed, property is destroyed, and government may be overthrown. These are the evils which all the overcrowded countries of Europe have felt, and which are not altogether unknown in our own land.

* * * * *

As the rich have learned architects to plan, and skillful workmen to build, their costly residences, I shall confine this paper to a discussion of the dwellings of the laboring classes.

Every working man should strive to own a healthy home. A cottage may be as perfect in its sanitation as a palace. Indeed, the advantage is often in favor of the former, since the elaborate ornamentation of the latter may serve as a harbinger of dirt and disease.

LOCATION.

The location of the home of the working man is often determined by conditions over which he has no control. The price of land, the distance from place of work, and the ease of access cannot be disregarded. However, certain facts must not be ignored in the selection of a site for a home. In the first place, the soil must be healthy, or must be rendered healthy, before the building is erected. Certain soils are hot-beds in which disease-producing conditions are constantly grown. * * *

A soil which is moist and which contains much organic matter, is invariably unhealthy. Low and imperfectly drained lands have, from the remotest times, been regarded as undesirable places of residence. The same is true of the so-called "made earth" of our cities, where water-courses, arms of bays and lakes and marshes have been filled up. Such fillings are usually made with ashes, scrapings from the street, and all kinds of refuse

from back yards. In the "made earth" the organic matter putrefies, and gives off poisonous gases, which are drawn into the houses and breathed by the inmates. Other products of this putrefaction are dissolved by the water percolating through the soil, and probably collected in the wells from which drinking-water is taken. Thus the air breathed and the water drunk by persons dwelling in houses built upon such soil, are both likely to be poisonous.

A healthy soil contains no animal refuse, and at most only small amounts of vegetable matter. If a bit of such soil be broken in the hand and tested by the sense of smell, it will be found to have no unpleasant odor. On the other hand, the process of decay and putrefaction in polluted soils may be recognized by their disagreeable odors. These are best detected by heating gently a handful of the earth. If animal matter be present, ammonia will be evolved on heating the soil with potassium hydrate.

About one third the volume of the soil is air. This ground air bears from the soil the gaseous products arising from the decomposition of organic matter. If a house be built over a polluted soil, and no precautions be taken to prevent the entrance of ground air, the currents will be established by the difference in temperature between the air of the room and that contained in the surrounding soil. Transitions in atmospheric pressure and the velocity of winds also affect the movements of the ground air. Even when the building is placed upon an uncontaminated soil, it should be an invariable rule to place beneath the floor a layer of cement impenetrable by gases.

THE CELLAR.

Every house, even if it be one of only one room, should, in this latitude, have a cellar extending under every part of it. I am sure that one of the most favorable conditions to the development of consumption is residence in a house set down on damp ground. Even if this dreaded disease is escaped, the dwellers in such houses are frequently subjects of malarial fevers, dysentery, and rheumatism in its various forms. The construction of the

cellar should be carefully attended to, even if its cost necessitate the omission of ornamentation in the superstructure. The excavating should extend out in all directions, at least one foot beyond the line on which the walls will stand. Then, after the walls have been built, this space should be packed with gravel or cement. This will aid in turning the rainfall from the walls, and in keeping the cellar dry. The walls, if of brick, should be double, with an intervening air space of at least two inches, the outer and inner walls being tied together by an occasional brick placed crosswise. This will prevent the walls from becoming saturated with moisture. If of stone, the walls should be at least two feet in thickness. The walls should extend far enough above ground to allow sufficient space for windows. If this is impossible, there should be sunken areas in front of the windows. The windows should be hung on hinges, so that they can be easily thrown open for ventilation of the cellar. As a rule, cellar windows are firmly nailed in place, and are not opened for years. The cellar floor should be of the best Portland cement or asphalt, not less than six inches in thickness. If the underlying soil is damp, it should be drained with agricultural tile, which should pass under the walls into a large tile passing around the house and conducting the water into some suitable receptacle. If the cellar is to be used for different purposes, for a furnace or storage of fuel and vegetables, it should be divided into compartments, to modify the temperature. The care of the cellar should not be neglected. Decomposed vegetables should not be allowed to accumulate in it to vitiate the air of the rooms above. It should not be made the repository of old shoes, tin cans, and other rubbish. It should occasionally know the presence of the broom and the whitewasher's brush.

THE WALLS OF THE HOUSE.

The walls of the house, if of brick, should be double. Besides, the plastering should not be placed directly on the bricks. The inside of the wall should be furred, with scantling nailed to the furring, and then

lathed. With hollow and furred walls two air spaces are secured, and moisture will never penetrate such walls. On the other hand, if the brick walls are solid and the plastering be placed directly on the brick, the walls will be constantly damp, and the rooms will have a musty odor, it matters not how busy the housewife may be in her endeavor to keep everything sweet and clean. . . . Healthy walls should be pervious to air and impervious to moisture. . . . The furnishing of the interior walls is a matter of no little importance. The plastered wall is still pervious to air; but as soon as it is covered with paper, the passage of air through it is wholly prevented. The same effect is produced by oil paint. Indeed, there are many hygienic objections to the use of wall-paper. The paste used slowly undergoes putrefactive changes. When a coat of new paper is demanded, the old is but partially removed, and in this way layer after layer accumulates. The paper may offer suitable hiding places for disease germs, where they will escape the action of disinfecting agents. Lastly, wall-paper sometimes contains arsenical colors, and many authentic cases have been reported in which great detriment has been done to the health of persons occupying rooms whose walls were covered with arsenical papers. * * *

THE FLOORS.

The floors of the house should be well laid. The best floor for a residence is one of hard wood, laid with tight joints. When there are open seams between the boards, waste matter falls or is swept through the crevices, where it accumulates or forms food for mice and rats. Moreover, if the joints are not tight, the frequent scrubbing of the upper floors at least will be neglected for fear of injuring the plastering of the ceiling of the room below. Carpets are great receptacles of dust. They should be frequently removed and thoroughly cleaned. For hard floors, rugs are most suitable, and will not be allowed to accumulate filth to the extent that carpets do.

TO BE CONCLUDED.

FASHION AND PHYSIOLOGY.

BY LOUISA M. ALCOTT.

CONCLUDED.

“HE closed the door with a shrug, but before any one could speak, his quick eye fell upon an object which caused him to frown, and demand in an indignant tone:—

“‘After all I have said, were you really going to tempt my girl with those abominable things?’

“‘I thought we put them away when she wouldn't wear them,’ murmured Mrs. Clara, whisking a little pair of corsets out of sight with guilty haste. ‘I only brought them to try, for Rose is growing stout, and will have no figure if it is not attended to soon,’ she added, with an air of calm conviction that roused the Doctor still more, for this was one of his special abominations.

“‘Growing stout! Yes, thank Heaven, she is, and shall continue to do it, for nature knows how to mold a woman better than any corset-maker, and I won't have her interfered with. My dear Clara, *have* you lost your senses that you can for a moment dream of putting a growing girl into an instrument of torture like this!’—and with a sudden gesture he plucked forth the offending corsets from under the sofa cushion, and held them out with the expression one would wear on beholding the thumb-screws or the rack of ancient times.

“‘Don't be absurd, Alec. There is no torture about it, for tight-lacing is out of fashion, and we have nice, sensible things now a-days. Every one wears them; even babies have stiffened waists to support their weak little backs,’ began Mrs. Clara, rushing to the defense of the pet delusion of most women.

“‘I know it, and so the poor little souls have weak backs all their days, as their mothers had before them. It is vain to argue the matter, and I won't try, but I wish to state, once for all, that if I ever see a pair of corsets near Rose, I'll put them in the fire, and you may send the bill to me.’

“As he spoke, the corsets were on their way to destruction, but Mrs. Jessie caught his arm, exclaiming merrily, ‘Don't burn

them, for mercy's sake, Alec; they are full of whalebones, and will make a dreadful odor. Give them to me. I'll see that they do no harm.’

“‘Whalebones indeed! A regular fence of them, and metal gate-posts in front. As if our own bones were not enough, if we'd give them a chance to do their duty,’ growled the Doctor, yielding up the bone of contention with a last shake of contempt. Then his face cleared suddenly, and he held up his finger, saying, with a smile, ‘Hear those girls laugh; cramped lungs could not make hearty music like that.’

“Peals of laughter issued from Rose's room, and smiles involuntarily touched the lips of those who listened to the happy sound.

“‘Some new prank of yours, Alec?’ asked Aunt Plenty, indulgently, for she had come to believe in most of her nephew's odd notions, because they seemed to work so well.

“‘Yes, ma'am, my last, and I hope you will like it. I discovered what Clara was at, and got my rival suit ready for to-day. I'm not going to “afflict” Rose, but let her choose, and, if I'm not entirely mistaken, she will like my rig best. While we wait I'll explain, and then you will appreciate the general effect better. I got hold of this little book, and was struck with its good sense and good taste, for it suggests a way to clothe women both healthfully and handsomely, and that is a great point. It begins at the foundation, as you will see if you will look at these pictures, and I should think women would rejoice at this lightening of their burdens.’

“As he spoke, the Doctor laid the book before Aunt Plenty, who obediently brought her spectacles to bear upon the illustrations, and after a long look exclaimed with a scandalized face:—

“‘Mercy on us! these things are like the night-drawers Jamie wears! You don't mean to say you want Rose to come out in this costume? It's not proper, and I won't consent to it!’

“‘I do mean it, and I'm sure my sensible Aunt *will* consent when she understands

that these—well—I'll call them by an Indian name, and say "pajamas," are for underwear, and Rose can have as pretty frocks as she likes outside. These two suits of flannel, each in one piece from head to foot, with a skirt or so hung on this easily fitting waist, will keep the child warm without burdening her with belts, and gathers, and buckles, and bunches round the waist, and leave free the muscles that need plenty of room to work in. She shall never have the back-ache if I can help it, nor the long list of ills you dear women think you cannot escape.'

"I don't consider it modest, and I'm sure Rose will be shocked at it," began Mrs. Clara, but stopped suddenly as Rose appeared in the doorway, not looking shocked a bit.

"Come on, my hygienic model, and let us see you," said her uncle, with an approving glance, as she walked in, looking so mischievously merry that it was evident she enjoyed the joke.

"Well, I don't see anything remarkable. That is a neat, plain suit; the materials are good, and it's not unbecoming, if you want her to look like a school-girl; but it has not a particle of style, and no one would ever give it a second glance," said Mrs. Clara, feeling that her last remark condemned the whole thing.

"Exactly what I want," answered the provoking Doctor, rubbing his hands with a satisfied air. 'Rose looks now like what she is, a modest little girl, who does not want to be stared at. I think she would get a glance of approval, though, from people who like sense and simplicity, rather than fuss and feathers. Revolve, my Hebe, and let me refresh my eyes by the sight of you.'

"There was very little to see, however, only a pretty gabrielle dress, of a soft, warm shade of brown, coming to the tops of a trim pair of boots with low heels. A seal-skin sack, cap, and mittens, with a glimpse of scarlet at the throat, and the pretty curls tied up with a bright velvet of the same color, completed the external adornment,

making her look like a robin red-breast—wintry, yet warm.

"How do you like it, Rose?" asked the Doctor, feeling that *her* opinion was more important to the success of his new idea than that of all the aunts on the hill.

"I feel very odd and light, but I'm warm as a toast, and nothing seems to be in my way," answered Rose, with a skip which displayed shapely gaiters on legs that now might be as free and active as a boy's, under the modest skirts of the girl.

"You can run away from the mad dogs, and walk off at a smart pace without tumbling on your nose, now, I fancy?"

"Yes, uncle! suppose the dog coming, I just hop over a wall so—, and when I walk of a cold day, I go like this—."

"Entering fully into the spirit of the thing, Rose swung herself over the high back of the sofa as easily as one of her cousins, and then went down the long hall as if her stout boots were related to the famous seven leaguers.

"There! you see how it will be; dress her in that boyish way and she will act like a boy. I do hate all these inventions of strong-minded women!" exclaimed Mrs. Clara, as Rose came back on a run.

"Ah, but you see some of these sensible inventions come from the brain of a fashionable *modiste*, who will make you lovely, or what you value more, "stylish" outside and comfortable within. Mrs. Van Tassel has been to Madame Stone, and is wearing a full suit of this sort. Van himself told me, when I asked how she was, that she had given up lying on the sofa, and was going about in a most astonishing way, considering her feeble health.'

"You don't say so! Let me see that book a moment," and Aunt Clara examined the new patterns with a more respectful air, for if the elegant Mrs. Van Tassel wore these 'dreadful things,' it would never do to be left behind, in spite of her prejudices.

"Dr. Alec looked at Mrs. Jessie, and both smiled, for 'little Mum' had been in the secret, and enjoyed it mightily.

"I thought that would settle it," he said, with a nod.

"I did n't wait for Mrs. Van to lead the way, and for once in my life I have adopted a new fashion before Clara. My freedom suit is ordered, and you *may* see me playing tag with Rose and the boys before long," answered Mrs. Jessie, nodding back at him.

"Meantime Aunt Plenty was examining Rose's costume, for the hat and sack were off, and the girl was eagerly explaining the new under-garments.

"See, Auntie, all nice scarlet flannel, and a gay little petticoat, and long stockings, oh, so warm! Phebe and I nearly died laughing when I put this rig on, but I like it ever so much. The dress is so comfortable, and does n't need any belt or sash, and I can sit without rumpling any trimming, and that's *such* a comfort! I like to be tidy, and so when I wear fussed up things, I'm thinking of my clothes all the time, and that's so tiresome. Do say you like it. I resolved I would, just to please Uncle, for he does know more about health than any one else, I'm sure, and I'd wear a bag if he asked me to do it."

"I don't ask that, Rose, but I wish you'd weigh and compare the two suits, and then choose which seems best. I leave it to your own common sense," answered Dr. Alec, feeling pretty sure he had won.

"Why, I take this one, of course, Uncle. The other is fashionable,—and—yes—I must say I think it's pretty; but it's very heavy, and I should have to go round like a walking doll if I wore it. I'm much obliged to Aunt, but I'll keep this, please."

"Rose spoke gently but decidedly, though there was a look of regret when her eye fell on the other suit, which Phebe had brought in; and it was very natural to like to look as other girls did. Aunt Clara sighed, Uncle Alec smiled, and said heartily,—

"Thank you, dear; now read this book and you will understand why I ask it of you. Then, if you like, I'll give you a new lesson; you asked for one yesterday, and this is more necessary than French or house-keeping."

"Oh, what?" and Rose caught up the book which Mrs. Clara had thrown down with a disgusted look.

"Physiology, Rose. Would n't you like to be a little medical student with Uncle Doctor for teacher, and be ready to take up his practice when he has to stop? If you agree, I'll hunt up my old skeleton to-morrow."

"That was too much for Aunt Clara, and she hastily departed, with her mind in a sad state of perturbation about Mrs. Van Tassel's new costume, and Rose's new study."

HARD STUDY NOT UNHEALTHFUL.

THE exercise of the brain, under the proper conditions, is no more unhealthy than the exercise of the arm, or of any other part of the body. It was made for use. Its functions are as essential to life and health as those of the stomach or lungs, and its full and powerful development is essential to the highest health and perfection of the bodily powers. Like all other parts of the body, the brain is subject to waste, and demands nourishment, more, in proportion to its size, than any other organ of the body. The fresh air, general exercise, and proper alternations of repose required for the health of all other parts of the physical system, are also requisite for a healthy brain; and these being withheld will kill a student as quick as it will another man, but no quicker. That many students lose health is owing not to hard study, but to close confinement without fresh air, and to insufficient general exercise. Intellectual efforts ought to promote health, and doubtless do when the other functions of the body are not sacrificed for it. We are not so badly constructed that, in order to be fat, we must consent to be fools; nor is a dyspeptic stomach the necessary companion to a wise head.

Only the best and the worst students usually show injury,—the best because of over-work and under-rest, bad air, and inaction; the worst because of idleness and dissipation. Students between the two classes usually escape injury, except as they approach either one or the other of the classes named.

The marking system in our colleges, while it has certain advantages which professors are quite ready to perceive and use, is fraught with so many dangers and positive evils that it can scarcely be defended. The system of college honors, which usually stands connected with and crowns the system of marking, is another of those bad and dangerous usages to which we expose college life. It is questionable whether the public exercises with which the school year of our public high schools is usually closed, have not the same bad effects. And worst of all, the stimulation excited by these systems of which I have spoken is as unfriendly to sound scholarship and real intellectual power as it is to good health.—*Dr. Gregory.*

PLAIN LIVING AND HIGH THINKING.

A CONTRIBUTOR to *Good Housekeeping* writes as follows upon this subject:—

Wheat bears the same relation to other grains that the Anglo-Saxon bears to other races. It is the most mature, perfect, and satisfactory of all foods. The ripest thought, the most consummate wisdom, the most solid productions of the brain, must have healthy nutrition as their basis. Thought is made out of something, and a portion of that something is food. How food is converted into nerve force, and that refined still further into intangible mental action, ceaselessly and beautifully, day and night, through the long years of our mortal existence, none can tell. It would take a higher order of beings to see and understand the delicate mechanism by means of which the warp and woof of mind or soul are woven.

We look with awe upon the result; but the most ignorant among us can see just as much as the most learned. Nature is a cunning chemist, and her secret laboratory is impenetrable. Issuing from it are productions of ravishing beauty or repulsive deformity. The quality depends both on the materials given her to use, and the conditions which surround her workmanship, and finally upon something subtle and mys-

terious which works through law, and underlies it all.

There is no doubt that the quality of our affections as well as our thoughts, is greatly influenced by our dietary. The man who eats pork, thinks pork; if he eats bread, he thinks bread. And too much luxury without self-restraint fosters the growth of useless habits, just as a hot-bed fosters rank weeds that require extermination to let good growths come to maturity. It is the use we make of things that brings real riches or poverty.

Firm health is the result of many agencies, and of these, it is true, a good dietary is only one. Consumption, that scourge in many parts of our land, is developed and made fatal by the lack of it. A consumptive is often brilliant in mind and beautiful in character,—the brilliance and beauty of a being burning rapidly to extinction. Let us have more stupidity,—with health, happiness, and long life. Let us live nearer to nature, while yet preserving our aspirations, refinements, and enjoyments. The song of a bird, the murmur of a brook, the fragrance and hue of a flower, the floating clouds across the blue ether, and—

“Dewy morn and odorous noon and even,
With sunset and its gorgeous ministries,
And solemn midnight's tingling silentness,”

all will waken in us “thoughts that often lie too deep for tears.”

Plain living should include true elegance and culture and a wide intelligence. The “shoddy” are never simple. They overload food, furniture, and personal adornment, as if the ends of life were accumulation and show. Pretention is always vulgar, and vulgarity is generally ostentatious. The “*nouveau riche*” are often detrimental to the true republic. A writer has wisely said: “Greece was never more adorned with arts, fuller of schools, more resonant of music, richer in genius, more showy in religious sacrifices, than when she was struck with hopeless death. It was the decay of virtue, the triumph of selfish over public good, the absence of self-denial, the enervation of luxury, the pride of vain philosophy, the hypoc-

risiness of religion, that killed her." And the use of history is to correct our own mistakes in the light of past experience.

The good housekeeper shows her wisdom by the well-being of the inmates of her home, physically first, then mentally and morally. She knows that home cannot be kept worthy and happy without effort. She studies the temperament of each member of the family, and furnishes him or her with the food needed. The sanguine and full-blooded require one kind; the nervous and wiry another. Good taste rules the serving of the viands, but the viands are first selected to build up muscle and nourish brain, not to pamper and enervate. Otherwise, energy, capacity, and integrity are weakened, and the power to do good work is gone.

It is related by a gentleman who had an appointment to breakfast with the late A. T. Stewart, that the butler placed before them both an elaborate bill of fare. The visitor selected a list of rare dishes, and was quite abashed when Mr. Stewart said, "Bring my usual breakfast,—oatmeal and boiled eggs." He then explained to his friend that he found simple food a necessity to him; otherwise he could not think clearly. That unobscured brain applied to nobler ends would have won higher results, but the principle remains the same.

THE HYGIENE OF THE HAIR.

BY GEORGE THOMAS JACKSON, M. D.*

ATTENTION to the care of the hair and the hairy scalp is of special importance to those who belong to families in which premature baldness is hereditary; and it cannot be given too early. We should therefore instruct parents as to the importance of giving attention to their children's heads, so that the matter may not be delayed too long, until it is too late to stop the hair from falling out. Dandruff is regarded by most people as merely an annoyance, and, if not excessive, is neglected. If we could convince the laity that dandruff is one of

the chief causes of baldness, they would eagerly seek relief, the disease could be early checked, and the day of hair-fall very much delayed. The care of the hair is important, not only to those with an inherited tendency to baldness, but to all who wish to preserve their hair in good condition. If properly attended to, it will be a prophylactic, not only to diseases of the hair proper, but also to parasitic troubles of all sorts. It is true that this demands the expenditure of a certain amount of time; but it is time well expended, though, I must confess, often greatly begrudged by male patients.

The hygiene of the hair and scalp consists in the proper use of the shampoo; in brushing and combing; in arranging the hair, especially in women; in the exposure of the hair to air and light, especially in men; in cutting and shaving it; and in the use, or rather avoidance, of pomades. We should watch over the hair from infancy, and instruct our patients as carefully in regard to its hygiene as we would in regard to matters of general hygiene.

SHAMPOO.

In children and adults, the scalp should be kept clean, so as to avoid stopping up the hair follicles with foreign matter, and to prevent any irritation of the scalp which its presence might cause. This is accomplished by the systematic use of the shampoo, followed by careful drying and the application of some oily substance to the scalp. It may be given as a rule that a shampoo every second to fourth week is sufficient for the scalp of those who are not exposed to more than the usual amount of dust; while those who are so exposed should shampoo their heads every week or two.

The daily practice of sousing the head with cold water, which is very commonly done by men, is pernicious, not because the water itself is harmful, but because the scalp is not properly dried afterward; no oil is applied to take the place of the oil that has been removed by the water, the wet hair cannot be thoroughly brushed, and soon gets into a condition of dryness and brittleness.

*Instructor in Dermatology, New York Polyclinic; Assistant Physician New York Skin and Cancer Hospital.

Women avoid getting their hair wet, and this may be one reason why they are less often bald.

The proper manner of shampooing the head is as follows: Choose some good soap, such as "Pear's Glycerine Soap," "Sarg's Liquid Glycerine Soap," pure castile soap, the tincture of green soap, or the tincture of prepared olive soap, and with plenty of warm water make a good lather on the head, and rub the head vigorously with the fingers, or with a rather stiff, long bristled brush. If the scalp is very sensitive to irritants, borax and water may be used instead of soap, or a mixture composed of the yolks of three eggs beaten up in a pint of lime-water, either of which will make a good lather with water. When the head has been thoroughly shampooed, wash out the lather with a copious supply of warm water, or, when practicable, with alternate douches of warm and cold water, and then dry both scalp and hair with a good bath towel. When all is dry, rub on the scalp, not on the hair, a small quantity of some unctuous substance, such as sweet almond oil, or vaseline. Care must be used in drying the hair, specially in women, who should sit before an open fire or in the sunlight in so doing; and they should not dress the hair until it is perfectly dry. To oil the scalp the hair should be parted and the oil rubbed in along the part, then another part made and the operation repeated, and so on till the whole scalp is gone over. Should there be an excess of oil upon the hair, a condition which is disagreeable to many, it may be removed readily by pulling the hair between the folds of a damp towel moistened with ether, chloroform, or Cologne water.

BRUSHES AND BRUSHING.

Of far more importance than shampooing is the use of the brush and comb, and much more care should be given to the selection and use of these common toilet articles than is usually bestowed. Too often they are badly made, and generally, especially with men, they are used in a very perfunctory manner. The brush which is to be used upon an infant's head should have long soft

bristles, so as not to scratch or irritate the tender scalp, and should be employed simply in smoothing and polishing the hair. For young children whose hair is well grown, a stiff brush is necessary, and for adults two brushes should be used, a stiff one and a soft one. A properly made brush has its bristles placed in little clumps or groups in such a manner that the middle bristles of each group are longer than those of the periphery. The bristles are well set into the back of the brush, and the groups are wide apart. Most of the brushes met with in the shops are made with the bristles all of the same length and the groups close together, so as to look pretty, but not to perform their proper function. The brush should be used systematically in the morning, and with considerable vigor, so as to produce a feeling of warmth in the scalp, and to brush out all particles of dandruff and foreign matter lodged in the hair. Every part of the scalp should be gone over with a stiff brush, and then it should be laid aside for the rest of the day, and the soft one used to assist the comb in parting the hair, and to give smoothness and gloss to it. The stiffness of the brush and the vigor of its employment must vary with the tenderness of the scalp, and in no case should be sufficient to cause a feeling of soreness. Were brushing performed in the manner indicated, the hair would lie properly without the aid of water or pomades, excepting, of course, in cases of mal-position of the hair, as in the so-called cow-lick, or where the hair is unnaturally stiff.

COMBS AND COMBING.

The comb is next in importance to the brush, its office being to open up the hair so that the brush may reach all parts of the scalp, to part the hair, and to disentangle snarls. A properly made comb has long, thick, wide, perfectly smooth teeth, with well-rounded ends, and set wide apart. In choosing a comb, it should be held up to the light and discarded if any roughness or irregularities are found in the surface of its teeth, for such a comb would catch and tear the hair. Combs are usually made with a

coarse and a fine half, and there is no objection to this arrangement if the fine part is used only to disentangle the hair. No attempt should be made to pick off crusts from the scalp with the comb. It should be used only as an assistant to the brush, and always with it in the systematic morning brushing. No comb should touch an infant's scalp, and the fine-toothed comb should be rigorously excluded from the toilet case. It is a dangerous instrument, the cause of many a case of eczema, and only of use in removing the ova of lice from the hair. Above all things the tender scalp of the infant should be spared from its damaging effects.—*American Lancet.*

TO BE CONCLUDED.

EARLY RISING.

BY JOHN G. SAXE.

[THERE has been a vast deal of mischief done by the repetition of cant maxims about early rising, as though there was some particular virtue in getting out of bed before the sun gets above the horizon, irrespective of the hour of going to bed. This bit of sarcastic poetry was undoubtedly written for the benefit of those who believe in the special virtues of early morning air.—ED.]

"God bless the man who first invented sleep;"

So Sancho Panza said, and so say I;
And bless him, also, that he did not keep
His great discovery to himself, nor try
To make it—as the lucky fellow might—
A close monopoly by patent right.

Yes; bless the man who first invented sleep
(I really can't avoid the iteration);
But blast the man, with curses loud and deep,
Whate'er the rascal's name, or age, or station,
Who first invented, and went round advising
That artificial cut off,—Early Rising!

"Rise with the lark, and with the lark to bed,"

Observes some solemn, sentimental owl;
Maxims like these are very cheaply said;
But ere you make yourself a fool or fowl,
Pray first inquire about his rise and fall,
And whether larks have any bed at all!

The time for honest folks to be abed
Is in the morning, if I reason right;
And he who cannot keep his precious head
Upon his pillow till its fairly light,

And so enjoy his forty morning winks,
Is up to knavery; or else—he drinks!

Thompson, who sung about the "seasons," said

It was a glorious thing to *rise* in season;
But then he said it lying—in his bed

At ten o'clock A. M.,—the very reason
He wrote so charmingly. The simple fact is,
His preaching was n't sanctioned by his practice.

'Tis doubtless well to be sometimes awake—

Awake to duty, and awake to truth;
But when, alas! a nice review we take
Of our best deeds and days, we find, in sooth,
The hours that leave the slightest cause to weep
Are those we passed in childhood or asleep!

'Tis beautiful to leave the world awhile

For the soft visions of the gentle night,
And free, at last, from mortal care and guile,
To live as only in the angels' sight,
In sleep's sweet realm so cosily shut in,
Where, at the worst, we only *dream* of sin!

So let us sleep, and give the Maker praise.

I like the lad who, when his father thought
To clip his morning nap by hackneyed phrase
Of vagrant worm by early songster caught,
Cried, "Served him right!—it's not at all surprising;
The worm was punished, sir, for early rising!"

THE INFLUENCE OF EXERCISE UPON HEALTH.

BY PROF. EUGENE L. RICHARDS, OF YALE COLLEGE.

THE following article is particularly appropriate at this season of the year, when many persons shut themselves up indoors, and from lack of the exercise to which they have been accustomed, lay the foundation for many of the diseases which afflict those who live much indoors during the months of winter and spring,—colds and pneumonias in the winter, and fevers and biliousness in the spring:—

The age of forty to fifty is the period of life during which, according to the best authorities, the need of exercise is the greatest. "At no time of life is the necessity of exercise so imperative. . . . At that time the circulation becomes defective, unless continually quickened by exercise;"* and there is a tendency to passive congestion and functional derangements of various organs, es-

* "Exercise and Training," by Ralfe.

pecially the liver. At this time, though needing less food, we are apt to eat more than in the periods of life immediately adjacent; consequently, the products of disintegrated food and tissue are not eliminated. Accumulating in the blood, they form the *materies morbi*, the matter on which death feeds.

Tiding over the period of middle life, by using appropriate exercise, and by care in seeing that all the excretory organs do their proper work at proper times, we ought to find the following years the best years of life, especially for brain-work. If we live rightly, the words of the poet ought to be true for us all:—

“Grow old along with me!
The best is yet to be,
The last of life for which the first was made;
Our times are in His hand
Who saith, ‘A whole I planned,’
Youth shows but half; trust God; see all, nor
be afraid.”†

As to kinds of exercise, each person must be thrown on his own judgment with regard to his own case. In McLaren’s “Physical Education,” and in Blaikie’s “How to Get Strong and How to Stay So,” most excellent hints will be found for all cases. In beginning a course of systematic exercise, it is wise to err on the side of doing too little rather than too much. Increase the amount of exercise very slowly. No discouragement should be felt if it is hard work at first. It will become easier and easier. It may be a long time before it can be taken joyfully; yet if any person will persevere, he will be certain to rejoice in the work, and will come to feel that he cannot do without it. There is no royal road to health any more than there is to learning. Like all things made precious and to be really enjoyed, health must be earned.

It may be said that, for all persons whose regular occupation is sedentary, exercise in the open air is to be preferred. The oxygen of the air is essential to the life of the blood. It is well, also, to take exercise as much as possible in company. One person encour-

ages another. A man will often take part in exercise with a companion so as not to disappoint him, even if he would not exercise for his own sake. This is one valuable feature of games or athletic sports,—they must be carried on in company and by system. Another valuable feature of games and sports is that in them the mind is occupied without being taxed; it is diverted from its usual cares. The sports are well called recreative, as both body and mind are recreated by them.

To affect the chest and the underlying organs, such as the lungs and the heart, the most direct means lies in exercise of the muscles of the arms and shoulders. If a person has weak lungs, one of the first objects at which he should aim should be the strengthening of the muscular system covering the chest. If such a person is weak, let him begin exercise very cautiously, and increase very slowly the duration, frequency, and difficulty of his exercises until he is made to breathe hard. In taking a full inspiration, not only are the lungs affected, but, strange as it may seem, the brain and spine also. “The fluid surrounding the brain and spinal cord is essential to their safety. The motions dependent on the action of the heart are much weaker on the spinal cord than on the brain; while those connected with breathing are more constant and considerable on the former, from the more powerful distention of the veins of the spinal canal. . . . The fluid surrounding brain and spine regulates their vascular fullness,” and “it is manifest that, in order to keep up the proper alternations between the brain and the spinal cord, and between the heart and the lungs, it is not enough to breathe pure air, but it is also necessary that it should be *deeply* breathed.”‡

The effect of exercise on the character is felt most of all on the will. This is very natural; for in all muscular exercise a certain amount of resistance has to be overcome, and the power which acts through the muscles to overcome this resistance is will-power. Development of muscular strength is, there-

†“Rabb. Ben Ezra,” by Robert Browning.

‡Dr. George Moore.

fore, to a certain extent, development of will. It becomes development of the highest kind of will,—that of self-mastery,—when to take exercise a man resolutely overcomes the distaste for it. This feeling often comes upon us when we are weary with brain-work, and are inclined to rest and to forego exercise. But let any man resist the temptation and take the exercise, and he will find that the brain is rested and refreshed, and the whole body renewed and invigorated.

It is not true that so much given to the body is just so much taken from the brain. It has been the aim of the writer to show that all parts of the body, the brain and the nervous system among the rest, contribute to the vigor of the whole; that the muscular system forms about half of the body, and is a very important contributor to the health of all the organs. Body and brain are parts of a harmonious whole. The neglect of either makes trouble for the other. Each appropriately exercised means not only health and strength to that one, but vigor to both. This hue and cry against exercise as being detrimental to mental culture, is founded on a mistaken theory that the material and spiritual parts of man are enemies,—so much less material, so much more spiritual. But it ought to be observed that a very high authority says it is the “carnal *mind* which is enmity against God,”—and “out of the *heart* proceed evil thoughts, murders, and adulteries.” Man is not more of a “brute” for cultivating his body; but a better man if he cultivates both body and mind,—body first in the order of development; mind second in order of time, but the crown and king of the whole.—*Health.*

THE PERFECT MAN.

ALREADY in the first man who trod the soil of our planet, the great mechanical and chemical discoveries of uncounted coming ages were anticipated. His tissues were woven in a loom which no Eastern fingers, no Western machinery could rival. Where strength was needed, a power of resistance like that of iron was given to strands of fibers finer than the spider's thread which

can be seen only as it glistens in the sun-beam. Where elasticity was wanted, a substance like caoutchouc was caused to exude and solidify. The pillars which supported his frame would have crumbled under it had they not been many times stronger in substance than the columns which supported his temples. The leverage of his limbs was adjusted to his needs with an audacity which no engineer would venture.

The hydraulics of the circulation are but clumsily imitated in our aqueducts and their distribution. And what are all the flood-gates of human contrivance compared to those delicate translucent valves which stand guard at the mouth of the great artery, and arrest the solid column of blood coming back upon them like the blow of a hammer day and night, seventy times a minute, for seventy years, and so many more as life may spare us.

Man is more than a machine; but even as a machine he is an ever present miracle. His heart is a time-keeper which counts the seconds for a century with one winding up. The heating apparatus of our dwellings, in the surface of its radiators and the pots of its furnaces, only repeats the *valvulae conniventes*, and the villi of our own mucous membranes. No telephone conveys a message so faithfully as the membrane of the tympanum transmits it to the listeners in the recesses of the labyrinth; no steam engine can work with so little fuel as the human organism; no dye-house can reproduce the glow of a youthful cheek; no laboratory can manufacture a grain of albumen; no musical instrument can reach the human heart like a woman's voice; no lens can adapt itself to light like the human eye.

And so we come back to the microscope, the perfection of which was developed by imitating, as best it might, those achromatic arrangements, the darkening pigment, the diaphragm, the adjustments for distance, which were all complete in the first man who opened his eyelids on creation.—*Dr. O. W. Holmes.*

—Look out for colds. It is easier to prevent ten colds than to cure one.

* TEMPERANCE AND MISCELLANY. *

Devoted to Temperance, Mental and Moral Culture, Social Science, Natural History, and other interesting Topics.

CONDUCTED BY MRS. E. E. KELLOGG, A. M.

LOVING WORDS.

Loving words will cost but little,
Journeying up the hill of life;
But they make the weak and weary
Stronger, braver for the strife.
Do you count them only trifles?—
What to earth are sun and rain?
Never was a kind word wasted,
Never one was said in vain.

When the cares of life are many,
And its burdens heavy grow
For the ones who walk beside you,
If you love them, tell them so.
What you count of little value
Has an almost magic power,
And beneath its cheering sunshine
Hearts will blossom like a flower.

So, as up life's hill we journey,
Let us scatter all the way,
Kindly words, to be as sunshine
In the dark and cloudy day.
Grudge no loving word, my brother,
As along through life you go,
To the ones who journey with you;
If you love them, tell them so.

—Selected.

SOWING WILD OATS.

YOUNG men say (and I have heard them more than once) that they "must sow their wild oats." Remember this, young gentlemen, "Whatsoever a man soweth, that shall he also reap." If you sow corn, you reap corn. If you sow weeds, you reap weeds. If you sow to the flesh, you will of the flesh reap corruption. But if you sow to the Spirit, you will of the Spirit reap life everlasting. Ah, young men, look at *that* reaping, and then contemplate the awful reaping of men to-day who are reaping as they have sown, in bitterness of spirit and anguish of soul. "When I find out that it is injuring me, THEN I will give it up."

Surely that is not common sense. Such is the fascination thrown around a man by the power of this habit, that it must have essentially injured him before he will acknowledge the hurt and consent to give it up. Many a man has been struck down in his prosperity, has been sent to prison for crime, before he acknowledged that his evil habit was injuring him. I remember riding from Buffalo to Niagara Falls, and I said to a gentleman, "What river is that, sir?" "That," he said, "is Niagara River." "It is a beautiful stream," said I, "bright smooth and glassy; how far off are the rapids?" "Only a few miles," was the reply. "Is it possible that only a few miles from us we shall find the water in the turbulence which it must show when near the rapids?"—"You will find it so, sir." And so I found it, and that first sight of Niagara Falls I shall never forget. Now, launch your bark on that river; the water is smooth, beautiful, and glassy. There is a ripple at the bow of your boat, and the silvery wake it leaves behind adds to your enjoyment. You set out on your pleasure excursion. Down the stream you glide; oars, sails, and helm in proper trim. Suddenly some one cries out from the bank, "Young men, ahoy!" "What is it?"—"The rapids are below you." "Ha, ha! we have heard of the rapids, but we are not such fools as to get into them. When we find we are going too fast, then we shall up with the helm and steer to the shore; we will set the mast in the socket, hoist the sail, and speed to land. Then on, boys, don't be alarmed, there's no danger." "Young men, ahoy there!" "What is it?"—"The rapids are below you." "Ha, ha! we will laugh and quaff; all things delight us. What care we

for the future? No man ever saw it. Sufficient for the day is the evil thereof. We will enjoy life while we may; we will catch pleasure as it flies. This is enjoyment; time enough to steer out of danger when we are sailing too swiftly with the current." "Young men, ahoy!" What is it?"—"Beware, beware! the rapids are below you." Now you feel them! See the water foaming all around! See how fast you pass that point! Up with the helm! Now turn! Pull hard; quick, quick! Pull for your lives! Pull till the blood starts from the nostrils and the veins stand out like whipcords upon the brow! Set the mast in the socket, hoist the sail! Ah, ah, it is too late; faster and faster you near the awful cataract, and then, shrieking, cursing, howling, praying, over you go. Thousands launch their barks in smooth water, and realize no danger till on the verge of ruin, boasting all the while to the last, "When I find out that it is injuring me, then I will give it up." The power of this habit, I repeat, is fascinating, is deceptive, and men may go on arguing and coming to conclusions while on the way down to destruction.—*John B. Gough.*

ADVICE TO YOUNG LADIES.

JOHN RUSKIN gives the following advice to young ladies:—

"In order to investigate one's self, it is well to find out what one is now. Don't think vaguely about it. Take pen and paper and write down as accurate a description of yourself as is possible, and if you dare not, find out why you dare not, and try and get strength of heart enough to look yourself in the face, mind as well as body. Always have two mirrors on your dressing table, and with proper care dress mind and body at the same time. Put your best intelligence to finding out what you are good for, and what you can be made into. The mere resolve to be useful and the honest desire to help other people will, in the quickest and most delicate way, improve one's self.

"All accomplishments should be considered as a means of assisting others. In music,

get the voice disciplined and clear, and think only of accuracy; expression and effect will take care of themselves. So in drawing; learn to set down the right shape of anything, and thereby explain its character to another person.

"But if you try only to make showy drawings for praise, or pretty ones for amusement, your drawing will have little or no real interest for you, and no educational power. Resolve to do each day something useful in the vulgar sense. Learn the economy of the kitchen, and the good and bad qualities of every common article of food, and the simplest and best modes of their preparation. Help poor families in their cooking; show them how to make as much of everything as possible, and how to make their niceties, coaxing and tempting them into tidy and pretty ways, and pleading for well-folded table-cloths, however coarse, and for a flower or two out of the garden to strew on them. One should at the end of every day be able to say, as proudly as any peasant, that she has not eaten the bread of idleness.

"Get quit of the absurd idea that Heaven will interfere to correct great errors, while allowing its laws to take their own course in punishing small ones. If food is carelessly prepared, no one expects Providence to make it palatable; neither if through years of folly you misguide your own life, need you expect Divine interference to bring around everything at last for the best. I tell you positively the world is not so constituted. The consequence of great mistakes are just as sure as those of small ones; and the happiness of your whole life and of all the lives over which you have power, depends as literally on your common sense and discretion as the excellence and order of a day."

—A society has been formed in Switzerland for the cultivation of amiability. Its members are to be good-natured, polite, and agreeable always and under all circumstances. The test will be when they get the toothache or neuralgia, or when their corn-toe is stepped on in a street car.

CHOOSING AN OCCUPATION.

THE choice of an occupation depends partly upon the individual preference and partly upon circumstances. It may be that you are debarred from entering upon that business for which you are best adapted. In that case make the best choice in your power, apply yourself faithfully and earnestly to whatever you undertake, and you cannot well help achieving a success. Patient application sometimes leads to great results. No man should be discouraged because he does not get on rapidly in his calling from the start. In the more intellectual professions especially, it should be remembered that a solid character is not the growth of a day, that the mental faculties are not matured except by long and laborious culture.

Ever remember that it is not your trade or profession that makes you respectable. Manhood and profession, or handicraft, are entirely different things. An occupation is never an end of life. It is an instrument put into our hands by which to gain for the body the means of living until sickness or old age robs it of life, and we pass on to the world for which this is a preparation. The great purpose of living is twofold in character. The one should never change from the time reason takes the helm. It is to live a life of manliness, of purity, and honor,—to live such a life, whether rich or poor, that your neighbors will honor and respect you as a man of sterling principles. The other is to have some business, in the due performance of which you are to put forth all your exertions. It matters not so much what it is, as whether it be honorable; and it may change to suit the varying change of circumstances. When these two objects—character and a high aim—are fairly before a youth, what then?—He must strive to attain those objects. He must work as well as dream, labor as well as pray. His hand must be as stout as his heart, his arm as strong as his head. Purpose must be followed by action. Then is he living and acting worthily, as becomes a human being with great destinies in store for him.—*Brooklyn Magazine.*

—Earnestness alone makes life eternity.

WHERE DO YOU LIVE?

I KNEW a man, and his name was Horner,
Who used to live on Grumble Corner,
Grumble Corner in Cross-Patch Town,
And he never was seen without a frown.
He grumbled at this; he grumbled at that;
He growled at the dog; he growled at the cat;
He grumbled at morning; he grumbled at night;
And to grumble and growl were his chief delight.

He grumbled so much at his wife that she
Began to grumble as well as he;
And all the children, wherever they went,
Reflected their parents' discontent.
If the sky was dark and betokened rain,
Then Mr. Horner was sure to complain;
And if there was never a cloud about
He'd grumble because of a threatened drought.

His meals were never to suit his taste;
He grumbled at having to eat in haste;
The bread was poor, or the meat was tough,
Or else he had n't had half enough.
No matter how hard his wife might try
To please her husband, with scornful eye
He'd look around, and then, with a scowl
At something or other, begin to growl.

One day, as I loitered along the street,
My old acquaintance I chanced to meet,
Whose face was without the look of care
And the ugly frown that it used to wear.
"I may be mistaken, perhaps," I said,
As, after saluting, I turned my head;
"But it is, and it is n't, the Mr. Horner
Who lived for so long on Grumble Corner!"

I met him next day, and I met him again,
In melting weather, and pouring rain,
When stocks were up, and when stocks were down;
But a smile somehow had replaced the frown.
It puzzled me much; and so, one day,
I seized his hand in a friendly way,
And said: "Mr. Horner, I'd like to know
What can have happened to change you so."

He laughed a laugh that was good to hear;
For it told of a conscience calm and clear,
And he said, with none of the old-time drawl:
"Why, I've changed my residence—that is all!"
"Changed your residence?" "Yes," said Horner,
"It was n't healthy on Grumble Corner,
And so I've moved; 't was a change complete;
And you'll find me now on THANKSGIVING STREET."

Now, every day as I move along
The streets so filled with the busy throng,
I watch each face, and can always tell
Where men and women and children dwell;
And many a discontented mourner
Is spending his days on Grumble Corner,
Sour and sad, whom I long to entreat
To take a house on THANKSGIVING STREET.

—Josephine Pollard.

POPULAR SCIENCE.

—The bones of sheep and waste pieces of deer and kid skins are by a new method utilized for making artificial ivory.

—The aerolite which fell in Washington Co., Pa., last September, is said to be the largest on record. It is believed to weigh fully 200 tons.

—The herbarium of the National Museum at Washington now embraces over 25,000 specimens, of which about 7,000 species are North American flora.

—The beautiful red plumage of a South African species of bird is said to be due to the copper they find with their food. Birds deprived entirely of this mineral with their food, wholly lose their bright tint.

—The Statue of Liberty, which was recently unveiled, is illuminated in a decidedly novel manner. "The torch of the statue contains eight electric lamps, of six thousand candle-power each, the light from which is thrown directly upward, making a powerful beam and cloud illumination. Forty-eight lamps, of six thousand candle-power each, reflect their light upon the statue, illuminating it, and causing it to shine forth in bright relief."

—A very ancient, probably prehistoric, British vessel was recently unearthed at Brigg, Lincolnshire, England. It is forty-eight feet in length, fifty-two inches in width, thirty-three inches in depth and was hewn out of a solid piece of wood. It is said to have been in a remarkably good state of preservation, owing, no doubt, to the fact that it was imbedded in a clay soil, which excluded the air.

—The procuring of edible birds' nests, which are considered such an epicurian dainty, forms a regular industry in Eastern countries. Lying off the coast of the Malay peninsula are many caves in islands which belong to the Siamese Government. These caves are regularly farmed out to contractors. The nests are collected as soon as they are built, and before the swallows have begun to lay their eggs. The birds build second nests, and these are also taken away; but the third nests are left. The great harvest of birds' nests is during March and April. The caves are wild and dangerous, and only accessible by means of rattan ladders.

—The bed of the ocean is said to be covered to an enormous extent with lava and pumice stone, and in many places with the dust of meteorites. Of this fact a writer in a recent number of a scientific journal says:—

"These bodies whirl about in the heavens like miniature comets, and are for the most part broken into small fragments. We are all familiar with the heavenly visitants known as shooting stars, but it has been lately discovered that this cosmic dust forms layers at the bottom of the deepest seas. Between Honolulu and Tahiti, at the depth of 2,350 fathoms, over two miles and a half, a vast layer of this material exists. Falling upon land, this impalpable dust is undistinguishable; but, accumulating for centuries in the sea depths, it forms a wondrous story of continuous bombardment of this planet by cometary bodies."

—The extreme delicacy of the sense of smell in man, has been shown by a series of experiments by Messrs. Fischer and Penzoldt. In an empty room of 230 cubic metres' capacity, and tightly closed, a small quantity of the substance to be detected was thoroughly mixed with the air, and the observer then admitted. Among different substances it was found that the smallest amount recognizable was .01 of a milligram of mercaptan. This quantity diffused through the room sufficed to make its distinctive character appreciable in the small volume of air coming in contact with the nerves of the nose, from which it was estimated that a four hundred and sixty millionth part of a milligram of this substance was recognizable. Hitherto the spectroscope has been considered the most delicate of all means of analysis, indicating less than the millionth part of a milligram of sodium; but the sense of smell, in the case of mercaptan at least, is seen to be at least two hundred times more delicate.—*Science.*

Vegetable Pepsin.—The curious fact has been discovered that the milk of the fruit of the *carica*, or *papaya*, or *parpapaw*, contains a substance possessed of the property of dissolving albumen, and to a much greater extent than pepsin. This substance, known as *papaine-christy*, will dissolve 1,000 times its weight of fibrine, or 8,000 times its weight of hard boiled egg-albumen. It is not yet thoroughly established that the peptone thus produced is the same as that formed in the digestion of food in the stomach; but it is found by experiments that the newly discovered substance is exceedingly useful in the treatment of diphtheria, as it will dissolve the false membrane with great rapidity.



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J. H. KELLOGG, M. D., EDITOR.

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PSEUDO HEALTH SCIENCE.

It is an interesting study of human nature to observe the alacrity with which a certain class of scientists find scientific excuses for every folly and foible to which depraved humanity is addicted. The fact that stimulants are used by almost every nation of the globe, is taken to be proof positive that there is a natural taste for these poisons, and therefore a necessity for their use. This is just as sensible as it would be for a moral scientist to observe that since lying is a vice universal among the nations of the globe, it is a natural product of the mind; hence a necessity, and a real good in disguise.

Having affirmed that stimulants are naturally demanded by the system, it is necessary to find some apology for their use, and so we have been told that they are not only foods themselves, but that they aid in the digestion of other foods. So thousands of men and women have been for generations heroically swallowing their after-dinner claret and evening Burgundy, to stimulate their slow stomachs, and doctors innumerable have exhausted their rhetoric in extolling the virtues of this or that particular vintage of wine, or some special brand of brandy, as an artificial aid to digestion. One would think, to read some of these eloquent lucubrations, that the modern stomach is of little more value as a digesting agent than a leathern bag, and that that all-powerful digesting agent, alcohol, in the form of beer, wine, French brandy, or Bourbon whisky, is capable of making good blood and brains out of the most indigestible viands.

Within a few months several European

scientists have published the results of long-continued and carefully conducted researches, which show most conclusively that alcohol in any form is a hindrance to digestion; and immediately our scientific apologists for alcohol begin to execute the most marvelous sorts of gymnastics, and finally conclude the performance by a sort of logical somersault, declaring that alcohol is after all an inestimable blessing as a *hindrance* to digestion, as thus explained in a recent issue of the *British Medical Journal*:—

“ Sir William Roberts, of Manchester, has lately suggested an ingenious hypothesis, which offers a plausible explanation of their use. Man, in a state of nature, would derive his sustenance presumably from materials which, from their being raw, or at any rate imperfectly cooked, would be necessarily but slowly digested and assimilated. With civilized communities, on the contrary, everything is done with the view of facilitating digestion, by the removal of indigestible parts of the food, or by submitting them to processes which favor the action of the juices with which they are to be brought in contact. Under these circumstances, it is quite possible that digestion and assimilation may proceed at a speed not only unnecessary, but even disturbing to the equilibrium of the organism, and provocative of waste. The employment of alcohol, tea, coffee, etc., would tend to correct this undesirable acceleration of the assimilative processes; for Sir W. Roberts has proved, by a series of carefully conducted experiments, that their effect is powerfully to retard the action of the various digestive ferments on the foods; and it may be that the instinctive sense of the benefit thereby derived lies at the root of the yearning of all civilized nations for such substances.”

Properly paraphrased, the above para-

graph means that by means of untiring research and the exercise of a marvelous degree of inventive genius, and by the aid of that chief of all methods of food adulteration, French cookery, such a large number of easily digestible food preparations have been added to the modern man's bill of fare that his food has become too easy of digestion. In consequence of this dangerous property of modern diet, when the digestive organs get started on a meal, they tear along at such a break-neck speed that there is great danger of "disturbing the equilibrium of the organism," and producing an "undesirable acceleration of the assimilative processes." A little alcohol is needed to put on the breaks, and keep the body from tearing itself in pieces by the too great velocity of its nutritive processes. It seems that the greatest danger to which the modern man is exposed is that of being too healthy, of assimilating food faster than he can use it up. What a pity that this important fact should not have been discovered a generation sooner, before such vast sums of money and such a great amount of effort had been expended in the discovery and perfecting of agents to aid digestion, such as pepsin, pancreatin, diastase, etc., etc., and the preparation of peptones and peptonoids, and artificially digested foods of every description. Now that we know that our digestions are already too rapid, and that our most imminent danger is from "acceleration of the assimilative processes," we shall scrupulously avoid all these dangerous remedies. In the light of the present state of science, ought not their use to be prohibited by law, unless in the case of those who desire to use them as relishes and table delicacies, they might be permitted, provided they were invariably accompanied by a proper antidotal dose of alcohol?

Some years ago an acute scientist claimed to have observed that alcohol has a peculiar influence upon the gait. A number of unscientific observers thought they had noticed the same thing,—a sort of unsteadiness in the lower extremities, which rendered progression in a straight line a matter of considerable difficulty. It seems that this observation was

incorrect. The most recent researches on this subject show beyond room for reasonable doubt, according to the eminent Dr. Roberts, that alcohol is not a disturber of the equilibrium, as many vulgar people have believed, greatly to the discredit of this useful agent, but that it is indispensable as a corrector of the natural *unsteadiness* of the organism,—a sort of balance wheel, which keeps the vital machinery from running away with itself!

Heretofore, the rival of alcohol—tobacco—has enjoyed a respectable reputation as an agent for keeping down nutrition, in other words, for keeping a man lean and unhealthy; but now we know that its value in this regard has been vastly overestimated, and that alcohol is the "anti-fat" remedy par excellence. The fact that beer-drinkers usually exhibit a decided rotundity of body must not be allowed to militate against this new discovery of science. If the facts do not agree with this newly ascribed property of alcohol, it must be regarded as bad for the facts.

Now that we have been fairly warned of the evils of overnutrition, let us keep a strong hand on our stomachs and livers, and at the first evidence that they are getting the start of us and threatening to get a little extra fat on our bones or a little surplus strength into our muscles, let us make haste to swallow something to slow them down, and keep them within safe bounds. Some old foggy will probably suggest that it might answer equally well if we would eat less food, if there is danger of overnutrition, but such sophistry should not be listened to for a moment. The truly scientific and philosophical method in diet is to eat all sorts of stimulating foods, and goad our stomachs to the highest rate of activity with irritating spices and peppers and ragouts and hot sauces, and surcharge our livers with sweets and fats and *pate de foie gras* and fried foods of every description, and then swallow a commensurate amount of bad whisky or some other form of that most indispensable of all slowing-down agents, to keep the stomach and liver from doing more work than they ought to do. This is the true science of dietetics, as revealed in the latest researches of an English physiologist.

AN ANALYST ANALYZED.

OUR esteemed contemporary, the *American Analyst*, published in New York, an excellent paper, and one which ought to be in the hands of everybody who is interested in matters pertaining to food adulteration and kindred topics, criticizes some remarks recently made in GOOD HEALTH on the subject of vinegar in its relation to digestion, in which some experiments are referred to which seem to show that the effect of this much-used condiment is to interfere with salivary digestion. The following are the criticisms of the *Analyst* :—

"*Good Health* says that it is the business of the saliva to digest starch, and that it cannot do this in the presence of an acid. It therefore concludes that vinegar, in any and every possible form, is absolutely unwholesome, and that it should be at once banished from the cruet-stand, the pickle-jar, and the sauce-bowl. At some future time we may be able to spare enough space to give *Good Health* a hint or two concerning vinegar and its properties, but our present purpose is only to correct the error into which it has fallen anent the virtues of saliva.

"It is with this substance that our foods, of whatever kinds, first come into contact; and it may be described as a viscous, turbid liquid, containing from $\frac{1}{3}$ to about 1 per cent of solid matter, with an alkaline reaction, and a specific gravity oscillating between 1.004 and 1.006. It is secreted by the buccal membrane and several other glands, and is anything but simple or uniform in its general composition. Besides numerous mineral salts, it contains an albuminoid matter called *ptyalin*, in combination with potash-soda, or lime.

"Its really important mission is that of moistening our food, and thus facilitating its deglutition; and there is positively no truth in the affirmation made by some authors as to its ability to transform starch into sugar. Need we prove this by pointing out the very short time during which foods and saliva remain in contact? or if this be deemed insufficient, by recalling that no sooner does the mass reach the stomach than all alkalinity is attacked and instantaneously destroyed by the acidity of the gastric juice?

"The real chemical fact of the matter is, that the normal quantity of saliva is not at all proportionate to the amount of starch in our foods, and that it is always secreted in an inverse ratio to their dryness or moisture. What part, we would ask, do the salivary

glands play in the economies of those animals who do not chew their food at all? Perhaps *Good Health* will be courteous enough to answer this question, and kind enough to excuse us if we continue to indulge in our favorite pickle, while respectfully pausing for its reply."

The article referred to, which appeared in the June number of this journal, was based upon the researches of an eminent physiologist, which were detailed in a foreign medical journal, and thus came to our notice. We cannot vouch for the correctness of the experiments, as we have not repeated them; but we believed them to be authentic, or should not have offered them in evidence.

This is not the point, however, upon which our critic takes issue. While intimating that we are in great darkness as to the virtues of vinegar, he says that his present purpose is only to correct the error into which we have fallen "anent the virtues of saliva."

At the outset of his criticism, our critic remarks, "*Good Health* says that it is the business of the saliva to digest starch," etc. This is the point upon which our chemical critic seems to be in doubt. He says, "There is positively no truth in the affirmation made by some authors as to its ability to transform starch into sugar." This is indeed an astounding statement. So far as the knowledge of GOOD HEALTH extends, all authors concur in the statement that it is an important part of the business of the saliva to convert starch into sugar. Indeed, a simple experiment which our chemist can easily make in his laboratory, and which we have made scores of times, will demonstrate to his satisfaction that the saliva really does digest starch. We have never before known this fact to be disputed.

The *Analyst* says, speaking of saliva, "Its really important mission is that of moistening our food." That the moistening of the food is really an important mission of the saliva, is not to be disputed; but that this is its only important purpose, we do not believe, for several reasons :—

1. If to moisten the food were the chief business of the saliva, it might be perfectly substituted by water, which can moisten the

food as well as the saliva; but every physician knows that it makes a very material difference whether a dyspeptic patient chews his food, or rinses it down with water or weak tea or some other liquid. If the chief business of the saliva is to moisten the food, it is of very little use to the average man, who takes most of his food in a condition that does not require moistening.

Our chemist says that the saliva "is always secreted in an inverse ratio" to the dryness or moisture of our food. Surely he does not mean exactly this, or which does he mean? In inverse ratio to dryness would mean, the more dryness, the less saliva. In inverse ratio to moisture would be the opposite. It cannot be both. According to Dr. Carpenter, the eminent English physiologist, it is by the movements of mastication that the flow of saliva is chiefly promoted, so that "the amount poured forth will in a great measure depend upon the duration of these movements." Experiments made upon persons having salivary fistulæ, show that the influence most potent for producing a flow of saliva, next to the movements of the jaw, is a sapid flavor in the food. Even the sight and smell of food will often cause a flow of saliva, irrespective of the moisture or dryness of the substance seen or smelled.

2. The size of the parotid gland, which is the chief organ for the secretion of saliva, is regularly proportioned to the amount of starch which the food contains, in all animals which chew their food, such as the horse, ox, and other herbivorous and gramivorous animals. The dog and other carnivorous animals which subsist upon food free from starch and hence have no use for a starch-digesting agent in the mouth, have very small parotid glands, and their saliva is found to be practically inert so far as starch is concerned. It is from experiments made upon dogs that the erroneous views stated by our chemical friend have been drawn. But man is not a dog. Experiments to settle this question satisfactorily must be made upon human beings, and such experiments have been made, as we shall show. Our chemist asks triumphantly, "What part. . .

do the salivary glands play in the economics of those animals which do not chew their food at all?" We answer, So little that nature has deprived them of the parotid gland altogether, as in birds, and the other glands are reduced to a very small size. But man is not a bird. He has three pairs of salivary glands, all of good size, and secretes nearly three pints of saliva every twenty-four hours.

Experiments show that the saliva is capable of converting starch into sugar very rapidly, and that a small amount of saliva will convert a large amount of starch. And yet we are informed that "The real chemical fact of the matter is that the normal quantity of saliva is not at all proportionate to the amount of starch in our foods." Surely three pints of saliva, half of which is secreted during the digestion of the meals, must be sufficient to do considerable in the sugar-making business, if the saliva is given a fair chance, as it should be, by slow mastication of the food.

But what does the *Analyst* mean by the assertion that the saliva does not transform starch into sugar? Surely, our critic cannot be ignorant of the familiar experiment made by every school-boy, in which a dry crust becomes sweet by prolonged chewing; or of the chemical experiment which shows beyond question the presence of sugar in starch paste which has been held in the mouth but a very few seconds! Is it possible that our chemist has discovered that starch under such circumstances is converted into some other sweet thing which is not sugar? Perhaps there have been some new discoveries in this matter which the rest of the world have not yet found out. If so, we would like to be enlightened; but certainly we are not more benighted than the eminent Dr. Austin Flint, our old teacher in physiology, who states in a late edition of his classical work on human physiology, that "unleavened bread taken into the mouth, almost instantly. . . responds to the ordinary tests for sugar." Will our chemist tell us what this sweet thing is if it is not sugar?

As a conclusive and clinching argument, our critic asserts that "no sooner does the

mass [of chewed food] reach the stomach than all alkalinity is attacked and instantaneously destroyed by the acidity of the gastric juice." This is an undoubted "chemical fact," but what of it? We have said nothing about the alkalinity of the saliva, and have staked nothing upon it. We have been talking about the ability of the saliva to digest starch. Our chemist is still laboring under the long-ago-exploded "chemical fact" that the saliva cannot digest starch in an alkaline solution. More than thirty years ago this was proven to be false by observations upon a woman suffering with gastric fistula, made by the physiologists Grunewaldt and Schröder. They found that the formation of sugar by the action of the saliva continued after the food is swallowed into the stomach, and at a very rapid rate, provided that the starch had been cooked. Longet and others have shown, years ago, that the addition of gastric juice to the saliva does not interfere with its action upon starch.

We are sorry that our very useful chemical friend has been so long despising his saliva as a thing of little worth. We hope he will place a higher estimate upon it in the future, and would suggest that physiological facts are of more value in questions relating to digestion, than "chemical facts," by which he seems to have been led astray. Now for those "hints" about vinegar and pickles.

Bed-Smothering.—A most pernicious habit, which is very prevalent among children, is that of sleeping with the head under the bed-covers. Sometimes children acquire this habit when young on account of their "fear of the dark." Unwise parents often do their children a vast deal of harm by using the imaginary man in the dark as a means of frightening the little ones into obedience. Such children, when put to bed, nestle down under the covers as soon as the light is put out, and thus breathe over and over during sleep, air which is contaminated by exhalations from both the skin and the lungs.

Another cause for this injurious mode of sleeping is cold sleeping-rooms. The custom of sleeping in rooms in which there has been

no fire for weeks or months is a most pernicious one for many reasons, and this may fairly be included among the number of grave objections to the old-time custom. The temperature of such a room is often some degrees below freezing. Children, and even older people, sleeping in a cold bedroom, are often compelled to cover the head with the bed-covers to protect the nose and ears from freezing.

Children who sleep in this way awake in the morning pale and languid, and present all the evidences of systemic poisoning. Such children do not develop properly. When they sleep with older persons, as is often the case, the evil is greatly increased by the greater degree of impurity of the air beneath the bed-clothing. Infants are not infrequently smothered to death by this means. Several cases of this sort have come under the personal observation of the writer.

The habit of sleeping with the head thus covered is sometimes continued to adult life, and a vast deal of constitutional injury is thus done. Parents would do well to look carefully after this matter.

Long Fasting.—An Italian, one Signor Succì, is repeating Dr. Tanner's experiment in doing without food, ostensibly for the purpose of demonstrating that a certain decoction of weeds which he has prepared possesses the power of replacing food, or rendering its use unnecessary for long periods of time. His experiment is not likely to establish anything in this direction, however, as it is well known that Dr. Tanner lived forty days without food, whereas his Italian imitator only proposes to continue his experiment for thirty days. However well these experiments may seem to succeed, it is not probable that they will result in convincing any great number of people that food is a useless luxury which we are only dependent upon from force of long custom. There is, however, one useful lesson that may be learned, viz., that the danger of starving to death is much less imminent than many people suppose. For example, we have often met persons who felt sure that they would not

survive till morning if they did not eat a hearty supper in the evening or just before going to bed. The experiments of Tauner, Griscom, and Succi ought to convince the most skeptical that two meals a day are ample to afford the system an adequate amount of nutriment.

Spontaneous Combustion.—Dr. Dungate, an English physician, has been investigating the matter of human spontaneous combustion; and after an exhaustive study of all the reported cases of this sort, he sums up his researches by the statement that of all the cases which have been reported, there is not one which cannot be accounted for by the hypothesis of "murder, accidental death, or suicide," as well as by the theory of spontaneous combustion; and experiments which have been made show that the dead body will not burn unless surrounded with flame, even when it has been long soaked in, and is saturated with, alcohol. This would seem to dispose of this popular myth in so satisfactory a manner that we need to hear no more of it.

Pure Air at Night.—The season of the year is approaching in which doors and windows are usually closed, and the matter of pure air becomes one of serious importance. During the day, the air of living-rooms is pretty certain to be changed more or less by the frequent opening of outside doors. During the night, however, not infrequently all outside openings are tightly closed, and the occupants of sleeping-rooms might almost as well place themselves for the eight or ten sleeping hours of night in an air-tight box.

In the morning, persons who thus deprive themselves of life-giving oxygen, the great necessity of life, awake unrefreshed and dispirited, languid, pale, and weak, with headache, giddiness, no appetite, and many other symptoms of the foul air poisoning to which the system has been subjected. This accounts for a very large part of the colds and other forms of physical wretchedness of which a good many complain at this season of the year, and which is ordinarily ascribed

to the change of season. The system is filled with impurities as a result of deficient oxygenation of the blood, and so the body becomes in a high degree susceptible to all causes of vital disturbance. The reception of a few fever germs is all-sufficient to bring on a violent illness, by setting fire to the fever-feeding material with which the tissues are filled as the result of deficient air cleansing.

Ventilation of living-rooms is of great importance at all times, but the supply of an ample amount of fresh air to sleeping-rooms is doubly important during the hours of sleep. How this may best be done, will be more fully shown in another article.

Cheese Poisoning.—According to *Science*, three persons were recently poisoned in Brooklyn by eating cheese. According to the results of the remarkable researches of Prof. Vaughan, all new cheese is liable to contain poison, and it would seem that the frequent recurrence of these cases of poisoning would convince the public that cheese is an article of exceedingly doubtful value as food. The taste for food which has been fermented or partially decayed is certainly a perverted one, and it is no wonder that the gratification of such a taste is to some degree dangerous. The only way nature has of keeping us at all within the bounds of decency in matters of diet, as well as in other things that pertain to our physical well-being, is by making it unpleasant or dangerous for us to do otherwise than to obey her laws. We quite agree with the Spanish officer who, when asked by a German to share a bit of "limburgher" with him, declined, not, as he said, because the article was unhealthy, but because it was an unnatural crime to eat it.

Cream-of-Tartar Adulteration.—Those who are in the habit of using cream-of-tartar in their food, will do well to note the fact that the adulteration of this article with oxalic acid has recently been detected, and no one as yet knows how extensively the fraud is practiced. This is one of those unnecessary

additions to food which is not only highly unwholesome in itself, but is in danger of being made still more so by the conscienceless cupidity of dealers. No simple method of detecting the fraud has been given to the public. Hence the only safety is in abjuring baking-powder altogether.

Diet of Trainers.—Much dietetic wisdom of a practical character can be gleaned from the rules enforced by trainers in the preparation of persons for the prize ring and for various feats of strength and endurance. These rules are wholly the result of experience, and hence are unbiased by any preconceived opinions of a theoretical character. The following are a few of the restrictions and rules laid down by experienced trainers:—

Little salt. No coarse vegetables. No pork or veal. Two meals a day, breakfast at eight and dinner at two; if supper is allowed at all, it must be a very light and simple lunch, several hours before bedtime, and is not recommended. "It is reckoned much against a man's wind to go to bed with a full stomach." No fat meat is ever given, and no butter or cheese, which are reckoned as indigestible. Pies and pastry are not allowed. Meat must always be taken fresh, and not seasoned. Salt meats are not allowed. Puddings and hard dumplings are considered unfit to be eaten. The trainer says, "People may as well take earthenware into their stomachs."

Sleeping with the Head Low.—A German physician, Dr. Menli-Hilty, claims to have demonstrated that the only proper position in sleeping is with the head lower than the feet. He has himself practiced this method for years, and says that he wakes in the morning much more refreshed by sleep, and capable of much better work during the following day. He claims that the beneficial results are due to the larger blood supply which the brain receives, securing better nutrition. Doubtless there are cases of cerebral anemia which might be materially benefited by adopting the Doctor's suggestion; possibly

it might be a safe and wise procedure for phlegmatic people who are troubled with too little blood in the head; but we are inclined to the opinion that the average American, with his predisposition to hot head and cold feet, will find his sleep sweeter and more refreshing by holding fast to the old-fashioned, and, according to the learned Doctor, unscientific method of sleeping with the head at least a little higher than the heels.

Amazing Stupidity.—According to one of our exchanges, "the people in a large portion of Pittsburg, where no system of drainage exists, think they have solved the problem by drilling holes to a point sixty feet beneath the surface, where are large caverns or catacombs made by the miners years ago in their grasp after coal. The filth of an entire ward of the city is pouring into these subterranean chambers, where it will remain a putrescent mass, destined most assuredly, when it has sufficient accretion, to spread deadly pestilence through every loop hole."

This scheme was probably the product of some economical alderman's brain, and was undoubtedly considered a most happy thought. Some years ago a friend brought to us a sample of water for examination. We found it to contain a very large amount of organic matter. On inquiry as to its origin, it appeared that it was obtained from a well situated across the street from another well which had been filled up with stable cleanings. The owner of the premises had made a drive well near his house, and as he had a large quantity of manure which he wished to dispose of, he thought the most inexpensive way would be to dump it into the old well. The effect was to poison the ground water in the vicinity for years.

Such ignorance or recklessness is really inexcusable in this age of sanitary enlightenment.

Alcohol and Epilepsy.—In Germany, about two fifths of those subject to delirium tremens are found to be also subject to epileptic attacks, indicating very clearly that the use of alcohol is the most potent cause of epilepsy.

Alcohol and Muscular Work.—Drs. Mosso and Maggiora, two eminent Italian physiologists, have recently been overhauling the influence of various foods and other substances upon muscular work, and by novel and ingenious methods have confirmed in a most conclusive manner “the induction that alcohol, so far from augmenting muscular energy, positively diminishes it.” This is a most important result, and one that temperance workers everywhere ought to make valuable use of. The sooner the popular error respecting the food value of alcohol is thoroughly exposed, the better it will be for the rising generation.

Potato Fruit.—An Irish correspondent of a London agricultural paper advocates the use of potato balls as food. He depreciates the enormous annual waste of what he terms the best part of the potato. The writer tells about eating a whole meal of the “balls” with great satisfaction, and urges Englishmen to no longer waste this wholesome and delicate article of diet. We suspect this is a new and original “Irish bill.” No doubt many Irishmen would enjoy seeing several prominent Englishmen trying the experiment.

Another Theory of Ice-Cream Poisoning.—A New York doctor, advocating the specific poison theory of ice-cream poisoning, writes to the *New York Medical Record* as follows:—

“I do not wish to detract from any man’s labors, but I do believe that the cause, or rather causes, of the poisoning can be attributed, not to poor gelatine, vanilla, coumarin, or to tyrotoxicon, but to the manner in which the cream is partaken of. Every law of digestion is violated at the so-called ‘ice-cream’ festival. Every fellow takes particular delight in gorging himself and his ‘best girl,’ not only with ice-cream, cake, candy, etc., but with every variety of indigestible substance. This process goes on for two or more hours, when outraged nature comes to the rescue, and the indigestible matter is expelled with all the symptoms of acute gastrointestinal irritation. It only excites the pub-

lic because so large a company are sick, or poisoned if you wish, at the same time. Have we not seen isolated cases presenting exactly the same symptoms, caused by eating oysters and other food, and drinking ice-water? I have. What are the causes of cholera morbus, summer diarrhea, etc? Are they other than those of ice-cream poisoning? I say that they are the same. I have arrived at this conclusion after some experience and much study.”

Poison Hose.—A writer in the *London Lancet* calls attention to the fact that, notwithstanding the frequent warnings which have been published upon this subject, socks and stockings dyed with arsenical colors are still manufactured and worn. An English chemist recently extracted three grains of arsenic from a single pair of socks which had produced serious symptoms of poisoning.

A Sure Sign of Death.—M. Lessenne, a French physician, affirms that the following is a sure sign of death: When a needle is thrust into the living flesh, it generally causes a little blood to flow, but the wound immediately closes so that it is sometimes even difficult to tell where the puncture was made. But when the flesh of a dead person is punctured by a needle, the wound remains open as though it were made in leather.

Through our much esteemed friend, Rev. Wm. Jones, of London, formerly a missionary to Jerusalem, we have received, just as the journal is going to press, an interesting communication from a former correspondent from China, Rev. J. Crosset. Mr. Crosset is very anxious that some competent person should establish a Sanitarium at Jerusalem, where he thinks such an institution is much needed. He states that the population of 40,000, which that city now has, is ample to support an institution of this sort; and that the general neglect of sanitary matters which prevails is such as to make an ample supply of business. Unfortunately for the prospects of such a project, the financial outlook is not flattering, as the poverty of the people is so great that it would necessarily be to a large degree a missionary enterprise. Certainly it would be a worthy object for the expenditure of means, and we would suggest to some of our millionaires that this would be a capital way in which to appropriate some of their surplus.

Mr. C. also calls attention to the great need of asylums for the blind in India, China, and Japan. What is wanted is not simply prison houses or hospitals, or places for these unfortunate creatures to sleep and eat, but educational institutions, where they can be taught to read. Is not this an excellent opening for missionary effort? We would commend it to the attention of those who are specially engaged in foreign mission work. We regret that our present space does not admit of a more extended notice of the very interesting letter written by Mr. C., and hope we may have the pleasure of hearing from him again at some future time.

DOMESTIC MEDICINE.

How to Take a Vapor Bath.—We copy the following from the "Home Hand-Book of Domestic Hygiene and Rational Medicine," a work which every household should contain:—



"As a remedial agent, water in the form of warm or hot vapor is scarcely less useful than in its ordinary form. The vapor bath can be readily and successfully administered with such conveniences as every family possesses. Place the patient in a

cane-seat chair, having first taken the precaution to spread over the seat a dry towel. Surround the patient and the chair first with a woolen blanket, and then with two or three thick comfortables, drawing the blankets close around his neck, and allowing them to trail upon the floor so as to exclude the air as perfectly as possible. Now place under the chair a large pan or pail containing two or three quarts of boiling water. Let the blankets fall quickly, so as to retain the rising vapor. After a minute or two, raise the blankets a little at one side, and carefully place in the vessel a very hot brick or stone, dropping the blankets again as soon as possible, to avoid the admission of cold air. Before the first brick or stone has cooled, add another, and so continue until the patient perspires freely. The amount of perspiration must be judged by the face and forehead, as much of the moisture on the skin beneath the blankets is condensed steam.

"Should the bath at any time become too hot, a little air may be admitted by raising the bottom of the blankets a little, being careful to avoid chilling the patient in so doing. The bath should seldom be continued more than half an hour, and fifteen to twenty minutes will usually accomplish all that is desired by the bath. If too long continued, it induces faintness. A too high temperature will be indicated by a strongly accelerated pulse, throbbing of the temples, flushed face, and headache. The head should be kept cool by a compress wet in cool water and often changed.

The temperature of the bath should be from 100° to 115°. Unpleasant effects are sometimes produced at 120°.

"After this bath, apply a tepid spray, rubbing wet-sheet, pail douche, or full bath. No time should be allowed to elapse after the blankets are removed before the concluding bath is applied, as the patient will chill. He should not be allowed to become chilly by exposure to cool air before the application of the spray, douche, or other bath, which should be followed by vigorous rubbing.

"For 'breaking up a cold,' 'breaking chills,' relieving rheumatism, soreness of the muscles from over-exertion, and relaxing stiffened joints, this is a valuable agent. It may also be used to advantage in chronic diseases in which there is inactivity of the skin, liver, or kidneys, being a powerful diaphoretic; but great care must be exercised to avoid excessive use, as too frequent repetitions of the bath produce debility.

"In institutions where the bath is in daily requisition, a permanent arrangement for giving the bath is usually employed. It generally consists of a box in which the patient sits upon a stool, his head being allowed to remain outside by a suitable opening. A wet towel is placed around the neck to prevent the steam from rising about the head.

"Steam may be generated by boiling water in the box with a large spirit-lamp or a gas-burner, or it may be conducted into the box by a rubber tube connected with a tight boiler."

Dressing to Keep Warm.—The season of the year has arrived when the prime necessity of clothing is to keep the body warm by preserving its natural heat. The color as well as the texture of the clothing is a matter of consequence. Of all the different materials of which clothing is made, scientific researches, as well as practical experience and experiments, show very clearly that wool is the best material for warmth, silk coming next in the list, cotton next, and linen last. The neglect to wear warm woolen undergarments is a very common cause of the ill-health of women and children. Everybody knows this, but large numbers of per-

sons are nevertheless as careless of the proper clothing of their bodies and of the proper clothing of their children as though they were entirely ignorant of this simple fact.

The color of clothing is a matter which is seldom considered of any consequence except as regards the requirements of fashion or the tastes of the wearer; but science teaches us that there is a very marked difference in the quality of fabrics for retaining or absorbing heat according to their colors. For example, taking white as the standard, it is found that a body covered by a yellow cloth will absorb in the sunshine two fifths more heat; with a dark green covering, two thirds more; and with a blue or black covering, twice as much. From this we may infer that for summer, white and light-colored garments should be worn; and during the cold months, black or dark-colored garments.

A Word about Undergarments.—A fact which many people do not seem to know, simply because they have never given any thought to the matter, is that the undergarments should be adapted to the weather and the amount of exposure to which one is subjected. It is much easier to regulate the clothing by adjusting the weight of the undergarments than in any other way. In cold weather, thick woolen undergarments should always be worn. If the weather is unusually cold, thicker garments, or an extra suit, should be worn. A person who is accustomed to wear thin undergarments when indoors, should put on an extra suit or a heavier suit when obliged to go outdoors. An extra suit of thick undergarments is as good for warmth as an overcoat, and much cheaper. It is safe to say that at least half of all the colds which make life miserable for many persons during the winter months, might be easily avoided by attention to the underclothing.

To Disinfect a Sick Room.—The season of the year has come when diphtheria, scarlet fever, and small pox begin to prevail with increasing virulence and frequency, which is in part, at least, due to the fact that at this season of the year houses and living rooms are more shut up than during the warmer months; and in consequence the atmosphere of sick rooms becomes more densely saturated with the specific poisons of contagious maladies, and hence more highly infectious. The walls of rooms become, in consequence, more densely loaded with contagious matter, and thorough disinfection becomes of greater importance, if possible, than in the summer months. Here is the way to do it:—

After the patient has died, or become convalescent, carefully close the room, retaining in it everything that has been used about the patient, after fastening closely the windows and all but one door, burn in the room three pounds of sulphur for every thousand cubic feet of air in the room.

The room must be shut up tight and allowed to remain so over night. In the morning, air the room thoroughly for two or three hours. Do not try to disinfect a sick room while the patient is still occupying it.

—A writer in *Good Housekeeping* says that “many of the ‘warranted genuine’ jellies are frauds. Those brought from France are said to be nearly all so. A dealer in jellies says that some of the manufacturers in this country use the apple pulp left in the press, after the cider is squeezed out, for the body of the jellies. The pulp is shoveled into close vats, and steamed until it is melted into a thin paste. This is then strained into another vat, where it forms a very unsavory stew; but its unsavoriness does not discourage the jelly maker. He puts in glucose, sugar, and flavoring, and coloring material liberally, and at once the apple pomace becomes currant jelly, or any other kind that the market demands, the flavoring and coloring chemicals being changed to produce each variety.”

A Sure Cure.—“Are you the proprietor of Dr. Coffin’s celebrated consumption cure?”

“Yes, sir—the present one.”

“Then your name, I presume, is Dr. Coffin?”

“No, I succeeded him. Dr. Coffin is dead. He died last fall of an incurable malady.”

“Ah! I had n’t heard of it. May I ask what he died of?”

“Have n’t heard? He died of consumption.”—

Puck.

QUESTION BOX.

Offensive Perspiration.—M. F., of Iowa, inquires for a remedy for offensive perspiration of the feet.

Ans. The proper measures to be employed are the following:—

1. Build up the general health in every way possible.
2. Bathe the feet two or three times a day, first with warm water, then with equal parts of cold water and vinegar, putting on a pair of clean stockings every morning. On going to bed at night, rub the feet with dry sub-nitrate of bismuth.

Hygienic Cookery—Preserving Meat.—Mrs. N. H. inquires:—

1. What is the best way to cook graham?
2. Should meat, fish, or chicken stand in the water over night, or should it be kept dry in a vessel surrounded with ice?
3. What is to be the price of Mrs. Kellogg’s Cook Book?

Ans. 1. Graham may be properly cooked in a great variety of ways. The best forms of preparation are, bread, either leavened or unleavened, crackers, and mush. Back numbers of *Good*

HEALTH contain excellent recipes for preparing graham flour and other grain preparations in a variety of ways.

2. Meat and other forms of flesh food are best preserved in a cold, dry atmosphere. If exposed to the action of water, they are apt to become sodden.

3. The price of Mrs. Kellogg's Cook Book, when completed, will probably be \$2.00.

Flatulent Dyspepsia.—A Western subscriber inquires for the best diet for use in flatulence of the stomach. He adds that a fruit and vegetable diet does not agree with him, and that the free use of meat and eggs causes inactivity of the bowels.

Ans. The diet recommended for acid dyspepsia in answer to E. A. D. in last number, is also the proper diet for a person suffering with flatulence of the stomach, which is due to the same cause. The difficulty is usually relieved by the use of such foods as whole-wheat wafers, gluten wafers, plain graham crackers, well-toasted bread, and other foods which require thorough mastication.

Condensed Milk.—W. H., of Montana, asks:—

1. Is Borden's Eagle condensed milk a healthful article as a substitute for fresh milk, where the latter cannot be obtained?

2. Of what is the so-called condensed milk made?

3. Does a chemical analysis reveal any injurious properties in it?

4. What is the best brand of condensed milk on the market for family use?

Ans. 1. Yes, if not used too freely. The only objection to condensed milk as an article of diet is that it contains so large a proportion of sugar.

2. Condensed milk is made from cows' milk by the evaporation of the greater portion of the water in vacuum pans, and the addition of pure white sugar.

3. No.

4. We do not think there is essentially any difference between the principal brands of condensed milk in the market.

Butter and Honey.—A. W. writes, "Please explain Isa. 7:15 if butter is not good for food."

Ans. The text reads, "Butter and honey shall he eat, that he may know to refuse the evil and choose the good." The only way that this text may be considered as a recommendation for the use of butter and honey, is on the supposition that it teaches that the use of butter and honey will render one wise. This the language would seem to imply; but no sensible person would be willing to maintain the value of butter and honey on this ground, unless it might be supposed that by the liberal use of butter and honey he possibly would become sufficiently wise in dietetics to adopt a more sensible diet. The truth of the matter is that the translation is defective. According to Dr. Judd, as quoted in Clarke's Commentary, the text should read, "Butter and honey shall he eat

when he shall know to refuse the evil and choose the good." The context shows that the intent of the text was simply to convey the idea that by the time the little child was old enough to choose between good and evil, the distressing times of war and siege which had previously existed, would be at an end, as indicated by the fact that he would have butter and honey to eat, a diet which could be procured only in times of peace. We wish to say two things more upon this subject: 1. Butter and honey are foods, and in the absence of better foods, they might be used with great advantage. Our only objection to them is that they are not the best food. 2. We do not think it is profitable to spend time in hunting up obscure passages of scripture for the purpose of sustaining some pet theory in dietetics. The Bible was intended to be a compendium of information respecting morals, but cannot be regarded as an exhaustive text-book on dietetics.

How to Get Thin.—S. C. of Iowa, asks us for a remedy to reduce flesh without injuring the health, with directions for use.

Ans. There is no medicine which a person can take, by means of which the flesh can be reduced, without first impairing the health. Anti-fat medicines are effective in reducing the flesh only through the injury which they do to the digestion and general bodily health. The best way for a too fat person to get thin is to restrict his diet within the limits of necessary food, and take as much physical exercise as his muscles will stand every day of his life. He should also encourage activity of the skin by occasional warm baths, though these should not be used so freely as to produce general weakness. Sweets and fats should be avoided. The diet should consist chiefly of acid fruits and non-farinaceous vegetables, such as cauliflower, cabbage, asparagus, together with whole-wheat preparations, and a moderate allowance of lean meat.

Chalk Mixture—Hoarseness.—Mrs. S. S. P., of Vt., inquires:—

1. Is it injurious to drink freely of cold water in cases of diarrhea, dysentery, and cholera infantum, and is it advisable to give chalk mixture to these patients?

2. What shall I do for my little girl, who is much troubled with hoarseness? and do you think the difficulty may be caused by worms?

Ans. 1. Hot drinks are better than cold in the cases mentioned. Chalk mixture is often useful in cases of diarrhea, though the majority of cases can be cured by a regulation of the diet better than by medication.

2. We would recommend for the hoarseness, the inhalation of astringent solutions by means of a steam atomizer, such as a solution of tannin, a drachm to the pint of water, or of the fluid extract of golden seal, two drachms to the pint of water, or the distilled extract of witch-hazel, one part to three of water. There is very little probability that the hoarseness is due to worms.



SCIENCE IN THE HOUSEHOLD.

CONDUCTED BY MRS. E. E. KELLOGG.

GRUELS FOR THE SICK.

THESE simple foods, the base of which is usually some one of the grains, play an important part in the dietary for the sick, if properly made; but the sloppy messes sometimes termed gruel, the chief merits of which appear to be that they are "prepared in ten minutes," are scarcely better than nothing at all. Like all other dishes prepared from the grains, gruels need a long, continuous cooking. They should, when done, be the very essence of the grain, possessing all its nutritive qualities, but in such form as to be readily assimilated.

In the preparation of gruel, a scrupulously clean double boiler or stewpan is of the first importance. It is a good plan in every household to reserve one or two cooking utensils purposely for the preparation of gruels and other delicate foods, and not be obliged to depend upon those in daily use, as utensils used for the cooking of fruits, vegetables, meats, etc., unless cleaned with the utmost care, will sometimes impart a sufficiently unpleasant flavor to the gruel to render it wholly unpalatable to an invalid whose senses are preternaturally acute.

If it is desirable to strain the gruel before serving, have a hair sieve of a size to stand conveniently within a large bowl or basin, turn the gruel into this, and with a wooden or silver spoon rub it through the sieve. Have a second clean wooden or silver spoon, if necessary, to remove that which hangs beneath the sieve. On no account use the first spoon for the latter operation, as by so doing one is apt to get some of the grain into the gruel, and destroy its smoothness. When as much of the gruel as possible has been rubbed through the sieve, turn the strained liquid into a clean sauce-pan, reheat to boiling, and season as desired before serving.

Barley Gruel.—Take two tablespoonfuls of pearl barley, wash in clean water, drop it into a pint of boiling water, and parboil five minutes. Pour this water away, and add a quart of fresh boiling water. Let it simmer gently for three hours. Strain, season, and serve. A small bit of lemon rind added to the gruel a half hour before it is done gives it a very agreeable flavor. Equal quantities of milk

and barley gruel make a very nourishing drink; the milk, however, should not be added to the gruel long before it is needed, as in a warm atmosphere it undergoes quite rapid change, and is likely to ferment. A little lemon juice, with sugar to sweeten to taste, is sometimes preferred as seasoning for barley gruel.

Gluten Gruel.—Heat a pint of milk to boiling. When heated, stir into it two and one half tablespoonfuls of the prepared gluten of the Sanitarium Food Co., turn into a double boiler, and cook for half an hour. Serve hot.

Oatmeal Gruel.—Into one quart of boiling water stir two tablespoonfuls of coarse oatmeal. Let it boil until it thickens, stirring all the time, then turn into a farina boiler, and simmer for two and a half or three hours. Strain before serving. A little cream may also be added, unless contra-indicated by the patient's condition.

Milk Oatmeal Gruel.—Take a pint of milk and one of water, and heat to boiling. Stir in two tablespoonfuls of coarse oatmeal, and simmer gently in a double boiler for two or three hours.

Lemon Oatmeal Gruel.—The United States Dispensatory recommends the following method of preparing oatmeal gruel for fever patients: Rub one heaping tablespoonful of fine oatmeal smooth in a little cold water. Stir this into three pints of boiling water. Cook until the quantity is reduced to two pints, then strain, and let it cool and settle. When it is quite cold, pour the clear gruel from the sediment, add the juice of a lemon, and sugar to sweeten lightly. If desirable to serve it warm, reheat before adding the lemon juice.

Indian Meal Gruel.—Make a thin paste of one teaspoonful of flour, two tablespoonfuls of best cornmeal, and a little water. Stir this into a quart of boiling water, or milk and water in equal proportions, as preferred; cook until the meal has set, stirring constantly, then turn into a double boiler and simmer for an hour and a half or two hours. Season with salt, and strain. If too thick, thin with milk or cream.

E. E. K.

A CHEAP FRUIT EVAPORATOR.

By means of the following cut and explanations, any tinner can make an excellent fruit evaporator which will cost only \$12 to \$15, and will have a capacity of forty lbs.:

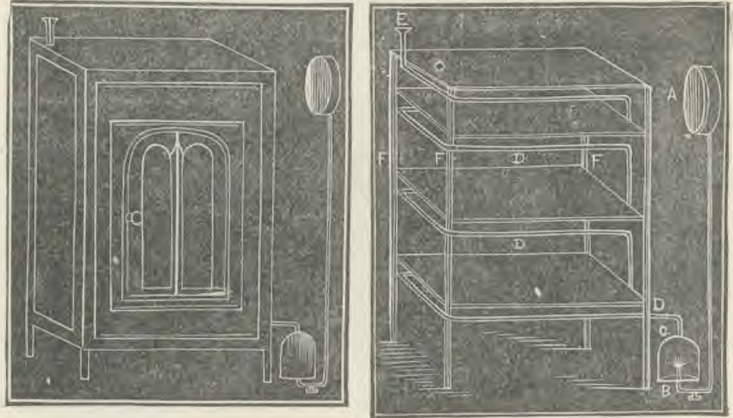
"Referring to the diagram by letters, (A) is a tank to hold gasoline leading to the burner (B) which burns in the magazine (C); the blaze should be not less than four inches from the bottom of (C) to insure good results. (C) is the magazine made of sheet iron riveted together, or lap seamed, not soldered, size 8x16. (D) is the conducting pipe, made of tin, lap seamed, not soldered, and run around the pans next to the outer edge of the evaporator, coming around and back to within 4 inches of the starting point, thence ascending to the bottom of the next pan, going around it in like manner, and continuing on up to the top.

Let there be one or more pans. (D), or the conducting pipe, enters on the side as close to the front as possible, running first along the front, then substantially as above described.

"The size of the conducting pipe should be $1\frac{1}{8}$ " for the family size machine. The shelf rests are riveted, as are the rests for the conducting pipe (D), to the side of the evaporator in such a manner as to hold the pans, which should be simply sheets of tin turned up on the edges $\frac{3}{8}$ " of an inch, and tacked with solder to fit in the shelf. An L-shaped piece of sheet iron is all that is needed for the pans to rest in. The pans should be three in number for each shelf, which will facilitate getting them out of the door. The outlet (E) is the simple extension of the heater pipe, which must be left open on top to insure a perfect radiation of heat. The outside, as well as the door, is all of common sheet iron. The legs are of $1\frac{1}{4}$ " x $\frac{3}{4}$ " iron running from the top to support the evaporator. The evaporator must be raised from the ground so as to allow the magazine (C) to rest not less than 6 inches from the ground or floor to insure a circulation of air through the radiating pipes (D). The gasoline tank (A) can be fastened to a post erected for that purpose. Follow the directions closely, and you will succeed nicely. The door can be made very cheaply. The tinner will know how to hinge it, at small expense."

—No matter how humble your room may be, there are eight things it should contain, *viz.*, mirror, washstand, soap, towel, comb, and hair and tooth brushes. These are just as essential as your breakfast, before which you should make good and free use of them. Parents who fail to provide their children with such appliances, not only make a great mistake, but commit a sin of omission. Look tidy in the morning, and after your dinner-work is over improve your toilet. Make it a rule of your daily life to "dress up" for the afternoon.

Your dress may, or may not, be anything better than calico; but you have an air of self-respect and satisfaction that invariably comes of being neatly and cleanly dressed. A girl with fine sensibilities cannot help feeling embarrassed and awkward in a ragged, dirty dress, with her hair uncombed, if a



stranger or a neighbor comes in. Moreover, your self-respect should demand the decent appareling of your body.—*Farmer's Advocate.*

—An exchange says: "Ten cents' worth of oxalic acid dissolved in a pint of hot water will remove paint spots from the windows. Pour a little into a cup, and apply to the spots with a swab, but be sure not to allow the acid to touch the hands. Brasses may be quickly cleaned with it. Great care must be exercised in labeling the bottle, and putting it out of reach of the children, as it is deadly poison."

—An English writer of note, speaking of the need of improved cookery, very aptly says: "Ill-cooked meals are a source of discomfort in many families. Bad cooking is a waste—waste of money and loss of comfort. Whom God has joined in matrimony, ill-cooked joints and ill-boiled potatoes have very often put asunder. Among the common things which educators should teach the rising generation, this certainly ought not to be overlooked. It is the commonest and yet most neglected of the branches of female education. Health, morals, and family enjoyment are all connected with the question of cookery."

—To remove match stains on walls or wood-work, rub the marks thoroughly with the cut surface of a lemon. Then wash off with a clean flannel cloth dipped first in water to moisten it, and then in whiting. Rub well, then dry.

LITERARY NOTICES.

THE AMERICAN KINDERGARTEN AND PRIMARY TEACHER: Fowler & Wells Co., 753 Broadway, New York City. \$1 per year, 25 cts. for four months.

The number of this journal for October fully sustains the promises given in the first number. It opens with "Teaching Vocal Music to Young Children," by Professor Andrews. "An Experiment in Teaching," by W. E. Partridge; "Mothers in Council," by Dr. Allen; and "A Stitch in Time," by Mrs. A. Elmore, are among the many good things that fill its pages.

The first edition of Inspector Byrne's PROFESSIONAL CRIMINALS OF AMERICA, Cassell and Company, has been exhausted by advance orders, and a second of 5,000 copies is now on the press. It should be a consolation to the American readers of this book to find that very few of these criminals are recruited from the ranks of native born citizens. The majority of them are Irish and German, with a large sprinkling of Hebrews.

HOW TO STRENGTHEN THE MEMORY; OR, NATURAL AND SCIENTIFIC METHODS OF NEVER FORGETTING: By M. L. Holbrook, M. D. Price \$1.00. New York: M. L. Holbrook and Co.

In this volume Dr. Holbrook has presented to the public a very useful little work, and one which, if diligently studied, will well repay the reader for the time and effort bestowed upon it. The work fills a place not filled by any previous work, to our knowledge, and in this fulfills one of the chief requisites of a good book. We would advise all our readers to get the book and study it.

HOUSEHOLD REMEDIES: By Felix L. Oswald, M. D. New York: Fowler and Wells Co.

This volume of 229 pages contains much that is original and curious, and a great deal of information that will not be found elsewhere. Probably no one will wholly agree with the writer in all his opinions, but every one who looks into the book will find something to engage his attention and secure a careful perusal. Dr. Oswald is always racy and interesting, and never writes without saying something that is worth remembering, and usually contrives to say it in a way that one cannot help remembering it. This work is well worthy a place in every library, and if its many wise maxims are followed, it will be a means of saving a vast amount of sickness.

PUNCTUATION AND THE USE OF CAPITAL LETTERS: By John S. Hart, LL. D. Published by Eldredge and Bro., No. 17 North Seventh Street, Philadelphia. Price 50 cents.

This little book of 74 pages is the most complete and trustworthy compendium on this important subject that has come to our notice. It is concise and exhaustive, and is, with all its other good qualities, reliable, which is most important of all. The work is essentially a reprint of the chapters on the subject which appear in Hart's "Composition and Rhetoric." The work is so moderate in price that it can be secured by all, and its compact form will enable the student to carry it in the pocket while familiarizing himself with the subject. In this popular form the work ought to have a very large sale.

OUR COUNTRY: By Rev. Josiah Strong, New York. The American Home Missionary Society.

This is a really forcible work written by the author at the request of the American Home Missionary Society. The chief purpose of the work seems to be to emphasize the importance of the United States as a Christianizing agency in the world. While many may disagree with the conclusions drawn from the facts presented, it cannot but be conceded that the author has brought together a vast number of useful and potent facts, and that he correctly forecasts the future as to the dangers threatened by certain growing influences among the social elements of this country. The book is well worthy of an attentive and candid perusal.

The Social Purity literature which has just begun to make its appearance in this country, will be an efficient antidote to a vast amount of vice. Most of this literature has been imported from England, but many excellent tracts have recently appeared from writers in this country.

We have recently received sample copies of two new leaflets of THE PHILANTHROPIST Series which have just been published. No. 8, "The Double Standard of Morality," by Mrs. Josephine E. Butler; and No. 9, "Clean Lips," by Rev. J. P. Gladstone. They are a valuable addition to social purity literature, and should be widely circulated. Price, 10 cents a dozen; 50 cents a hundred. Address, The Philanthropist, P. O. Box 2554, New York.

THE STORIES GRANDMA TOLD is the title of a collection of stories by Mary D. Brine, which Cassell and Company will publish at once. They are in Mrs. Brine's happiest vein, which has proved so attractive to the young people.

PUBLISHER'S PAGE.

Now is the time to look to your subscription for the next year. Do not wait until the journal is stopped on account of the expiration of your subscription. Send along the dollars, friends, at once, and save us the trouble of taking your name off the list and putting it back again, as you will certainly want the journal next year as much as this. Numerous improvements in the journal are in contemplation for next year, and it is expected that those who have been pleased with it during the year just passed, will be more than delighted with the feast of good things to be served up in the coming volume.

An old subscriber, in renewing his subscription, says that the family cannot get along without *GOOD HEALTH*. It is the aim of the editors and publishers to make the journal so indispensable to all who receive it that they will become permanent subscribers, and the journal a permanent blessing to their households.

The editor and Mrs. K. had the pleasure of attending the late meeting of the N. W. C. T. U. at Minneapolis, which was the largest attended and most enthusiastic gathering of that body ever held. The afternoon and evening sessions were held in the Casino, an immense audience room which was usually filled to its utmost capacity. The editor had the honor of addressing the convention by request, at an evening session, on the subject of diet and dress. He also gave a short talk to the boot blacks and news boys who were present the same evening to present an address of welcome to Miss Willard, and showed them the effect of alcohol upon the stomach, brain, and other organs of the body by means of the Health Charts. The work of the N. W. C. T. U. is a great moral reform movement, in which all good men and women ought to be interested, and which ought to have the cordial support of all public spirited citizens.

While making a flying trip west recently, the editor had the pleasure of visiting the mission stations of the International Tract and Missionary Societies located in Chicago and Minneapolis. We were glad to find these missions in a flourishing condition, and were especially glad to note the interest shown in matters hygienic. There is no line of reformatory work in which the labor of intelligent and earnest missionaries is more needed than in the direction of hygienic and a sanitary reform. It is an unquestioned fact that thousands of persons annually die from ignorance of the laws of health. Thousands more drag out a miserable existence hardly better than death from lack of knowledge of the simplest principles of right living. There is a crying need of philanthropic effort in this direction, and we were much cheered by the readiness with which those in charge of these flourishing missions accepted suggestions respecting work in this direction, and their promise that some of their best workers should be set apart for it. The new series of Health Science Leaflets, published at this office, is just the thing for this work, and the ready sale which they have met shows that they are appreciated as efficient aids in this work.

Health and Temperance Normal—A health and Temperance Training School will be held at this place during the three weeks following Nov. 18, which will be largely attended, and which will be an excellent opportunity for those who are interested in the promulgation of sanitary reforms to fit themselves for efficient work in this direction. Instruction will be given in the use of Dr. Kellogg's new Health Charts, and in the employment of simple experiments for the purpose of illustrating the leading principles of hygiene. Especial at-

tention will also be given to Bible hygiene and to instruction in giving Bible Health Readings. Those who desire to attend this drill should correspond at once with the President of the American Health and Temperance Association, care of Sanitarium, Battle Creek, Mich.

Nurses' Training School.

The Sanitarium Training School for Nurses will open its next annual session Nov. 15, 1886. This school is one of the most thoroughly practical schools in the country, and its course of study comprises a larger number of subjects and more thorough instruction than any other. The school has now been in operation a sufficient number of years so that it has passed well out of the experimental stage, and has become a fixed fact, and a decided success, as is evidenced by the large number of graduates who are already filling positions of trust and great usefulness in the practice of their profession, and with credit to themselves and the school in which they were trained. A fuller announcement of the school and its course of study will be found in the advertising pages of this number. Students may be received as late as December, if it is impossible to get here sooner. Fully three times the usual number of applications for attendance at the school have already been received. It is possible to give opportunity to a few more young ladies to pay their way while in attendance at the school, in work in connection with the course of instruction. Those who desire further information, should address Sanitarium, Battle Creek, Mich.

Battle Creek College, located in this city, opened this year with a larger attendance than for many years previous, which has steadily increased up to the present time. The new addition to the building has been completed, making the structure one of the largest and most commodious school structures in this part of the State. It is well equipped with all educational appliances, and the school is conducted by an efficient and thorough corps of teachers under the able and experienced management of Prof. Prescott, recently superintendent of schools for Montpelier, Vt., to whom all letters of inquiry should be addressed.

We know of no school in all the land where so solid an educational foundation can be laid by young men and women who are seeking to fit themselves for a life of Christian activity and usefulness, as at this admirable school.

Annual Meeting of the Health Reform Institute.

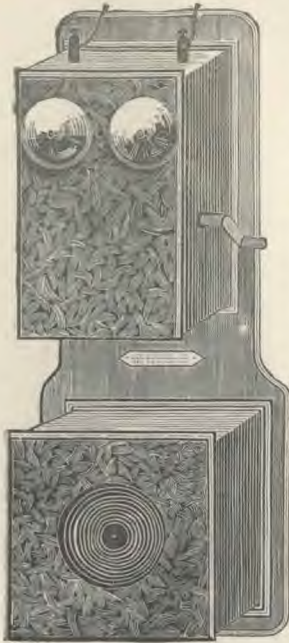
The annual meeting of the Stockholders of the Health Reform Institute will be held Nov. 23, 1886, in this city. It is hoped that there will be a large attendance of the stockholders and friends of the institution. The past year has been one of the most prosperous in the history of the institution, and many matters of much interest will be considered at the coming annual meeting respecting the future work of the Sanitarium.

DIRECTORS.

An Awkward Blunder.—Just as he was leaving the city, after finishing the editorial work of the last number of the journal, the editor's attention was called to the fact that an unhappy blunder had been made by the printers in neglecting to change the name of the month on the cover, so that the October number appeared with a cover bearing the name of the preceding month. In correcting the error, the printers unfortunately printed the word October upon a slip of paper of different color from that of the cover, which accounts for the unsmooth appearance of the outside dress of the journal last month, which must have been a source of surprise and regret to all friends of the journal who observed it; but certainly no one felt the misfortune so keenly as the editor, and when made aware of the matter, he insisted that the journal should not be sent out with at a replacement of the yellow slips by others of a proper color; but owing to his absence from the city, the journal was mailed without the faulty work being corrected. The publishers hope that the above explanation is sufficient apology to exculpate them from blame in the matter.

By letters received from several subscribers, it has been learned that in a number of instances the number for September was sent out for the October number, which was probably due to the mixing of the two numbers before the error in the printing of the cover had been discovered. The publishers will be obliged to all who will inform them of this error in cases in which it occurred so that they may correct it by sending the proper number instead of the old one. It is certainly to be hoped that no such mistake on the part of the printers will again happen to this journal.

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The subscription price may be sent to the office of publication of "GOOD HEALTH," at this place, or to our English office in charge of Miss Jennie Thayer, International Book and Tract Depository, 73 Heneage Street, Grimsby, England. Remittances may be made in postage stamps, post-office order, or draft. Subscriptions sent to England should be in postage stamps or money order.

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