VOL. 22. AUGUST, 1887. No. 8.

GOOD HEALTH

A JOURNAL OF HYGIENE

DEVOTED TO PHYSICAL, MENTAL, AND MORAL CULTURE

CONTENTS OF THIS NO.

HEALTH PUBLISHING COMPANY, BATTLE CREEK, MICH.
OAKLAND, CAL.: PACIFIC PRESS. NEW YORK: AMERICAN NEWS CO. PHILADELPHIA: GENERAL NEWS CO.
INTERNATIONAL BOOK AND TRACT DEPOSITORY, 72 HENEAGE ST., GRIMSBY, ENGLAND.

THE ALCOHOL DETECTOR.

SOMETHING NEW AND USEFUL.

The accompanying cut shows a new and very simple apparatus, by means of which Alcohol may be detected in beer, wine, and cider, as well as in the stronger liquors.

The apparatus is so simple that a child can use it. The alcohol is made visible by a blue flame burning at the mouth of the flask.

This is the most useful piece of apparatus ever invented for illustrating a temperance lecture, and is offered at so cheap a price that it can be possessed by every one interested in temperance teaching. It should be in every school room.

PRICE, Securely Packed, - - - $1.25.

Address, **HEALTH PUB. CO.,**

BATTLE CREEK, MICH.

MEDICO-CHIRURGICAL COLLEGE

OF PHILADELPHIA.

Hospital attached to College. Ample Clinical Laboratory and Dissecting Material. Surgical and Special Clinics unexcelled.

Send for Announcements to

W. F. WAUGH, M. D.,
Secretary,
1725 ARCH STREET, *Philadelphia, Pa.*

SMITH'S DIAGRAM

OF PARLIAMENTARY RULES,

Showing the relation of any motion to every other motion, and answering at a glance over 500 questions in parliamentary practice; together with a key containing concise hints and directions for conducting the business of deliberative assemblies.

It is to the Study of Parliamentary Practice what a Map is to the Study of Geography.

"I regard the work as a very valuable one, and cheerfully commend it as a *vade mecum* for parliamentarians."—*J. Warren Keifer, Speaker U. S. House of Representatives.*

"It strikes me as a valuable work, as the diagram can be utilized by a presiding officer at a glance."—*Hon. David H. Jerome, Governor of Michigan.*

"It is an admirable book of reference."—*Hon. B. K. Elliott, Judge of the Supreme Court of Indiana.*

"Smith's 'Diagram of Parliamentary Rules' is a marvel of conciseness, perspicuity, and convenience."—*J. H. Kellogg, M. D., Physician-in-Chief of the Sanitarium, Battle Creek, Mich.*

"I have never seen parliamentary practice put in a form at once so comprehensive, concise, and convenient for reference."—*Hon. E. S. Lacey, Member of Congress from Michigan.*

"Your diagram makes clear the most useful as well as the most perplexing rules."—*Hon. T. W. Ferry, U. S. Senator from Michigan.*

"Mr. Uriah Smith has put more of the essence of parliamentary practice into small space and lucid order than we find in any other manual."—*N. Y. Independent.*

Price, by mail, post-paid, 50 cents,

REVIEW AND HERALD PUBLISHING ASSOCIATION,
BATTLE CREEK, MICHIGAN.

MICHIGAN CENTRAL RAILROAD.

GOING EAST.					STATIONS	GOING WEST.				
Mail.	Day Exp's	N. Y. Exp.	Atl'n Exp.	Nig't Exp.		Pa'ic Exp.	Ev'g Exp.	Day Exp.	Chi'o Exp.	Mail.
p. m.	p. m.	p. m.	a. m.	a. m.	Ar. Dep.	p. m.	p. m.	a. m.	p. m.	a. m.
6.00	6.45	10.45	6.00	7.30	Detroit,	9 15	8.00	9.10	1.30	7.00
4.33	5.30	9.45	4.35	6.08	Ann Arbor,	1.38	9.12	10.25	2.32	8.16
3.15	4.20	8.49	3.15	4.50	Jackson,	12.03	10.52	11.35	3.32	9.35
2.00	3.10	7.54	1.58	3.43	Marshall,	1.04	11.47	12.50	4.22	10.38
1.42	2.27	7.33	1.30	3.20	Battle Creek,	1.55	12.12	1.12	4.40	11.03
12.17	1.50	6.58	12.33	2.85	Kalamazoo,	2.26	1.20	1.50	5.15	11.52
1.28	12.15	5.49	11.13	1.55	Niles,	4.18	3.03	3.22	6.27	1.40
9.18	11.11	4.55	10.18	11.27	Mich. City,	5.4	4.32	4.35	7.32	2.58
6.50	9.00	3.10	8.15	9.10	Chicago,	8.05	7.00	6.40	9.30	5.15
a. m.	a. m.	p. m.	p. m.	p. m.	Dep. Ar.	a. m.	a. m.	p. m.	p. m.	p. m.

Gr. Rap. & Kal. Ex. lvs. Kal'm'zoo 6.45 a. m., Bat. Creek 7.31, Marshall 7.57, Jackson 9.15, Ann Arbor 10.30, ar. Detroit 11.50 a. m. Returning, leaves Detroit 4.00 p. m., Ann Arbor 5.30, Jackson 7.10, Marshall 8.20, Battle Creek 8.52, ar. Kalamazoo 9.45.

All trains run by Ninetieth Meridian, or Central Standard Time.

Day Express, Grand Rapids and Detroit Express, and Grand Rapids and Kalamazoo Express daily except Sunday. Pacific, Evening, and Chicago Expresses west, and Atlantic, New York, and Night Expresses east, daily.

June 5, 1887. O. W. RUGGLES, *Gen. Pass., Agt., Chicago.*

CHICAGO & GRAND TRUNK R. R.

Time Table, in effect May 15, 1887.

GOING WEST.					STATIONS.	GOING EAST.				
Chico Pass.	Mail.	Day Exp.	Pacific Exp.	B.Crk Pass.		Mail.	Lmtd Exp.	Atlic Exp.	Sun. Pass.	Pt H'n Pass.
.....	am	am	pm	pm	Dep. Arr.	pm	am	am		am
.....	5.55	7.15	8.05	4.10	.....Port Huron.....	10.20	1.15	7.35	.....	10.50
.....	7.28	8.31	9.34	5.40	.....Lapeer.....	8.42	11.57	6.17	.....	9.17
.....	8.05	9.10	10.15	6.20	.....Flint.....	7.55	11.27	5.40	.....	8.40
.....	8.48	9.35	10.58	7.20	.....Durand.....	7.05	10.58	5.03	.....	8.05
.....	10.00	10.30	11.53	8.26	.....Lansing.....	5.20	10.07	4.00	.....	6.45
....	10.37	11.00	12.25	9.03	.....Charlotte.....	4.42	9.37	3.25	.....	6.15
a m	11.30	11.45	1.15	10.05	A { BATTLE CREEK } D	3.45	8.55	2.35	.....	5.30
6.30	am	12.05	1.20	pm	D { } A	3.40	8.50	2.30	.....	am
7.18	.....	12.45	2.21	———	.....Vicksburg.....	2.41	8.11	1.43	.....	———
7.30	———	12.55	†2.32	VAL.	.....Schoolcraft.....	2.31	.....	1.27	.....	VAL.
8.17	SUN.	1.45	3.19	ACC.	.....Cassopolis.....	1.45	7.26	12.43	.....	ACC.
9.00	Pass.	2.28	4.07	———	.....South Bend.....	1.05	6.50	12.01	.....	———
10.15	am	3.43	.....	am	.....Haskell's.....	11.47	.....	.....	pm	pm
10.30	7.35	4.05	5.52	6.05	.....Valparaiso.....	11.35	5.30	10.29	3.40	8.03
12.40	10.00	6.25	9.10	8.43	.....Chicago.....	9.05	3.25	8.15	1.15	5.25
pm	am	pm	am	am	Arr. Dep.	am	pm	pm	pm	pm

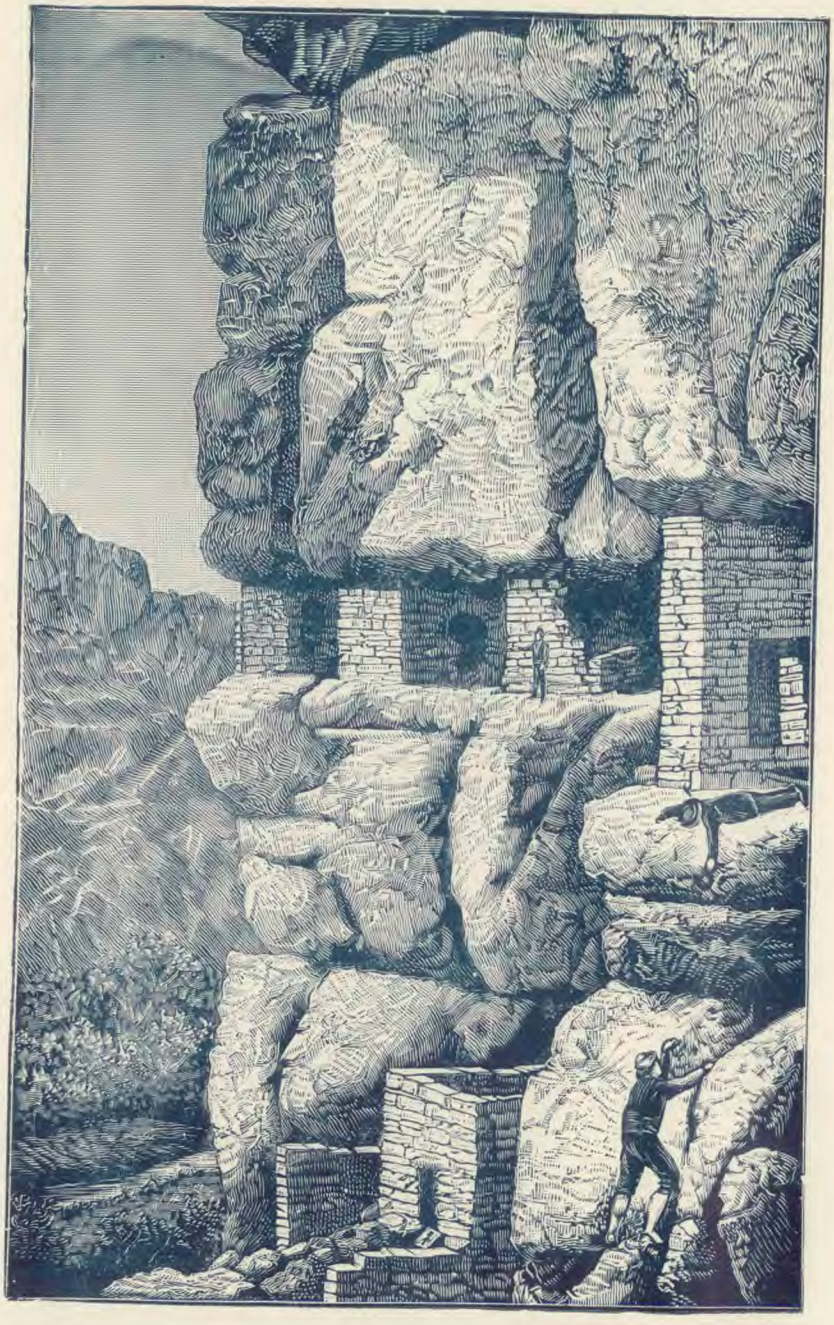
†Stops only on signal. Where no time is given, train does not stop. Trains run by Central Standard Time.

Valparaiso Accommodation, Battle Creek Passenger, Chicago Passenger, Pt. Huron Passenger, and Mail trains, daily except Sunday.

Pacific, Limited, Day, and Atlantic Expresses, daily.

Sunday Passenger, Sunday only.

GEO. B. REEVE, *Traffic Manager.* W. J. SPICER, *General Manager.*



Homes of the Cliff-Dwellers.

GOOD HEALTH

A JOURNAL OF HYGIENE.

MENS SANA IN CORPORE SANO.

Volume XXII. BATTLE CREEK, MICH., AUGUST, 1887. Number 8.

HOW TO KEEP COOL.*

BY THE EDITOR.

DURING the "heated term" the problem of "how to keep cool" interests a great many besides invalids. There is usually at this season of the year a perfect stampede from the cities. Everybody who can afford to do so, flees to some lake-side or mountain-side, or takes a trip to Europe, or adopts some other means of avoiding, as far as possible, the hot, sultry, germ-laden air of the cities. This is wise, and in the interest of health and long life. Extremes of temperature, whether of heat or cold, are depressing to the vital forces, and productive of special diseases which are highly dangerous to health. Extreme cold brings pneumonia, bronchitis, colds, and consumption. Hot weather swells the mortality list with cholera infantum, dysenteries, fevers, and sun-strokes. During the hottest weeks of the year, the death rate in the large cities is nearly doubled. Certainly, then, the annual hegira to escape the heat of July and August in the cities, is a means of life preservation.

But all cannot flee to the mountains, the breezy sea-shore, or the cool lake-side; and thousands of those who remain at home, as well as those who make their escape from the scorched and dusty cities, are unaware of the fact that there is more real danger in the vicious habits of eating, drinking, clothing, and various neglects of personal hygiene, than in the superabundance of radiant energy from "Old Sol." Let us study for a moment the physiology of animal heat.

The human body is, in some respects, like a furnace. A large part of the food which we eat is burned, much as fuel is burned in a stove. Our lungs serve for both draft and chimney, alternately drawing in the oxygen by which the vital fires are made to burn, and pouring out the smoke, in the form of carbonic-acid gas. Certain elements of the food are particularly efficient in the production of heat in the body. This is specially true of flesh food and fats of all kinds. Fats, when burned in the body, produce more heat than any other food substance.

The other day a man came into my office, puffing with the heat, and wiping the perspiration from his brow. As he threw himself into a chair, he called for ice-water, and exclaimed, "Doctor, isn't there any kind of medical treatment that will enable a man to keep cool?"

"Oh, yes!" said I; "but the trouble is the majority of people treat themselves in a way to keep up such a feverish heat that there is little chance for the doctors to do much for them."

"But," said the gentleman, "I am certain that I am doing my best to keep cool, but I feel as though a few days more of this roasting weather would make an end of me. I drink gallons of ice-water, and take huge doses of salts and other cooling medicines; but I feel as though I was in a furnace. Is there not some way to help a man in my con-

* NOTE.—Abstract of a lecture delivered in the Sanitarium parlors, July, 1887.

dition, without sending him to the North Pole, or putting him in an ice-house ?"

"Really, my perspiring friend, it does not seem to me to be so very warm. Perhaps the trouble is with yourself as much as with the weather. Let us see ; now, what did you eat for breakfast ?"

"Well, I ate about as usual, a good-sized beefsteak, a bit of bacon, 'Saratoga chips,' and griddle-cakes with butter and honey."

"And you expect to keep cool with such a diet ? One might as well expect to slow down the fire in the furnace by emptying the kerosene can into it. All that fat in the form of bacon, butter, and lard, is a highly inflammable substance, and it burns in the body with the same facility as in a lamp or stove."

"You really think that is true ? I am sure I never supposed that what one ate had anything to do with his being overheated."

"You have perhaps heard that the Esquimaux, who live in the extreme North, eat great quantities of blubber and oil. I do not say that it is the most healthful kind of diet for them ; but they live in a very cold country, and manage to keep warm. No doubt they have use for a large amount of heat-producing food. Now, suppose our Esquimau, or Lapp, should move to Italy or Egypt, or to Illinois or Indiana, or any other place in our latitude, during the summer season. Would you think it wise for him to continue to use the same food as at home in his snow hut among the icebergs ?"

"Well, really, I never thought of that before ; but I presume it would be well for him to make some change in his diet to suit the change of climate."

"And did it never occur to you that one ought to change his diet with the season of the year, as well as with a change of climate ?"

"I have never given the subject of dietetics much attention. I think I must study it up a little."

"Perhaps, also, it never occurred to you that flesh meat is of all foods most unsuitable for a hot-weather diet. This is true, not because lean flesh is the best kind of fuel, but because it stimulates the process by which other food substances are burned. It fans the fire, so to speak. So you see that in your habits of eating, instead of aiding yourself in keeping cool, you have literally been throwing fat in the fire, and blowing the fire besides."

"I am convinced, doctor, that you are right ; but what shall a man eat in hot weather ? One must have food of some sort in warm weather as well as cold."

"I see you make the same mistake as many others, in supposing that flesh meats are about the only foods of any value. There is a long list of most nutritious grains and fruits, and a few vegetables, which offer a most tempting bill of fare for the sultry weeks when the dog-star rages, as well as for the rest of the year, if one chooses to abjure less wholesome foods. Add to the products of the vegetable kingdom a liberal supply of milk, and we have a bill of fare, which, with reasonable prudence in exercise,—mental and physical,—and careful attention to general hygiene, will enable one to keep as cool as a cucumber, even when the thermometer runs up into the nineties, and one's flesh-eating friends are parboiling, not so much with solar heat, as with the flames of fires of their own kindling."

RIP VAN WINKLE, M. D.

BY OLIVER W. HOLMES.

CANTO SECOND.

So thirty years had past, but not a word,
In all that time, of Rip was ever heard ;
The world wagged on,—it never does go back ;
The widow Van was now the widow Mac ;
France was an empire ; Andrew J. was dead,
And Abraham L. was reigning in his stead.
Four murderous years had passed in savage strife,
Yet still the rebel held his bloody knife.
At last one morning—who forgets the day
When the black cloud of war dissolved away ?—
The joyous tidings spread o'er land and sea,
Rebellion's done, for Grant has captured Lee !
Up every flag-staff sprang the Stars and Stripes,
Guns going bang ! from every fort and ship—
They banged so loud, at last they wakened Rip.

I spare the picture—how a man appears
Who's been asleep a score or two of years ;
You all have seen it to perfection done
By Joe Van Wink—I mean Rip Jefferson.

Well, so it was—old Rip at last came back,
Claimed his old wife—the present widow Mac—
Had his old sign regilded, and began
To practice physic on the same old plan.

Some weeks went by—it was not long to wait—
And "Please to call" grew frequent on the slate.
He had, in fact, an ancient, mildewed air,
A long gray beard, a plenteous lack of hair—
The musty look that always recommends
Your good old doctor to his ailing friends.
Talk of your science! After all is said,
There's nothing like a bare and shiny head;
Age lends the graces that are sure to please,
Folks want their doctors moldy, like their cheese.

So Rip began to look at people's tongues,
And thump their briskets (called it "sound their lungs"),
Brushed up his knowledge smartly as he could,
Read in old Cullen and in Doctor Good.
The town was healthy: for a month or two
He gave the sexton little work to do.

About the time when dog-day heats begin,
Measles and mumps and mulligrubs set in;
With autumn evenings dysentery came,
And dusky typhoid lit its smoldering flame:
The blacksmith ailed, the carpenter was down,
And half the children sickened in the town.
The sexton's face grew shorter than before;
The sexton's wife a brand-new bonnet wore:
Things looked quite serious—Death had got a grip
On old and young, in spite of Doctor Rip.

And now the Squire was taken with a chill—
Wife gave "hot drops"—at night an Indian pill;
Next morning, feverish—bedtime, getting worse,
Out of his head—began to rave and curse;
The Doctor sent for—double quick he came:
Ant. Tart. Gran. duo, and repeat the same
If no *et cetera*. Third day—nothing new;
Percussed his thorax—set him cussing, too—
Lung fever threatening—something of the sort—
Out with the lancet—let him bleed—a quart;
Ten leeches next—then blisters to his side;
Ten grains of calomel—just then he died.

The Deacon next required the Doctor's care—
Took cold by sitting in a draught of air;
Pains in the back, but what the matter is
Not quite so clear—wife calls it "rheumatiz."
Rubs back with flannel, gives him something hot;
"Ah!" says the Deacon, "that goes *nigh* the spot."
Next day, a *rigor*—rum, my little man,
And say the Deacon sends for Doctor Van.
The Doctor came—percussion as before,
Thumping and banging till his ribs were sore—
"Right side the flattest"—then more vigorous raps—
Fever, that's certain,—pleurisy, perhaps.
A quart of blood will ease the pain, no doubt,
Ten leeches next will help to suck it out,
Then clap a blister on the painful part,
But first two grains of *Antimonium Tart*
Last with a dose of cleansing calomel
Unload the portal system—that sounds well!

But when the self-same remedies were tried,
As all the village knew, the Squire had died;
The neighbors hinted, "This will never do,
He's killed the Squire—he'll kill the Deacon, too."

Now when a doctor's patients are perplexed,
A *consultation* comes in order next:
You know what that is? In a certain place
Meet certain doctors to discuss a case,
And other matters, such as weather, crops,
Potatoes, pumpkins, lager beer, and hops.
For what's the use?—there's little to be said,
Nine times in ten your man's as good as dead—
At best a talk (the secret to disclose)
Where three men guess, and *sometimes* one man knows.

The council summoned came without delay—
Young Doctor Green and shrewd old Doctor Gray—
They heard the story; "Bleed!" says Doctor Green,
"That's downright murder! cut his throat, you mean!
Leeches! the reptiles! Why, for pity's sake,
Not try an adder or a rattlesnake?
Blister! Why, bless you, they're against the law;
It's rank assault and battery, if they draw!
Tartrate of Antimony! shade of Luke,
Stomachs turn pale at thought of such rebuke!
The portal system! What's the man about?
Unload your nonsense! Calomel's played out!
You've been asleep—you'd better sleep away
Till some one calls you"—

"Stop!" says Doctor Gray;
"The story is you slept for thirty years:
With Brother Green, I own that it appears
You must have slumbered most amazing sound;
But sleep once more till thirty years come round,
You'll find the lancet in its honored place,
Leeches and blisters rescued from disgrace,
Your drugs redeemed from Fashion's passing scorn,
And counted safe to give to babies unborn."

Poor sleepy Rip, M. M. S. S., M. D.,
A puzzled, serious, saddened man was he;
Home from the Deacon's house he plodded slow,
And filled one bumper of "Elixir Pro."
"Good-bye," he faltered, "Mrs. Van, my dear!
I'm going to sleep, but wake me once a year;
I don't like bleaching in the frost and dew,
I'll take the barn, if all the same to you.
Just once a year—remember! no mistake!
Cry 'Rip Van Winkle! time for you to wake!'
Watch for the week in May when laylocks blow,
For then the Doctors meet, and I must go."

Just once a year the Doctor's worthy dame
Goes to the barn, and shouts her husband's name,
"Come, Rip Van Winkle!" (giving him a shake)
"Rip! Rip Van Winkle! time for you to wake!
Laylocks in blossom! 'tis the month of May—
The Doctors' meeting is this blessed day,
And come what will, you know I heard you swear
You'd never miss it, but be always there!"

And so it is, as every year comes round,
Old Rip Van Winkle here is always found.
You'll quickly know him by his mildewed air,
The hayseed sprinkled through his scanty hair,
The lichens growing on his rusty suit—
I've seen a toadstool sprouting on his boot;
Who says I lie? Does any man presume—
Toadstool? No matter—call it a mushroom.
Where is his seat? He moves it every year;
But look, you'll find him—he is always here;
Perhaps you'll trace him by a whiff you know—
A certain flavor of "Elixir Pro."

Now then I give you—as you seem to think
We can drink healths without a drop to drink—
Health to the mighty sleeper; long live he—
Our Brother Rip, M. M. S. S., M. D.!

—*Boston Med. and Surg. Jour.*

BEAUTY OF COMPLEXION.

THE essential condition of beauty is health. Health consists in a harmonious proportion of the different parts of the body, and is maintained by an abundant supply of those things which are required for its growth and sustenance,—nourishing food, fresh air, plenty of exercise, and cleanliness.

It is an astonishing fact that some women consider the absence of visible health as beauty, and employ means, alike wicked and injurious, which destroy both health and the vital tints of the complexion. One lady, every morning for six months, swallowed eight wads of white linen paper, and carried camphor in her armpits, in order to have a fashionable pallor! To a much greater extent than one might at first suppose, American women of the nineteenth century continue to indulge in chalk-eating and vinegar-drinking in order to acquire this pallor; and the multifarious washes, toilet waters, and the like, still in use, are enormous in quantity, and contain more or less mercury, lead, and bismuth. These are as pernicious when applied externally as when taken internally. Cramps, congestions, fainting spells, and nervous prostration follow in their wake.

* * * * *

A beautiful complexion is nothing more than a healthy skin,—an outside mirror reflecting the internal harmony of the vital functions. In other words, It is *visible* health. This connection of the external with the internal is so complete that the slightest internal disharmony is immediately indexed on the skin, especially in the face. A proof of this is the fact that we often note from a friend's features that he is ill, long before he himself becomes bodily aware of it. Again, we frequently attempt to cure a blotched skin by applying salves and plasters thereto, until our physician tells us that a disordered liver, or something of that sort, is the real cause of the cutaneous eruptions. Certainly a providential arrangement of nature is this indicating of disease externally;—but how little use we make of it! We clean the mirror again and again, forgetting that, despite our efforts, a damp atmosphere will ever and anon becloud it. In short, it is a fruitless task to try to acquire a healthy com plexion without having healthy vital fluids. Besides, our skin is not simply a pretty mask to hide our bones and muscles from immediate view, but the great ventilator and the purifier of the body. Every cosmetic applied lessens the performance of its functions, and makes it dry, scaly, and hard, and the less able to perform its duties.

Our idea of beauty as comprised in a beautiful complexion, demands, as an essential, a certain cleanliness, softness, and suppleness of the skin, and withal a certain *living* color; all of which are properties that cannot be produced by artificial applications on the surface, because such applications interrupt the invisible evaporation of the body constantly taking place for the purpose of preserving that velvety exterior which we see in a healthy skin that has not been tampered with. Another essential to the preservation of beauty is the purity of the vital fluids; and this, again, is dependent on a proper respiration of the body, and the active condition of the digestive organs; and the third es-

sential is a perfectly free, unrestrained circulation of the blood through every muscle and fiber, since even the healthiest fluids lodge in the spot where constrained, and thus require of a limited space the sanitary duties which were originally designed to be performed by a much greater area of skin-surface. This space, being overtaxed, is finally prostrated, and ceases altogether to act, thus giving rise to blotches, tumors, pustules, and a scaly, crusty complexion. To these three points may all abnormal conditions of the skin be reduced, together with all the methods for acquiring a beautiful complexion. In accordance with this, the following rules for preserving complexional beauty are submitted,—rules which, if wisely considered and followed, will be found to contain the additional incentive of producing the highest state of health:—

Wines and liquors of all kinds are to be severely let alone. There can be nothing more detrimental to the tint than this fluid-fire, which overheats the blood, and drives its impurities to the surface, producing that copper complexion so commonly seen in the ladies who visit Wiesbaden, Carlsbad, Ems, and other European watering-places and spas. . . . Furthermore, excessive quantities of heated drinks, such as chocolate, coffee, and tea, produce the same effects.

* * * * *

Diet naturally has a great influence on the complexion; but since so many articles of food are only relatively harmful, each must ascertain by experiment those things which are best adapted to her constitutional peculiarities. . . . Pork, however, is absolutely to be shunned; likewise all highly-seasoned dishes, and all kinds of pastry. These latter occasion a dilatory, imperfect digestion, and hence are anything but conducive to a good complexion.

* * * * *

For continued health of mind and body, and a perfect development of all the muscles, regular exercise in the open air is necessary. As a people, we shut ourselves up too much in our houses. Four or five hours a day in the open air is the allowance needed by every human being. For most women that is impracticable during a great part of the year; but they could and should spend much more time out of doors than they do. In summer there is no reason why they should not habitually sit on their lawns or porches with their work and reading. It would be much healthier than sitting in darkened rooms. In this way the greater part of the day could be spent in the open air; and no better cosmetic ever was or ever will be invented than that produced by the shade of trees. But the above rules may be scrupulously followed, and yet, to the preservation of beauty, there is still one thing needful; and that is cleanliness.

* * * * *

Just one more slight warning. There is a class of people, who, while admitting that external appliances have no other than harmful effects on the complexion, will, nevertheless, suppose that copious doses of so-called blood-purifying ptisans, indulged in at frequent intervals, will, so to say, wash all impurities out of the system. Nothing could be more ridiculous than this supposition. These decoctions produce excessive perspiration, and thus drive the impurities of the blood to the skin, without giving to the latter enough functional vigor to throw them off. Hence they stop the pores of the skin, and produce a worse complexion than before; and besides this, they play havoc with the stomach, and prevent elimination of the impurities of the body by their natural channels. Again, it is absolutely necessary for the maintenance of a pure complexion, to be scrupulously careful about keeping the head cool and the feet warm. The two poles of the body are intricately connected and balanced. The more the pores of the one are closed by cold or dampness, the more is the blood attracted to the other; and since it is the feet, generally, that are chilly and cold, the circulation and transpiration which should take place through them, finds a natural outlet in the head and on the face. To acquire and retain a beautiful complexion, an equilibrious circulation of the blood in all parts of the body is the great *desideratum* to be sought.—*W. Pitt Mayer, A. M.*

MR. TILDEN AND THE DOCTOR.

Two years before his death, Mr. Tilden was taking severe medicine, prescribed by Dr. Simmons, to stop or lessen the nervous shaking from which he suffered. The medicine apparently had a good result.

Mr. Tilden, however, always quarreled with it. He said it disagreed with him. One morning he declared to Dr. Simmons:—

"I shall stop taking that medicine, it hurts my stomach."

"Governor," said the doctor, "it cannot hurt your stomach. Its effects are not on that organ at all."

"But I tell you it does," persisted Mr. Tilden, "and I shall take no more of it."

Dr. Simmons was now really alarmed, and said:—

"Are you resolved on that?"

The answer was, "I am."

"Then," rejoined the doctor, "at least promise me to leave it off gradually, because if you stop it all at once, I will not be answerable for the consequences."

Drawing his chair nearer to the doctor, Mr. Tilden laid a hand on the physician's knee, looked him straight in the face, and with a steely glare out of his game eye, said to him in a whisper:—

"I have stopped it."

"When?" asked the astonished and alarmed doctor.

"Three weeks ago," answered Mr. Tilden, "and it has not hurt me a bit. You doctors do not know nearly so much as you think you do."—*Brooklyn Eagle.*

MEDICINE FOR WEARY BRAINS.

MANY persons seek relief from weariness and lassitude, in things which stimulate and excite them. Those who do this are simply burning the candle of life at both ends. Whipping a tired horse may make him *go*, but it does not make him strong, nor lengthen his life.

A judicious writer says: "The best possible thing for a man to do when he feels too weak to carry anything through, is to go to bed and sleep as long as he can. This is the only actual recuperation of brain force, the only recuperation of brain power: because during sleep the brain is in a state of rest, in a condition to receive appropriate particles of nutriment from the blood, which take the place of those that have been consumed by previous labor; for the very act of thinking burns up solid particles, as every turn of the wheel or screw of the steamer is the result of consumption by fire, of the fuel in the furnace. The supply of consumed brain substance could only have been derived from nutritive particles in the blood, which were obtained from the food eaten previously, and the brain is so constituted that it can best receive and appropriate to itself those nutritive particles *during the state of sleep.* Mere stimulants supply nothing in themselves; they gorge the brain, and force it to a greater consumption of its substance, until it is so exhausted that there is not power enough left to receive a supply."

The weary man, who, by the aid of any stimulant, drives away sleep, drives away the best friend he has, and may find, when too late, that the friend has gone beyond recall. Sleep is a priceless gift, restoring and refreshing the weary. Let us see to it that we do not abuse this gift, and so prepare ourselves for sleeplessness, trouble, and death at the end. —*The Common People.*

—That we do not all look upon different branches of education in the same light, is evinced by the following: "I want Lillian to be highly accomplished, fit to shine in society," said a stylish visitor. "She is only ten, now, but she can sing quite sweetly. Lillian, sing, 'Oft in the Stilly Night,' dear."

Grim visitor, who is a lady doctor, replied: "I do not want Mary Ann to have accomplishments. I want her to have science. She is now six, but she is well along in physiology. Mary Ann, *say your bones!*"

—The chains of habit are generally too small to be felt until they are too strong to be broken.

Seasonable Hints.

—Look out for sun-stroke. Keep the head wet with tepid water, and stay in the shade when the thermometer goes above 90°.

—Those who are addicted to the use of alcoholic drinks should be reminded that July and August are particularly fatal to topers. When "Old Sol" determines to strike somebody, he almost always selects a drunkard, which is another illustration of the survival of the fittest, or rather that the unfittest does not survive.

—August is the month of the greatest mortality in the large cities. It is a strange fact that the number of deaths in the hottest week is usually greater in New York City than in London, a city four times as large. An examination of the mortality tables shows that the conditions of life in large cities are particularly fatal to children during the hot months; and parents who wish to preserve their children's lives, will do well to give them a vacation in some healthy country-place during August and the early part of September.

—One of the chief dangers to life and health during the hot months is the use of food which has undergone the first stages of decomposition. Thousands of infants are annually slaughtered during July and August by the use of milk a few hours too old or which has been placed in cans or other vessels that have been imperfectly cleansed. Unless milk is known to be perfectly fresh, it should be boiled before using. For this reason, if for no other, hot milk should be used in preference to cold at this season of the year. The popular idea that boiled milk produces constipation of the bowels has little or no foundation.

Sick Eggs.—Eggs are really unfit to eat unless alive and in good health. It may be a new idea to some of our readers that fresh eggs are alive, but this is true, nevertheless. In fact, a healthy egg breathes, and maintains a circulation within its limy covering as really as does a developed chicken, though the process is, of course, much more simple. It is a common observation that a stale egg does not leave the shell readily, and that the yolk is likely to break. This is an indication that the egg is "sick." Adhesions have formed by a process similar to inflammation. Eggs are frequently invaded by germs, and undergo changes which develop tyrotoxicon and other deadly poisons. This is why stale eggs often produce violent symptoms closely allied to cholera or cholera morbus, and exactly similar to those occasioned by the use of milk or ice-cream containing tyrotoxicon.

—The reign of the dogstar has begun; and the poor dogs are going about with their heads shut up in wire cages, to allay the popular fear of hydrophobia. It may be a comfort to some to know that the season of the year in which hydrophobia is most likely to occur is early spring. This fact has been known many years, yet popular custom still waits until the danger is past before putting the dogs in muzzles. Hydrophobia may occur, however, at any season of the year, and so the safety of human life is increased by the muzzling of dogs even during the months when they are least likely to run mad.

—The warm and frequently damp days of midsummer induce rapid decay of all animal and vegetable substances, and render necessary constant vigilance to maintain the surroundings of the house in a sanitary condition. The wise housekeeper will make a complete sanitary survey of the entire house and premises every day, and see that everything which shows the slightest symptoms of decomposition is at once removed, disinfected, or burned. A great deal of the malaria of which people complain at this season of the year is simply bad air generated in neglected cellars, damp closets, half-emptied cisterns under the house, and vaults and cess-pools in the back yard.

—The reckless manner in which people swallow ice-water, ice-cream, fruit ices, iced tea, and various other iced preparations at this time of the year is accountable for a great share of the disturbances of the stomach and bowels, for which the warm season is noted. It is a fact which any one can determine for himself by simple experiment that hot water will quench thirst more quickly and effectually than cold or iced water. In fact, the colder the water, the more one feels inclined to drink when very thirsty. Each glass of ice-water seems to create a demand for another, by producing a feverish condition of the mouth and throat, which gives rise to an artificial thirst.

Danger in Ice.—At this season of the year the large consumption of ice renders it important that the public should be informed of the dangers which may lurk in the harmless looking crystals which the ice-man leaves at our doors. A popular opinion prevails that all impurities are eliminated from the ice by the process of freezing, but a microscopic examination will frequently discover the presence of germs of typhoid fever and other organic impurities, whose presence is likely to give rise to disease. The activity of these germs is found to be in nowise impaired by the low temperature. The only means by which the danger can be avoided, when ice is to be used in cooling articles of food or drink, is to place the ice in a separate receptacle.

THE HAPPY FIRESIDE.

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

Conducted by Mrs. E. E. Kellogg, A. M.

NEW EVERY MORNING.

EVERY day is a fresh beginning,
Every morn is the world made new:
You who are weary of sorrow and sinning,
Here is a beautiful hope for you,—
A hope for me and a hope for you.

All the past things have passed and over,
The tasks are done, and the tears are shed;
Yesterday's errors let yesterday cover;
Yesterday's wounds, which smarted and bled,
Are healed with the healing which night has shed.

Yesterday is a part of forever,
Bound up in a sheaf which God holds tight,
With glad days, and sad days, and bad days, which never
Shall visit us more with their bloom and their blight,
Their fulness of sunshine or sorrowful night.

Let them go, since we cannot relieve them,
Cannot undo and cannot atone;
God in his mercy receive, forgive them!
Only the new days are our own;
To-day is ours, and to-day alone.

Here are the skies all burnished brightly,
Here is the spent earth all re-born,
Here are the tired limbs springing lightly
To face the sun, and to share with the morn
In the chrism of dew and the cool of dawn.

Every day is a fresh beginning;
Listen, my soul, to the glad refrain,
And, spite of all sorrow and old sinning,
And puzzle forecasted, and possible pain,
Take heart with the day, and begin again.

—*Springfield Republican.*

A YOUNG GIRL'S STANDARD.

BY MRS. HARRIET A. CHEEVER.

ALICE BURR was the beauty of Clarksville. Her mother, a gentle widow lady, had carefully trained and instructed her daughter, until now at the age of twenty years, she was the comfort and pride of her mother's heart. Their circumstances had always been straitened, but Alice had attended school until she was eighteen; and although she was not generally as richly dressed as many of her companions, she was usually the most attractive young lady at the party or sociable, so beautiful was her face, and so sweet were her manners.

Not a little rivalry had been apparent until of late on the part of the young gallants, who vied with each other in their efforts to impress the pretty Alice favorably; but it was now generally believed that Richmond Clark would be the favored one of her choice, for he was not only fine-looking and considered talented, but his father was the richest man in Clarksville, owning about a quarter of the land in the thriving village named for him several years before.

Then there was Prescott Giddings, a young fellow who was teaching the village school, and also taking care of his unfortunate mother, who was both poor and lame. It was almost piteous to see with what hungry eyes young Mr. Giddings would watch the graceful figure of Alice Burr, when he supposed no one saw him. He was far too much of a man, however, to betray any feelings of depression, or to wear a downcast look, because a man more brilliant and prosperous than he, found more favor in the eyes of the beautiful girl he could not but admire.

Frank White and Will Burt had tried their best to ingratiate themselves in Alice's good opinion; but now she received but little attention except from Richmond Clark and Prescott Giddings.

It did not annoy Richmond Clark in the least that young "Master" Giddings walked home from Sunday and Friday evening meetings with Alice Burr; the school-teacher was such a contrast to himself, he mentally argued, that it would be rather an advantage than otherwise to have Alice given opportunity to note the comparison. Richmond Clark would have attended the prayer-meeting himself, only that he found them utterly uninteresting; and despite his mother's almost invariable presence at the meetings, the son as invariably remained away.

But it was not long before the motherly, watchful eyes of Mrs. Burr detected a growing thoughtfulness on the part of her fair young daughter. For some time she forbore all questioning, feeling sure that when the proper time came, her daughter would unburden her heart in filial confidence; but the quiet and abstract manner continued until it seemed kinder to help matters for the child a little, so one day, as the silence became noticeable, she said cheerily:—

"A penny for your thoughts, Alice."

"Oh, I'm not sure they're worth a penny," said Alice, coloring a little. "The truth is, ma," she continued, "I am rather in a strait 'twixt two, for I feel that two young men are offering me marked attention, and I ought not to be encouraging both."

"Then why not manifest decided unwillingness to receive further attentions from one or the other?"

"Because I hardly know which to choose," said Alice, with a little laugh. "Richmond Clark is entertaining, bright, and witty, and very lavish with his money. I must say, to me, who have always had to count even the pennies carefully, it seems very nice to be able to use money so freely; yet there's something about Richmond I do not really like; at the same time I cannot tell just what I find so objectionable." She went on: "Prescott Giddings is poor compared with Richmond Clark, and not nearly as fine looking; but he has the tenderest way of speaking of his mother, and I feel as though he was a person one could trust to any extent.

"A great deal to say of any man," observed Mrs. Burr quietly.

"Then I don't think Richmond Clark is in the least religiously inclined," Alice continued, "though he might become so in time. Well, I only hope to be led aright, but I imagine both my friends think I have a good opinion of them, as I really have."

A few evenings after the above conversation, a church sociable called together a goodly number of both the older and younger members of the congregation. Contrary to her usual custom, Mrs. Giddings ventured out, the weather being unusually fine. Mrs. Clark and her son Richmond, Mrs. Burr and Alice, were also present.

They had not been long in the vestry before Richmond Clark approached Alice, saying:—

"Were you not in something of a hurry to-night? I called for you, but found you gone."

"I came with mother," answered Alice, "and I supposed you came with your mother. I see she is here."

"Oh, no," said Richmond, with a little shrug; "if the governor doesn't see fit to look after mother when she goes to places of social entertainment, I must be excused from dancing attendance. I know where to find more congenial company," and he looked significantly at Alice.

"Than your mother?" she asked in surprise.

"Why, certainly," he rejoined. "Mothers are very well when you're sick or want help. Mother's always whining about being neglected," he continued, "but she manages to comfort herself somehow, and appear lively enough when she finds herself in company."

As the young man turned to speak to some one else just then, Alice thought to herself: "Now I know what I've never quite liked about Richmond Clark; he never speaks respectfully of older persons, and I'm sure I never could trust a man who speaks so heartlessly of his mother."

"You must let me see you home," whispered Mr. Clark to Alice towards the close of the evening.

"Thank you, no; mother and I will go together."

"Oh, certainly, I can take care of you both."

"Thank you, not to-night. Mr. Giddings and his mother go our way. Mother thinks we would better go with them."

"Did you ever have the pleasure of trying to keep pace with Gidding's mother?"

"No, but I am aware she is lame."

"Goodness! How a man can go through the streets with a woman hanging on his arm who alternately hobbles and jumps, after the manner of Madam Giddings, is more than I can imagine!"

"But she is his mother."

"Well, what does that signify? Need a man make a guy of himself to serve his mother, or his sisters, or his cousins, or his aunts?"

"Suppose it was his wife, and she became lame?"

"Oh, that would be different; up to a certain point, duty would come in and allow allegiance."

"Yes, it might, as you say, up to a certain point."

Alice was quite willing to bring the conversation to a close, and not long after she found herself at home with her mother.

"It is really delightful," remarked Mrs. Burr, as she was putting her things away, "to hear Mrs. Giddings talk about Prescott—what a son he is, and yet what a student. It appears he is going away."

"Where, mother?"

Alice was surprised at the unpleasant start her mother's words gave her.

"Mrs. Giddings tells me that he has been called as principal of a high school in the city, and she is delighted, because, as she says, no young man was ever more deserving of advancement and prosperity; and then his salary will be more than trebled by the move."

* * * * *

All Clarksville was amazed when it was rumored abroad that Master Giddings was going away, and, what was more, he was engaged to beautiful Alice Burr.

When Richmond Clark asked, with genuine concern and flashing eyes, why she rejected him, and for a school-teacher with a mother to support, she answered simply:—

"You did not come up to my standard of a man."

"Why not, pray?"

"You were not gallant to your mother."

"But what possible difference did that make, so far as you were concerned?"

"All the difference imaginable; I shall not always be young, possibly not always vigorous and able to take care of myself."

Years afterwards, when Alice had long been a happy, cherished wife, old Goody Babson, the village nurse, was heard to remark:—

"I hear some folks a-blamin' she as was Alice Burr for not a-marryin' Richmond Clark, and they talk as though he neglects his wife 'cause he couldn't never love another body as he did Alice. But I guess the girl knew what she was 'bout. That man never used his mother just right; and Alice, I think she knowed it, and I agree with her that these sons that don't make much account of their mother, never make a husband worth havin'."
—*Zion's Herald.*

THE TRAVELER'S TREE.

In the far-away island of Madagascar there grows a magnificient tree of the order *musaceæ*, to which has been given the name of the traveler's tree, probably on account of the water which is stored up in the large cup-like sheaths to be found upon its leaf-stalks, and which often proves of great service to travelers in that torrid land. A writer in the *Youth's Companion* gives the following account of a European traveler, who on his way from the coast to the interior, having emptied his water flask, was suffering from thirst, and asked one of the natives of his party when he should be able to obtain more water:—

"'Any time you like,' answered the native, smiling. The European saw no sign of springs or water; but the natives conducted him to a group of tall, palm-like trees, standing in a cluster on the edge of the forest, with straight trunks and bright green, broad leaves, growing from the opposite sides of the stalk, and

making the tree appear like a great fan. The white man gazed admiringly at the tree.

TRAVELER'S TREE.

"'You think it is a fine tree,' said the native, 'but I will show you what it is good for.'

"He pierced the root of one of the leaf-stems, at a point where it joined the tree, with his spear, whereupon a stream of clear water spurted out, which the European caught in his water can, and found to be cool, fresh, and excellent drink.

"The party having satisfied their thirst, and taken a supply for future use, the native who had spoken, continued:—

"'This tree, which is good for us in more ways than one, we call the traveler's tree.'

"'But where does the water come from that the tree contains?' asked the European. 'Is it taken up from the soil?'

"'Oh, no,' said the native, 'the leaves drink in the rain that falls on them; and when it has passed all through them, it becomes very pure and sweet.'

"'And are there many of these trees on the island?'

"'There are so many that sometimes one sees no other trees for a mile; and very often we take no provision or water when we travel, because we know that we shall find the traveler's tree.'

"'And you say there are other things that they are good for?'

"The native answered by asking another question: 'Do you remember,' said he, 'the village that we passed through this morning, with its wooden huts roofed over with leaves? Those huts were made of nothing but the traveler's tree. The wood splits easily, but makes tough planks for floors, and the walls of houses are made of bark. With the branches we make the rafters, and the leaves cover the roof. But this is not all that the good tree does. We are coming soon to a village whose people I know, and I will show you more.'

"The native was eager in his haste to show to the traveler what the tree had in store for him; and the European, for his part, felt no little curiosity. They soon arrived at the village, and the guide conducted the traveler to the hut of a friend, who received them with hospitality, and soon spread a meal for them.

"First he placed upon a sort of table a spread made of some vegetable substance, very light and pretty; then he set before his guests two drinking-vessels of a material which the white man did not recognize, and gave them two utensils, which, although rude in shape, served in place of knife and fork.

"In the midst of the table he placed a large bowl filled with cream of a very appetizing appearance. In another vessel there was oil, with almonds floating upon it.

"'Before we begin,' said the guide, 'I must tell you what I promised. Everything upon this table comes from the traveler's tree. You see this table-cloth? It is made of the fibers of the leaves of the tree. These drinking-cups, these plates, these knives, are made of the wood or bark of the tree. What you take to be cream is a dish made of the seeds of the tree, pounded up with meal, and mixed with a kind of milk drawn from the trunk of the tree. What you think are almonds are little cakes made of these seeds; and the oil is pressed from the skin, or shuck, of the seed. As for the water you are about to drink, you know about that already. And we get not only these things, but some of the people of Madagascar have made out of the fiber of the wood a kind of cloth which they use for clothing.'"

CLIFF-DWELLERS.

OUR frontispiece this month represents the curious homes of a people long-ago extinct, probably the ancestors of the present race of Pueblo Indians, who now occupy certain portions of southern Colorado and New Mexico. What these people may have called themselves, we have no means of knowing, for their name perished with them. Because they built their homes in the crevices of the cliffs along the canyons which abound in that region of the country, they have been given the descriptive name of "Cliff-dwellers," which is, at any rate, much easier to remember than the long, hard names which scientific men have sometimes bestowed upon obscure races. Very little is known of the habits of this ancient people, but it is evident that they had attained to some little skill in architecture. A room has been found in one of their dwellings, with an arched ceiling thirty feet in diameter, at the height of twenty feet from the floor, thus entitling them to share, with the Peruvians and Esquimaux, the honor of being one of the three tribes inhabiting the Western Hemisphere who understood the principle of the arch.

Temperance Notes.

—A National Temperance fête was held at Crystal Palace, London, July 12, under the auspices of the I. O. G. T. of Great Britain.

—During the Queen's Jubilee the temperance people of England circulated hand-bills on which were printed: "Remember, if you drink to the Queen's health, you damage your own."

—For the first time in the history of Iowa, Fort Madison Penitentiary has not a sufficient number of convicts to enable it to fill contracts made upon the basis of the usual supply. Surely prohibition does decrease crime.

—The University of Pennsylvania has recently taken a grand stride toward true temperance, and forbidden the use of tobacco in any form by students belonging to that school. We believe this is the first State institution to prohibit tobacco, but it is to be hoped that others will soon follow.

—An old Chinese legend tells us of the great Yu, who lived some two thousand two hundred years before Christ, that, when offered wine, he poured it upon the ground, ordering the manufacturer banished, and forbidding its further manufacture, "lest in after ages the kingdom should be lost through wine." "Then" says the legend "the heavens rained gold for three days," no doubt in approval of the wise conduct of this ancient Chinese prohibitionist.

—On Wednesday evening, June 8, a great prohibition mass meeting was held in the hall of the Cooper Union, N. Y. City. It was the first prohibition mass meeting worthy of the name, ever held in the metropolis. Gen. Clinton B. Fiske acted as chairman of the meeting, and addresses were given by Dr. Funk, editor of the *Voice*; Mr. Finch; Gov. St. John; Walter Mills, of Ohio; and Rev. J. H. Hector, of Washington. Letters were read from Pres. Sisiye, J. P. Newman, Joseph Cook, and others.

—The following clippings from Kansas papers are added proof that "prohibition does prohibit:" "The police station was again empty this morning. It is empty so often now-a-days that the receipts have fallen from $900 a month to $400 a month, and the City Council, in its despair, will demand an occupation tax."—*Atchison Globe*. "No State has ever received so grand an advertisement as has Kansas by taking the advance steps on temperance and universal sufferage, and no State has ever so greatly prospered as Kansas in the last five years."—*Leavenworth Times*.

Popular Science.

—Detroit has an electric street-railway in active operation.

—An artesian well at Northampton, Mass., has reached a depth of 3,024 feet without finding the desired quantity of water.

—The fastest speed ever attained by an ocean vessel is thirty-one miles per hour, which was recently accomplished by an English boat.

Solid Oxygen.—Liquid oxygen has been produced in small quantities by a number of experimenters, but it is only recently that solidified oxygen has been obtained. This interesting experiment was performed by Professor Dewar at the Royal Institute, a short time ago. It was accomplished by allowing liquid oxygen to expand into a partial vacuum, when the enormous absorption of heat which accompanies the expansion, resulted in producing the solid substance. The oxygen in this condition resembles snow, and has a temperature of 360° F. below the freezing point of water.

Sound from a Rainbow.—One of the most wonderful discoveries in science that has been made within the last year or two is the fact that a beam of light produces sound. A beam of sunlight is thrown through a lens on a glass vessel that contains lampblack, colored silk, or worsted, or other substances. A disk having slats or openings cut in it, is made to revolve swiftly in this beam of light, so as to cut it up, thus making alternate flashes of light and shadow. On putting the ear to the glass vessel, strange sounds are heard as long as the flashing beam is falling on the vessel. Recently, a more wonderful discovery was made: the beam of sunlight is made to pass through a prism, so as to produce what is called the solar spectrum, or rainbow. The disk is turned, and the colored light of the rainbow is made to pass through it. Now, place the ear to the vessel containing the silk, wool, or other material. As the colored lights of the spectrum fall upon it, sounds will be given by different parts of the spectrum, and there will be silence in other parts. For instance, if the vessel contains red worsted, and the green light flashes upon it, loud sounds will be given. Only feeble sounds will be heard when the red and blue points of the rainbow fall upon the vessel, and other colors make no sounds at all. Green silk gives sound best in red light. Every kind of material gives more or less sound in different colors, and utters no sound in others. The discovery is a strange one, and it is thought more wonderful things will come from it.—*Selected*.

SOCIAL PURITY.

"Blessed are the Pure in Heart."

CHILDREN'S PARTIES.

Every now and then the newspapers give a graphic account of some children's party, in which little boys and girls hardly out of their cradles are encouraged by fond, but misguided fathers and mothers, particularly the mothers, to ape their elders in all the follies and frivolities of fashionable society. We read about the gay and costly dresses, the elaborate *menu*, the dancing, the flirting, and all the concomitants of a fashionable party. A generation ago, such a proceeding would have been frowned down in any intelligent community. At the present time, almost every town and village, as well as the larger cities, has witnessed one, if not many, exhibitions of this sort. Do not parents know that by encouraging such unwise liberties, they are laying in the characters of their children the foundation of evils which may lead them to infamy and ruin?

We quote the following from an excellent little "Leaflet for Mother's Meetings," by Mrs. Irma A. Jones:—

"Few questions are more perplexing than that of determining how much mingling of boys and girls in sports or at evening entertainments, can prudently be allowed. Evidently it is useless to sigh for the 'good old times' when lights went out at curfew bell, and boys and girls had little thought of society beyond the home circle; for in those days, families were so large that the home supplied abundant companionship.

"Children's evening parties, even under most favorable conditions, with their too frequent opportunities for juvenile flirtations, and their inevitable tendency to emphasize distinctions of sex, furnish too many temptations to be considered other than dangerous. Were there no other evils connected with them, these are sufficient to condemn them in the mind of every mother who has her child's moral welfare deeply at heart.

"That any woman can think or say of childish lovers, 'It is such a pretty sight to see them so devoted,' and then encourage separating themselves to each other's society, to carry out the conceit, is most surprising.

"'Why, there is no harm,' says one, 'they are only children.' But can you not see to what such talk and such thoughts lead? how they weaken modesty and reserve, which are the strongest safeguards of purity?

"Is it only a conservative whim, that it is unwise, nay, perilous, to allow during childhood any association of boys and girls or even trifles of speech, which place their thoughts strongly upon difference in sex? If, by any mischance, there have come to either, impure words or suggestions, such speech, such associations tend inevitably to fix and nourish them. It is impossible in such matters to overestimate the importance of 'little things, little decent ways, little safeguards and watchfulness.' One has said, 'Sow thoughts and reap actions; sow actions and reap habits; sow habits and reap character.' . . . This inexorable law of being explains why even so small an affair as a juvenile flirtation or the evil companionship of an hour may be the beginning of unspeakable sin and misery."

—A loveless marriage is an unchaste union. It is worse for a woman to sell herself for a home and livelihood than to fight hand in hand with poverty all her life.

The Need of Industrial Training.—It is a notable fact, which has been recognized by all who have interested themselves in the reformation of fallen women, that erring women are almost always of a class who, for want of proper training, are unable to earn a livelihood in any honest way. Most of them are unacquainted with the simplest of household arts, and have not the first rudiments of any trade. This is a matter to which mothers should give serious attention. Dr. L. Anna Ballard, speaking upon this subject in a little tract entitled, "Danger to Our Girls," says:—

"The uncertainties and changes of life make it just as needful that the daughter of the richest, as well as of the poorest, should know how to care for herself, and to what she can turn her hand to earn an honest living. A training that develops skill in labor of any class is a tower of strength to a girl when in temptation. A lack of any industrial training is a direct leading-string to sin and crime. This statement is amply illustrated by the following fact, given by Frances E. Willard in her annual address at the National Convention, at Minneapolis: 'Of eight hundred and seventy girls and women who were arrested, and lodged in one police station, in one month, in Chicago, only one hundred and thirty of them could sew or do housework, and none of them had ever learned a trade.'

"Nothing, except the grace of God, has more power than industry and self-reliance, to keep us true to ourselves in the midst of temptation.

Where Are the Children at Night?—Darkness emboldens human beings of all ages to do deeds which they would not venture upon in the face of broad daylight. Children are, under the cover of darkness, led into the most grossly evil ways. The following recent utterance of the late H. W. Beecher on this point, is worth reading and heeding:—

"Keep your children at home nights. There is many a sod that lies over the child whose downfall began by vagrancy at night, and there is many a child whose heart-breaking parents would give the world if the sod did lie over him. What a state is that for children to come to, in which the father and the mother dread the life unspeakably more than the death of their children! What a horrible state of things when parents feel a sense of relief in the dying of their children! Then, I say, take care of your children at night."

The New Waltz.—The following graphic description of one of the newest forms of the waltz, which has been well characterized as indecent, recently appeared in the *Christian Intelligencer*:—

"The gents encircle their partner's waists with one arm. The ladies and gentlemen stand close, face to face. The gents are very erect, and lean a little back. The ladies lean a little forward. (Music.) Now all wheel, whirl, circle, and curl. Feet and heels of gents go rip-rap, tippity-tap. Ladies' feet go tippity-tip. Then, all go rippity, clippity, slippity, tippity, bippity, skippity, hoppity, jumpity, bumpity, thump. Ladies fly off by centrifugal momentum. Gents pull ladies hard and close. They reel, swing, slide, sling, look tender, look silly, look dizzy. Feet fly, dresses fly, skirts fly, all fly. It looks tuggity, pullity, squeezity, rubbity, rip. The men look like a cross between steelyards and "limber-jacks." The maidens tuck down their chins very low, or raise them exceedingly high. Some smile, some grin, some giggle, some pout, some sneer, and all perspire freely. The ladies' faces are brought against those of the men or into their bosoms; breast against breast, nose against nose, and toes against toes. Now they go in again, making a sound like georgey, porgey, derey, perey, ridey, pidey, coachey, poachey. This dance is not much, but it's the extras I object to."

Who will dare say that such maneuvers are not conducive to immorality? The writer has heard from the lips of more than one young person the confession that the waltz was a direct incentive to grossness.

—The State of Delaware has raised the age of protection from seven to fifteen years, and also passed a bill prohibiting the sale of impure literature.

BIBLE HYGIENE

ANCIENT MAN.

THERE has been no end of speculation respecting the physical characteristics of the first men. How tall were they? Did Methuselah really reach the great age assigned him, —nearly one thousand years? These are questions which the scientists have discussed with much show of learning, but with little appearance of facts. In recent years, since the general acceptance of the doctrine of evolution as opposed to the Biblical account of creation, the disposition has been to discredit the Bible statements regarding the great age of antediluvian man, and to regard as utterly unworthy of credence the popular belief in the existence, during the early ages of the world's history, of human beings of enormous stature as compared with those of the present day. Indeed, it has been claimed by eminent scientists that man at the present day is far in advance of the early representatives of the race, in physical as well as mental development.

Recently, Prof. Warren, president of Boston University, has given to the world a work entitled, "Paradise Found," in which he adduces cogent arguments to show that the long-lost cradle of the race is to be found at the North Pole. Incidentally, the author referred to considers the question of the age and stature of ancient man, and shows very clearly that analogy and fair inference very powerfully confirm the statements of the Bible, as well as the sacred traditions of all ancient races. The Professor boldly asserts that "natural history in our times can produce no species of fishes, reptiles, birds, horses, elephants, or apes, which are not excelled by species of corresponding orders and classes in prehistoric times, as shown by their fossil remains, which have, from time to time, been exhumed. Witness the remains of the mammoth, towering high above the largest of living elephants; the enormous birds, at least four times the size of the ostrich; the titanosaurus, a land animal one hundred feet in length and thirty in height. There were monkeys also, to-day diminutive in size, but represented in early periods by specimens fully equal to modern man in stature, and living among the trees, and feeding upon fruits, as did primeval man.

The same principle holds in the vegetable kingdom. With the exception of the *Sequoia gigantea* of California, and the *Eucalyptus* of Australia, no modern vegetable growths begin to equal the gigantic vegetation of the former existence of which the coal fields of this and many other countries afford ample evidence; and these are evidently only a few specimens of the ancient vegetable world, which have in some wonderful manner escaped the destructive agencies which have buried in the earth almost all other vestiges of the youthful vigor of the earth.

If then, as appears, trees, turtles, horses, elephants, and apes have greatly deteriorated in size, why, in the absence of facts to the contrary, should it be regarded as incredible that man should have followed the same law? Certainly, the evidence is decidedly against the theory that there has been an increase in human stature and longevity, and well sustains the view that man, as well as his nearest relative, the ape, has become a mere pygmy in size, as well as a child in years, when compared with the men who lived when the earth was young.

While all this may not be called "hygiene" in a strict sense of the term, it is certainly related to hygiene in a very important way, as it at once suggests a study of the causes which have led to this notable deterioration in the physical vigor of the race.

ORIENTAL MANNERS.

No one who has not read Thomson's work, "The Land and the Book," can read with a proper understanding the many passages of Scripture which owe their force and beauty to the peculiar customs or to the conditions of the people for whom they were especially written. The following brief description throws light upon several points of interest concerning the manners of the Orient two thousand years ago; for although the picture exhibits Beirut as it appears to-day, the stereotyped customs of the people are known to have changed as little within a thousand years, or twice that length of time, as have the stone walls of their cities or the crags and peaks of their rocky hills:—

"But it is time we turn our steps homeward. The *muezzin* calls to sunset prayers from this tall minaret, and dinner will be waiting. As in ancient times, men now eat when the day's work is done.

"'Seeing is believing,' says the proverb, and it is *understanding* also. I have read, all my life, about crooked, narrow streets, with the gutters in the middle, and no sidewalks, but I never understood till now. How are we to get past this line of loaded camels? Well, by bowing the head, creeping under, and dodging from side to side, we have accomplished that feat; but here is a string of donkeys, carrying brush and water; their bundles actually sweep both sides of the street, and the ground too; there can be no creeping *under*, this time.

"True; but here is a recess in the wall, into which we can step until they have passed by.

"What is that fellow shouting all the while at the top of his voice?

"He cries *Daharak! wushhak! daharak! wushhak!* 'your back! your face! your back! your face!' to warn all concerned to look sharply before and behind, that they may not be run over, crushed against the wall, or have their clothes or faces torn by this brush—a very necessary admonition.

"That I perceive well enough; but are all Oriental cities built after this fashion,—streets eight feet wide, houses sixty feet high, with dead stone walls without ornament or relief of any kind? They are sad and somber at best, and must be particularly so at night. Already the shades of evening fall heavily along these gloomy avenues, and I see no provision for lighting them.

"There is none; and you observe that the shop-keepers are already shutting up, and leaving for home. Henceforward until morning the streets are deserted and silent, with only here and there a company returning from a visit, with a servant bearing a lantern before them. The city-guard creeps softly about in utter darkness, and apprehends all who are found walking the streets without a light. Remember, and act accordingly, or you may get locked up in quarters not very comfortable. Beirut is gradually departing from some of these customs, but enough remain to afford a type of all you will see elsewhere, except at Damascus. The style of that city is wholly different, and carries one back, as by enchantment, to the age of the Califs and the fantastic creations of the 'thousand nights.'"

The Climate of Palestine.—Josephus gives the following very interesting account of the climate and soil of that portion of the land of Palestine known as Gennesaret:—

"Its nature is wonderful as well as its beauty. Its soil is so fruitful that all sorts of trees can grow upon it, and the inhabitants, accordingly plant all kinds of trees there: for the temperature of the air is so well mixed, that it agrees very well with those several sorts; particularly walnuts, which require the coldest air, flourish there in vast plenty. One may call this the ambition of Nature, where it forces those plants which are naturally enemies to one another to agree together. It is a happy conjunction of the seasons, as if every one laid claim to this country; for it not only nourishes different sorts of autumnal fruits beyond men's expectations, but preserves them a great while. It supplies men with the principal fruits; with grapes and figs continually during ten months of the year, and the rest of the fruits, as they become ripe, through the whole year; for, besides the good temperature of the air, it is also watered from a most fertile fountain."

GOOD HEALTH.

J. H. KELLOGG, M. D., EDITOR. TERMS, $1.00 A YEAR.

BATTLE CREEK, MICHIGAN, AUGUST, 1887.

INFLUENCE OF WET-NURSING.

THE growing custom among the better classes, which leads to the employment of wet-nurses to relieve mothers of the tedium and confinement incident to the nursing of their own children, may be responsible for much greater evils than have been heretofore considered, at least in any other than a very cursory and limited way. It has long been known to physiologists that the mental as well as the physical qualities of the nurse exert a most profound influence upon the child. For instance, a fit of rage in the mother has been known to produce serious results in the child. It has long been claimed by some writers that other mental states besides those of a violent character may likewise influence the child, at least to the degree of determining to some extent its mental and moral characteristics. The importance of this subject will at once appear to every thoughtful person; and we feel sure that all such will be interested in the following paragraphs, which we take from an ably-edited medical journal, the *American Lancet*:—

"In an extended discussion on this subject, in the *Medical Record*, Dr. J. E. Winters presents some facts that support the following, which we give in his own words:—

"'We usually select a hireling to perform the mother's most sacred duty; one who occupies the lowest place in the social scale, and in whom there is an absence of moral qualities; usually one who has been in some degree, at least, a prostitute; one who can forsake her own child, and take a stranger to her breast; one who can witness the gradual starvation and death of her own child, and who may be a double murderess by poisoning her foster-child with opiates or alcohol. If after being nourished from such a fount, our child is perverse, froward, insolent, and has no regard for truth, who is accountable? Is not the mother, who deprived him of her own pure, untainted breast, and who purchased for him instead a polluted and debauched stream? I believe that wet-nurses are an unnecessary and unmitigated evil, and, with certain rare exceptions, their employment should be suppressed.'

"Illustrating the influence of the wet-nurse on the future habits and character of the child, he gives the following: 'A medical student says that his brother has four children. All but one were nursed by the mother. This one was nursed by a young Irish woman. He is entirely different from the other three, exhibiting decidedly Irish traits, which are so marked as to attract the attention of strangers, who are ignorant of the fact of his being wet-nursed.'

"In another case, one of three children was suckled by an Italian wet-nurse, while the others were nursed by the mother. The wet-nursed one has a more secretive disposition, and other Italian traits. In another case, of twins, one was nursed by the mother, and the other by a wet-nurse. The characters of the children exhibit marked resemblance to those who suckled them.

"As to the fact that most of the infants abandoned by their mothers, who become wet-nurses, die, there is the most satisfactory proof.

"Dr. Winter thinks that each physician can and does modify the custom of wet-nursing. Thus he says that one physician whose practice has for twenty years been exclusively among the wealthy classes of New York, states that nineteen-twentieths of his patients nurse their children. Another physician, practicing among the same classes, says that only one in ten of his patients nurse; another, one in five; another, one in four; another, one in three; another, one in two. Nurses also do much to extend or restrict this practice.

"The doctor shows that women who nurse their children are both healthier and happier than those who employ wet-nurses. They are less subject to uterine diseases. The list of evils pointed out which follow in the train of wet-nursing is simply appalling to one who has not considered the subject. Certainly, if half he says is correct, the whole matter should be looked into by every physician, every nurse, and every parent. Every lover of his race has an interest in this subject, as, if we are to believe Dr. Winter, this practice is sure to develop a race of criminals. It pollutes with depravity the structures of the children of the pure, without at all uplifting the depraved."

Danger in Bad Water.—Many of those who know that the use of bad water is dangerous, are not aware of the extent or gravity of the risk incurred in the use of water which is contaminated with sewerage.

The following account of poisoning from the water of an ordinary well, resulting in typhoid fever, shows that this grave disease may be contracted by the use of even a very small amount of contaminated water. We quote from the *Annals of Hygiene*:—

"M. Dujardin-Beaumetz has forwarded to the Paris Academy of Sciences a communication on the Pierrefonds typhoid cases of last summer. M. Fernet, who occupies a high post at the Ministry of Public Instruction, hired a house for his wife and family, at Pierrefonds, a fashionable resort near Compiegne, contiguous to two others. After they had rented it for a season, they were told to beware of the water in the well. On this account they drank mineral water exclusively until the last day, when the stock was out, and the servants, preparing to return to Paris, were too busy to fetch some bottles from the chemist. Madame Fernet said, 'For once surely there can be no harm in drinking the well-water.' They drank it. Six out of nine persons have since died, including one of the servants. The cook, two of the four children, and Madame Fernet had had typhoid fever before; and though attacked again by it after their return from Pierrefonds, have got through the illness.

"The well has been examined, and is reported to contain the bacilli which are believed to be associated with typhoid fever. This is a common danger, to which visitors to so-called health resorts are frequently subjected. The facility with which well-water is infected is hidden from the population by the impunity with which filthy well-water may often be drunk by resident families, who have become acclimatized, especially when that water is for the moment infected only by non-poisonous fecal matter; and this fancied immunity often leads to habits of carelessness, for which not themselves only, but also their visitors, have to suffer."

Tobacco Blindness in a Woman.—A prominent oculist recently reported a case of tobacco blindness in a woman of apparently cultivated and refined habits. Not suspecting the real cause, the doctor made a very thorough investigation of the cause, and was much puzzled to determine its real nature.

"She laughed heartily, and then confessed that she did smoke a good deal. Naturally, I desired to know how one with her education and refinement had acquired a habit so unusual for ladies. Her history was soon told: 'I married when quite young, and went to live with my husband in North Carolina, where he had a very large farming interest. He owned so extensive a tract of land that neighbors were far away, and I saw but little

of them. I have had no children, and during many long winters my husband and myself have been the sole occupants of our country house. My husband had always been devoted to his pipe, which he takes up as soon as he gets into the house after overseeing his farm work. Often during our early months of married life, he would call upon me to fill it for him, and at times would even dare me to light it. By degrees I found myself able to take several whiffs of tobacco smoke without discomfort. At his request, I learned to smoke, as he said, for companionship; and for many years I have taken my pipe with regularity.'"

We believe in woman's rights, and believe that a woman has just as good a right to be afflicted by tobacco blindness as a man has; and why should not women "smoke for companionship"? It always seemed to us very selfish for a man to sit down in the midst of his family, and enjoy his pipe all to himself. Why not let his wife smoke with him, and allow all the children to smoke small pipes or cigarettes, also? If tobacco is necessary for the father, it is just as important for the mother; and certainly the children ought not to be denied a "harmless luxury."

One Meal a Day.—The newspapers are making quite a fuss over a New England gentleman who eats but one meal a day, though he works hard every day. The idea of eating but one meal a day seems to be a novel one to newspaper correspondents, who are doubtless unaware that the one-meal-a-day plan was in vogue among the Greeks more than two thousand years ago, and, indeed, is still the practice of many isolated tribes, who have preserved the simple manners of their forefathers.

The writer has been acquainted with a number of persons who have adopted the plan of eating but once daily, and finding thereby relief from chronic stomach ailments, have adhered to the new way without apparent injury. There are doubtless many cases of dyspepsia in which the patient would find great advantage in taking but one meal a day; and it is a question whether most persons who are in the habit of eating three or four times a day would not have better health, if they were to adopt the one-meal-a-day plan.

Perhaps the best plan, on the whole, is that of eating twice daily, which was adopted by the later Greeks, and is now the general custom in many parts of the world. After more than twenty years' trial of this method, the writer feels more than ever assured that two daily meals afford ample nourishment for the average adult, and that the longer interval between the meals which is afforded by this plan, is conducive to good digestion, besides the great saving of time in the preparation, serving, and partaking of meals.

Expense of Sickness.—The enormous loss due to sickness can scarcely be estimated, yet it is safe to say that disease is directly or indirectly the cause of a greater financial, or pecuniary, loss than all other causes combined. Every State loses millions annually through the death and sickness of its inhabitants. Individuals lose not only time and money incidental to the necessary expense of sickness, but frequently lose the opportunity of a lifetime. History affords a notable example of the last sort.

"It is said that when Alexander VI. died, his son, the famous Cæsar Borgia, had every provision made to seize the supreme power, and make himself master of Italy; that he had every possible contingency guarded but one, and that was his own physical ability to take advantage of the crisis. But by threatened illness, caused by the same poisoned wine which killed his father, he lost his chance, and died defeated, an exile and a captive. It would be well if many an American business man would take warning by the moral which this fragment of history conveys, and would remember that the labor of a life may be lost by the preventable illness of a week."

Killed by Whisky.—A Western medical journal cites the case of a boy fifteen years of age who was killed by drinking half a tea-cupful of whisky. Death occurred twelve hours after swallowing the poison.

Inflammable Breath. — Stories of persons whose breath has taken fire as a result of intoxication with alcoholic liquors, have for a long time been popularly current. The impossibility of such an occurrence, however, has been amply illustrated. The explanation of these supposed cases is probably founded upon the following statement, which we quote from the *Swiss Cross* :—

"There is a brief reference in a recent number of *Science*, to a remarkable case, in which the breath of an individual, or rather the eructations from his stomach, took fire when brought in contact with a lighted match. This case, which was reported in the *Medical Record*, has called forth communications from physicians, by which it would appear that the phenomenon is not such a rare one as was at first supposed. In one case of disordered digestion, the patient emitted inflammable gas from the mouth, which, upon analysis, was found to be largely composed of marsh gas. In another case, the gas was sulphureted hydrogen. A case is reported in the British *Medical Journal*, in which, while blowing out a match, the patient's breath caught fire with a noise like the report of a pistol, which was loud enough to awaken his wife. One evening, while a confirmed dyspeptic was lighting his pipe, an eructation of gas from his stomach occurred, and the ignited gas burned his mustache and lips. The origin of these gases is undoubtedly the indigested food, which in these cases undergoes decomposition."

It is probable that in the cases in which the breath has been observed to take fire during intoxication, the inflammability of the breath has been due to gases from the stomach, rather than to the vapor of alcohol.

A New Adulteration of Milk.—An Englishman has devised a new plan for adulterating milk. A quantity of lard and other animal fat is added to the milk, in place of the cream, which has been removed. By a certain mechanical process the fat is so completely incorporated with the milk that it has the appearance of the genuine article, and is readily sold as new milk.

The Little Health of Children.—The sanitary editor of the *Independent* speaks thus seriously and sensibly respecting the increasing deterioration of health in the rising generation. The thoughts suggested are worthy of careful and serious consideration :—

"It cannot be concealed that there is a loss of old-time physical stamina in the rising race of native-born Americans. Some would attribute it to heredity, some to a loss of mental power, and some to an absence of proper moral training and restraint. But is it not very much to be attributed to, or recognized as associated with, physical conditions? So soon as you begin to put little children under the dominion of bad food, bad air, imperfect light, and disturbed sleep, so soon you introduce conditions which tell upon the mental and the moral, not less than upon the physical welfare. If the result in all these cases could be death, from a mere economical and social standpoint it might be argued that there was a deliverance from the more fragile element, and a survival of the fittest. But, alas! the same process which destroys some, enfeebles and demoralizes the survivors to such an extent as to prove that this mode of selection is vicious in the extreme. As we see the multitudes of enfeebled ones running about the streets, issuing forth from crowded tenement-houses, or from the equally packed ward or village schools, we are compelled to ask what all this means for the future of the Republic, of the municipality, not less than what it means for the individual children and for the race."

Salicylic Acid in Food.—Salicylic acid and its compounds, particularly salicylate of soda, have been quite extensively used for the preservation of food within the last few years. Numerous recipes for preserving fruits and other foods have been peddled through the country, which contain salicylic acid as their chief ingredient. The impression has prevailed that in the small quantities in which the drug is used, it is quite harmless, but recent investigations show the contrary to be true. This substance has been used in France

much more extensively than in this country; and the matter was finally brought to the attention of the Central Committee of Hygiene, who, finding a disagreement among physicians upon the subject, submitted the matter to the Academy of Medicine. A thorough investigation was made, which resulted in the recommendation that the government should prohibit absolutely by law, the use of salicylic acid or its compounds, even in small amounts, in any article of food or drink. This would seem to set the matter finally at rest, and it is hoped that the widest publicity will be given to the danger of these articles.

Influence of Beer on Digestion.—Prof. H. A. Hare, M. D., of the University of Pennsylvania, has recently been subjecting to scientific tests the popular idea that beer is an aid to digestion. It has long been supposed by many that the lighter forms of alcoholic liquors, particularly the various forms of beer, are an aid to digestion. The experiments made, however, very clearly show that beer distinctly retards both salivary and gastric digestion. This was true with reference to every specimen of beer examined, some seventeen in all. In more than two-thirds of the specimens of beer examined, the stomach digestion was delayed considerably more than one hour, and in some instances the delay was nearly two hours. Some recent experiments made by Prof. Duggan, of Baltimore, at the JOHN HOPKIN'S UNIVERSITY, show that alcohol in all its forms retards the digestion of starch in a very marked degree. These two sets of experiments together show very conclusively that beer retards the digestion, in consequence of the alcohol which it contains. When it is considered that the nutritive value of beer is so exceedingly small that a whole hogshead contains no more actual nutriment than a single loaf of bread, it will at once appear that the popular faith in beer as an aid to digestion or to nutrition, has no foundation whatever.

Further particulars relating to Dr. Hare's experiments are to be found in the *Medical News* for June 11, 1887.

A Sanatometer.—Why are the flies so much more numerous about the back door of the house than the front door? If we were to examine the contents of the stomach of a fly, we should find, among other matters, quantities of germs. These germs are found to be identical with those found always present in decomposing animal and vegetable matter. The fact is that flies are not at all fastidious about their diet, and are just as fond of germs as of the most delicate sweets. When the fly is listlessly soaring about in the odorous air surrounding the back door, it is just possible that he is not so much of a loafer as he seems, but is really in search of germs. So whenever we see an abundance of flies about, we may be sure that germs abound as well, and that there is a necessity that the premises should be cleaned up.

A New Argument against Temperance Education.—A journal which may well be suspected of being a paid organ of the whisky-sellers, recently published in great triumph the fact that "a Vermont boy learned to make cider brandy in his mother's tea-pot, from the information concerning the physiological effects of alcohol, contained in one of his obligatory text-books."

The above is a fair sample of the sort of arguments by which the enemies of temperance justify their position. On this principle all branches of educational training should be prohibited. There is no branch of learning which may not be made to contribute to evil ends. From the study of chemistry, a boy may learn how to make gunpowder and dynamite. The study of mathematics may enable him to become a successful defaulter, or an expert gambler in stocks. The use of such puerile arguments as these, shows clearly that the liquor sellers are conscious of the weakness of their position.

Diseased Meat.—According to the *Vegetarian Messenger*, large quantities of diseased meat are annually sold and eaten in England. The "Public Health Acts" are said to resemble flying machines, which seem to be all right in theory, but somehow won't work.

Sanitary Legislation.—At the recent session of the Legislature of Michigan several acts were passed which are of importance as relating to the health of the people of Michigan, and concerning which all should be duly informed. The following is a concise summary of the most important of these acts :—

An act to prevent the manufacture or sale of adulterated confectioneries.

An act to provide for a State Live Stock Sanitary Commission.

An act compelling railroad companies to use automatic couplings on all cars used in the State.

An act requiring that the heating of cars be so arranged as to prevent the burning of the cars, in case of accident.

An act to prevent the sale of impure, unwholesome, adulterated, or swill milk, in the State of Michigan, and to provide for inspectors. The following summary of this important bill we quote from the "Abstract of Proceedings of the Michigan State Board of Health" :—

"This act provides for an inspector of milk in Detroit and for each city and incorporated village in the State. It is made unlawful for any person to sell or expose for sale any unwholesome, watered, adulterated, or impure milk, or swill milk, or colostrum, or milk from cows kept upon garbage, swill, or other deleterious substance, or from cows kept in connection with any family in which there are infectious diseases. It is the duty of the inspectors of milk to personally view, as far as possible, all milk exposed for sale, and to visit all dairy houses, barns, or stables, to inspect the same and the animals therein, and to visit all places where milk is kept or exposed for sale, and to inspect and ascertain the condition of said milk. The inspector in Detroit may visit all dairy houses, barns, or stables in Wayne county, to inspect them and the animals. The jurisdiction of inspectors in other places is not stated; but the inspectors are to have such other powers as are conferred upon them by ordinances."

—Anxious thoughts disturb digestion.

Poisonous Hat-Bands.—A New York paper contains the following, which should be a sufficient warning against the wearing of hats with enameled hat-bands :—

"Dr. Joseph F. Geisler, official chemist to the New York Mercantile Exchange and to the New York Dairy Commission, has discovered that a compound of lead is being used for the enameling of the leather sweat-bands in hats. From a wholesale dealer in the city, he bought a hat which made his head ache; but he paid no attention to it, not deeming that there was any relation between his pain and his head covering. Shortly afterward the hat became accidentally exposed to the atmosphere of his laboratory, which was loaded with the fumes of sulphuretted hydrogen. On taking it up, he found that the beautifully enameled hat-band was discolored. A careful analysis showed that this was due to the formation of sulphide of lead. The hat-band was, in fact, a vein of metallic ore, from which the doctor obtained the surprising result of 37.548 grains. The compound used in this instance was white lead.

"Knox, the hatter, after hearing the above statement, said that it was perfectly true, but that the hatters must not be blamed for it. A hatter was compelled to respond to the requirements of the public; and though the great majority did not want enameled sweat-bands, there was a minority that did, because the stains from perspiration and hair oil could be removed from them with a wet sponge, leaving the band in its original whiteness and purity. It was, therefore, necessary to keep a certain number of hats with these leaded sweat-bands, and that all hatters did so."

Pasteur's Discovery.—The British Commission of Inquiry have recently made a report of their investigation of the alleged discovery by Pasteur, of a method of preventing hydrophobia by vaccination. After careful investigation of the whole matter, and a repetition of his experiments, the Commission confirm the results claimed by Pasteur, and assert that a great saving of life has already been effected by this remarkable discovery.

DOMESTIC MEDICINE.

CHOLERA INFANTUM.

WITHIN the next two or three months, many thousands of infants will fall victims to this often fatal malady. For this reason we offer a few suggestions with respect to the management of this disease, which may save a few lives:—

Recent investigations show that this disease is probably due to the fermentation, or decomposition of milk or other animal foods in the alimentary canal. The disease is produced by the absorption of the poisonous substance formed by this putrefactive process. The discovery of this fact suggests the very practical conclusion that the most important things to be done in the treatment of this disease are:—

1. To clear out the stomach and alimentary canal of the patient as quick as possible, so as to prevent the further absorption of poisonous matters.

2. To prevent the further formation of poisonous substances.

This may be readily done by the following means:—

Cut off the food. Do not give the patient milk, or sweetened water, or food of any sort, for six or eight hours; but give an abundance of water, which is generally swallowed with avidity. Induce the patient to drink as much water as possible, feeding it with a nursing-bottle or with a spoon. Place no stint upon the quantity taken. Let the infant swallow as much as it will; renew the offering of water every few minutes. When the stomach is full, it will naturally refuse to take more. Also wash out the bowels by means of an enema, using water as hot as can be borne. The addition of lime-water or soda to the water used either for drinking or cleansing the bowels is very advantageous. An alkaline solution destroys the poison at once, and prevents its further formation. For this purpose, water containing one-fourth part of lime-water may be given to the infant to drink, or ten grains of carbonate of soda may be added to a pint of water. The enema should be given every three or four hours, so long as the discharges are green.

It is, of course, necessary that the patient should eat in order to preserve strength. Milk and all forms of animal foods should be withheld. Any of the preparations of gluten, oatmeal, barley, or whole-wheat flour, should be made into a pretty thick gruel, and boiled for several hours, the longer the better. Gruel which is boiled ten or twelve hours is much sweeter than that which is cooked but one hour, and also much more digestible. Add to the gruel enough water to make it about the consistency of thin cream. Strain through a sieve or cheese cloth, and feed in the usual way.

These suggestions are made with reference to the treatment of cases of cholera infantum in which the treatment can be begun immediately, when the first symptoms of the disease appear. If the patient has already been vomiting and purging for many hours, it would not be proper to begin the treatment by starvation for several hours longer. In case the food cannot be retained upon the stomach, peptonized gruel may be administered by enema; and in cases in which the digestive powers seem to be too weak to digest food of any sort, the patient may be fed peptonized gruel. The main point is to exclude from the dietary all foods of animal origin. It is not absolutely necessary to do this in every case, as many patients have recovered when a small amount of animal food has been allowed.

The probability is exceedingly strong that it would be far better in all cases to pursue the plan recommended, as a more speedy recovery would be secured than if the use of animal foods were continued.

The Modern Treatment of Consumption.—The *Berlin Medical Journal* recently published the following summary of conclusions reached by Prof. Dettweyler in a paper read at the recent Congress for Internal Medicine:—

"1. There is no specific treatment for phthisis.

"2. The essence of treatment consists in regulating tissue changes, which is best accomplished by fresh air, cultivation of bodily endurance, nourishment, and exercise.

"3. A climate free from phthisis does not exist; that climate is best which best permits the treatment described.

"4. Phthisis is curable; the effort must be made to cure every case, especially in its early stages.

"5. These points are best gained by treating the phthisical in buildings and localities especially fitted for them."

Domestic Use of Lime-Water.—Lime-water is frequently of service as a simple remedy in the treatment of the digestive disorders of infants. It is especially serviceable in cases in which the stools are green and sour. In cases of this sort it is best taken in milk, to which it may be added in proportion of one part to five or six of milk. Its effect upon milk is to render it less likely to form large and hard curds in the stomach of the child, and to correct an acid condition of the milk.

In the use of this remedy it should be remembered that, simple as it is, it may be a possible source of injury, and hence cannot be used indefinitely, or without careful attention to the actual requirements of the case. When used too freely, it neutralizes the natural acids of the stomach, which are necessary to digestion, and thus produces indigestion, loss of appetite, sometimes vomiting, and even disturbance of the kidneys.

Cats and Whooping-Cough.—A writer in an English medical journal calls attention to a case of whooping-cough in a cat, which came under his observation. It was undoubtedly the result of contagion, the cat evidently having contracted the disease from a child who had been sick with the malady for several weeks in the same house. Five or six times a day the cat had a fit of coughing which was in every way similar to those of the boy, and was somewhat wasted by the disease.

The point of interest in this observation is the fact that the susceptibility to this disease explains a possible source, for some at least, of the mysterious cases of infection which have been hitherto inexplicable.

Sun-Stroke.—When a person falls with sunstroke, he should at once be taken to the coolest place available. His clothing should be removed, and cold applications made to his head and over the whole body. Pieces of ice may be packed around the head, or cold water may be poured upon the body from a water-pot. The ice-pack to the spine and cold enemata will also be found of advantage. As a preventive measure there is nothing like keeping out of the sun; but where this is impossible, as in the case of laborers and others, a device similar to that represented in the accompanying engraving, consisting of a cloth or large handkerchief fastened to the hat-band, will be found of advantage in shielding the back of the head from the sun's rays.

—Of all disinfectants, fire is the most effective, as it destroys the offensive material at the same time that it renders it innocuous. The cremation of sewerage has recently been tried on a large scale, and has proved very successful. The latest experiments have been made at Wheeling, Va., under the efficient supervision of Dr. Reeve.

HYGIENE FOR YOUNG FOLKS.

SAVED FROM DROWNING.

"UNCLE Ned! Uncle Ned!" screamed a shrill, boyish voice from a fringe of willows below the hill. "Will's fell into the creek and drowned himself!"

Uncle Ned was sitting on the back porch in the old rocking-chair, with a newspaper over his face, enjoying his regular Sunday afternoon nap, when this startling summons called him from the land of dreams. Breaking off in the middle of a loud snore, he started bolt upright, and sat stock-still for an instant, with a

Fig 1.

dazed and stupid expression on his countenance, unable to decide whether he was awake, or still dreaming. Then, as the full meaning of the situation dawned upon him, he flung away his newspaper, and ran at full speed down the narrow path which led to the "swimming-hole."

"Them pesky byes!" he said to himself, as he stumbled this way and that, down the crooked path. "I knew they'd be the death o' that city chap afore the summer was over."

"Them pesky byes," was Uncle Ned's customary, but not very complimentary, title for his two nephews, Tom and Harry Forbes, who had lived with him on his farm ever since, as Uncle Ned expressed it, "they was knee-high to a grasshopper." The "city chap," Will Henderson, by name, was a growing lad whose mother had sent him into the country to get a breath of fresh air and a taste of real cow's milk. Like most boys who have imbibed an abundance of country oxygen, Tom and Harry were as full of life and fun as two young colts; and between the two, Will sometimes had a pretty hard time of it. His utter ignorance of the commonest details of rural life gave his country cousins an unlimited opportunity for exercising their mischievous proclivities. What could be more laughable, for instance, than to see poor Will march boldly up to a yellow jacket's nest, and pull it down, under the impression that it was a new sort of hot-air balloon? Their last device for his entertainment, and one that, as we shall see, came to a rather disastrous ending, was to saw part way in two the limb of a willow-tree which projected far out over a deep place in the brook, the expectation being that Will, when he walked out on the limb, as they could readily persuade him to do, would tumble into the water and get a good wetting. This joke, which can hardly be said to have been in the best taste, was only too successful. The screams of laughter which rang out when the limb broke and dropped into the water with a great splash, were changed to screams of dismay when Will's head failed to reappear above the surface. In going down, his feet had become by some means entangled in the branches of the broken limb, and were held fast in such a way that he could not rise.

Fig. 2

When Uncle Ned arrived upon the scene, Harry had just succeeded in pulling the body loose from the tree, and was dragging it to the bank.

"Oh, he's dead. We've killed him," whimpered Tom, wringing his hands.

Uncle Ned said not a word, but helping Harry to pull the body from the water, he quickly turned it over on its face, with the head down-hill, and passing one finger under the collar-band, tore off the collar and neck-tie. Then, standing astride the hips with his face toward the head, he locked his fingers together under Will's stomach, and raising the body as

high as he could without lifting the forehead off the ground, gave a sharp jerk that brought quite a stream of water from the mouth. After holding the body up while he counted "one, two, three, four, five," slowly, he gave it two or three more jerks, and having let it down, began a queer operation, which the two boys, who had never seen the like before, watched with all their eyes.

Taking hold of Will's coat at the shoulders, he lifted the chest from the ground, and held it up while he counted "one, two, three," slowly. Next he placed the body on the ground again, and putting his hands over the lower ribs, pressed hard downward and inward while he counted "one, two." Then he took hold of the shoulders again and repeated the first motion, and so on, going over the process again and again.

Fig. 3.

"What are you doing that for, Uncle Ned?" asked Harry, his curiosity getting the better of his fright.

"I'm trying to start him to breathing again," replied Uncle Ned, without interrupting the motions. "When I lift him up, don't you see, it draws the air into his lungs; and when I press on his ribs, it pushes it out again. You watch, and see just how I do it. You may have a chance to save somebody's life some day."

"Then he isn't dead?" said Tom.

"I don't know. I'm going to keep this up for two hours before I give in. Hello, he's beginning to breathe of himself. Now, you, Tom, run right up to the house, and tell your Aunt Maria to send down a big blank t, and get the bed ready with bottles of hot water, and heat some milk; and you, Harry, pull off his wet clothes, and rub him for all you're worth. Hurrah! We'll save him yet!"

And save him they did, thanks to Uncle Ned's knowing just what to do under the circumstances.

As for Tom and Harry, they were considerably sobered by the unfortunate termination of their practical joke; and at last accounts they were working off a little of their superfluous spirits by practicing "artificial breathing" on each other, under Uncle Ned's instruction,—a kind of amusement we recommend to all the Wills, Toms, and Harrys who may read this story.

A TRUE STORY.

About seventy years ago there lived in the eastern part of Pennsylvania a little boy named Abram H. Like boys now-a-days, Abram liked to see all the sights; and so one beautiful autumn day his father took him to a neighboring village to see the soldiers drill, as it was the annual "training day." Nearly everybody in those days drank whisky, even the children being taught to drink it; and in almost every cellar a big barrel of the awful stuff was kept. On these "training days" there was a good deal of drinking, many of the men going home drunk. Little Abram saw these drunken men the day he went to the training; and when he got home in the evening, he said to his mother, after telling her of the things he had seen: "Ma, I am never going to drink a single drop of whisky, nor use a bit of tobacco, as long as I live."

His mother said: "I am glad to hear you say that You shall be my little temperance boy." This was the first temperance speech he made. Don't you think it was a good one?

About ten years after this, Abram, now a boy of seventeen, left his home, and went on foot over the mountains to Pittsburg, a journey of two hundred miles. Here he hired out to a sign-painter, and began to learn the business.

It was the custom in the shop for the workmen to send one of their apprentice boys every day for a quart of whisky, which they brought in an old stone jug. Of course, when Abram began working in the shop as an apprentice boy, the men sent him after the whisky. He went two or three times, and then made up his mind that he would not go again, as he felt that it was not right.

Next day while Mr. Jones, the owner of the shop, was at dinner, one of the men handed a shilling to Abram, and ordered him to go for the whisky, which he refused to do, saying that it was not right, and he would bring no more whisky for them to drink. This made the man angry; and while he was talking very loud, and threatening to whip Abram unless he would go, Mr. Jones, the proprietor, came in, and asked what the trouble was. Abram said: "Mr. Jones, I came into your shop to learn to paint signs, not to help to make men drunkards. I am willing to do all the honorable work I can, but I will not carry whisky for these men to drink. If I can't stay here unless I do this, why, then I will leave."

Mr. Jones said nothing for a moment; then seizing the whisky jug, he smashed it to pieces on the hard floor, and exclaimed: "The last drop of liquor has come into this shop that ever shall, with my consent. This boy has preached me a temperance sermon that I shall never forget; and I will never touch another drop of liquor."—*St. Louis Observer.*

—One day when they had a boiled dinner, papa asked Roy what kind of vegetables he would like. "I'll have all kinds of vegetables except meat," was the quick answer.

—A Parsonville boy conscientiously objects to taking Ayer's pills, "because," he says, "if them pills is Ayer's pills, why jest let Ayer take 'em. I don't want what belongs to him."

Question Box.

Salt Rheum.—O. C. C., Ohio, complains of a "breaking out" in the armpit, which is covered with a thick scale, that comes off and is followed by another. He wishes to know the nature of the disease and the remedy.

Ans. The difficulty is probably eczema, or salt rheum. Bathe the parts in hot water for five minutes twice daily. At night apply to the diseased surface a compress saturated with a solution of soda, a teaspoonful to a pint of water. In the morning after bathing with hot water, rub on zinc ointment, which can be obtained at any drug store.

Acid Phosphate—Skin Friction.—G. C., of New York, inquires:—

1. Do you consider acid phosphate a benefit in any case? And is it a reliable preparation, and safe to use in moderation?

2. In regard to friction of the skin, do you consider a dry towel better than a towel moistened with water? I can draw the blood to the surface seemingly better with a damp towel. Also, do you favor the use of a flesh-brush?

Ans. 1. The various preparations of phosphate of lime, etc., are much used in medicine, and often with seemingly good effect. In our opinion, however, their value is vastly overrated. Certainly, the popular notion that they are especially useful as food medicines is erroneous, as careful experiments show that the amount of mineral phosphates which can be absorbed into the system is very small, and it is well enough known that all the grains contain phosphates in abundance. If a person apprehends that he requires more phosphatic food, we would suggest as a substitute an extra table-spoonful of oatmeal mush, an extra slice of graham bread, or an extra baked potato. In any of these ways may be obtained a quantity of phosphates much greater than that ordinarily prescribed as medicine.

2. It is immaterial whether the friction of the skin is obtained by a dry or a moist towel, or by a flesh-brush, provided, of course, that the skin is kept clean by frequent ablution and the use of a moderate amount of some alkali.

Salt.—R. W., Washington, D. C., inquires for a statement of the chemical composition and properties of common salt.

Ans. Salt is a compound of a corrosive gas, chlorine, and a caustic metallic substance, sodium. It is slightly irritating; and when used too freely, it interferes with the action of the digestive fluids, and overtaxes the eliminative organs.

Headache—Sleepiness.—Mrs. E. J. S., Vermont, inquires: 1. What is the cause of constant headache in a boy of seven years, healthy, until within a year? He is also troubled with night sweats.

2. What is the cause and remedy for sleepiness? The patient has been troubled with persistent sleepiness for three or four years. He falls asleep immediately upon sitting down.

Ans. 1. The patient is probably troubled with indigestion. We would suggest careful attention to the diet, confinement to fruits, grains, and milk, and avoidance of sweets, meat, and highly-seasoned foods. Every other morning, administer a sitting sponge-bath followed by oil-rubbing; and see that he takes plenty of out-door exercise.

2. Indigestion is probably the cause. Remove the cause, and the difficulty will disappear.

Are Poisons Necessary?—J. Q., New Jersey, inquires: Are poisons in any degree necessary as food for animals?

Ans. No; we are not aware that any poisonous substance is necessary to the maintenance of health in any class of animals.

Bread, Leavened or Unleavened.—The above correspondent also inquires: Which is preferable from a health standpoint, leavened or unleavened bread?

Ans. Unleavened bread, if properly made, is unquestionably very much superior to leavened bread as an article of diet. The objection to leavened bread is that the yeast is not wholly destroyed in the baking process, and is likely to set up fermentation in the stomach. So long as digestion is vigorous, no great harm results from this cause, as the antiseptic property of the gastric juice is sufficiently active to prevent any serious degree of fermentation. When the digestive organs are weakened, or the gastric juice is inferior in quality or deficient in quantity, fermentations are set up which greatly deteriorate the food, and induce various disturbances of the digestive functions.

Water-Pipe.—H. W., California, inquires:—

1. What is the best kind of water-pipe to be used in conveying water from a spring to a house, for domestic purposes? I have been using iron pipe, as galvanized iron has been objected to as unhealthful.

The water conveyed through the iron pipe has the look of cistern water, and tastes of iron.

2. Can I remove the color and taste caused by the iron, by passing the water through a filter?

Ans. 1. Probably wooden pipe is, at the present time, the best of all available means for conveying water, unless vitrified tile can be employed. Tin-lined lead pipe is good so long as the tin lining is intact. Galvanized iron pipe can be used with safety if a considerable amount of water is consumed, and the water is not allowed to stand long in the pipe. The danger in the use of galvanized iron pipe has by recent investigation been found to be much less than was formerly supposed. Some time ago the writer filled a new galvanized iron tank with cistern water, allowed it to remain in the tank two weeks, and then sent specimens of the water to two eminent chemists. One found a trace of zinc; the other found none. The amount of zinc was estimated as not more than one-eighth grain in a gallon of water, quite too small a quantity to do any harm. An iron pipe having an incorrodible lining, has recently been placed upon the market.

2. Iron rust may be removed from water by passing it through any good filter. In time, however, the filter will become choked so that it must be renewed.

Abdominal Bandage.—H. W., Cal., also inquires: 1. Is there any danger incurred in wearing the wet abdominal bandage?

2. In using the bandage, should salt be added to the water in which the bandage is wet?

Ans. 1. One inconvenience which is likely to arise from the long-continued use of the bandage is an eruption of the skin. This eruption generally heals, however, very quickly after the bandage is taken off, but is sometimes quite obstinate. It is best to discontinue the bandage or wear it only on alternate days as soon as the eruption appears.

2. The stimulating effect of the bandage on the skin is greater when salt is added to the water.

Lemonade—Graham—Copperas.—Mrs. T. H. D., Colorado, inquires: 1. Would a person having a tendency to mesenteric consumption be benefited by drinking weak lemonade at meals?

2. Would you recommend the use of a hand-mill for making graham flour when a good article of flour cannot be obtained?

3. Will copperas kill chickens when placed within their reach?

Ans. 1. The free use of drinks of any sort at meals is not to be recommended. Lemonade is still less to be recommended than water, as the vegetable acids, if taken in considerable quantity, are likely to diminish the secretion of gastric juice. Lemonade may be taken an hour before eating without detriment, and perhaps with benefit.

2. Flour ground in a hand-mill is necessarily inferior to flour made by the improved modern milling process, but is better than stale or inferior flour, and may be advantageously employed, if good flour cannot otherwise be obtained. A mill of the most improved form can be obtained by addressing the Health Publishing Co. The price depends on the size.

3. Sulphate of iron, or copperas, is not wholesome food for chickens, and will probably occasion death if taken in any except small quantities. We cannot imagine that any advantage would accrue to chickens from having copperas or solutions of copperas placed about their coop. The chicken-coop should be frequently cleaned and disinfected, but to accomplish this the copperas should be dissolved in water, and applied with a sprinkling-pot.

Literary Notices.

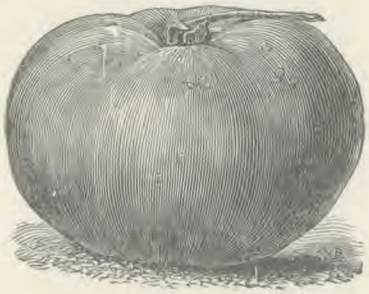
THE first number of a new paper called the *Oak and Ivy Leaf*, the organ of the Young Woman's Christian Temperance Union, has just appeared. It is an attractive four-page sheet, devoted to reports of Young Ladies' Unions, and is full of excellent temperance literature. It is edited by Mary Allen West, the talented editor of the *Union Signal*, assisted by Miss Margaret Sudduth.

Subscription price, 25 cts. per year. Published at 161 La Salle St., Chicago, Ill.

THE June number of the *Vegetarian Messenger*, organ of the English Vegetarian Society, is of especial interest, as it contains a full report of the May Conference of the Society. This meeting was held at Liverpool on May 19, and called out a large attendance, many of the most noted vegetarians of England being present. The Rev. Jas. Clark, one of the speakers, stated that he had brought up a family of six sons and daughters, none of whom had ever tasted animal food, and had three grandchildren, who had been brought up in the same way. His wife and mother had been vegetarians all their lives; and both his father and grandfather, vegetarians for above forty years; so that he was able to show five generations of one family all thriving and doing well under a vegetarian *regime*. The present number of the *Messenger* also contains interesting reports of other vegetarian meetings, readable correspondence, and valuable recipes,—valuable, at any rate, in the eyes of the English vegetarian, who has not yet progressed to the point where he can lay aside his condiments and rich pastry. The magazine will well repay a reading. Any further information concerning it can be obtained by addressing THE VEGETARIAN SOCIETY, 70 Princess Street, Manchester, England.

SCIENCE IN THE HOUSEHOLD.

CONDUCTED BY MRS. E. E. KELLOGG.



THE TOMATO.

THE tomato is a native of South America and Mexico. It was formerly regarded as a poisonous fruit; and though often planted, and prized as a curiosity in the flower garden, it has only within the last half century come to be considered as a wholesome article of diet. Botanically, it is allied to the potato. It is a slightly acid fruit largely composed of water, and hence of low nutritive value.

General Rules for Preparation and Cooking.—The tomato is much used as a relish, and served in an uncooked state. It should, for this purpose, be perfectly ripe.

To remove the skin from tomatoes, pour scalding water over them, and let them stand until the skins wrinkle, when they will easily rub off.

Tomatoes should always be cooked in porcelain or granite-ware; iron makes them look dark; and being slightly acid in character, they are not wholesome cooked in tin vessels.

Tomatoes require a long time to cook, one hour is needed, and two is better.

Fresh Tomatoes.—Select perfectly ripe tomatoes, scald and peel at least an hour before using; slice, and place on ice or in a cool place. Serve plain with lemon juice, or cream and sugar, as preferred.

Stewed Tomatoes.—Peel, slice, pour into a porcelain kettle, without water, or at most but a few spoonfuls, heat to boiling; then set back on the range, where they will stew slowly an hour and a half or two hours, stirring frequently till done. When done, serve plain, with a little sugar added, or season with cream, one-half cup to the pint, as preferred. The stew may also be thickened, if desired, by the addition of bread crumbs, rice, macaroni, or graham flour, a table-spoonful to the pint of tomatoes.

Tomato Gravy.—Take one pint of strained stewed tomatoes, either canned or fresh stewed. Heat to boiling, and thicken with a table-spoonful of flour rubbed smooth in a little water, add salt, if desired, and a half cup of hot cream. Boil up together for a minute or two, and serve at once.

Tomato Toast.—Brown nicely some slices of whole-wheat bread, pour hot tomato gravy over them, and serve. If the slices are quite hard, they may be first moistened with a little hot tomato liquor. If preferred, plain, hot, stewed tomatoes may be used instead of the gravy.

Stewed Corn and Tomatoes.—Boil dried or fresh corn until perfectly tender, add to each cup of corn two cups of strained stewed tomatoes, either canned or freshly cooked. Salt to taste, boil together for five or ten minutes, and serve either plain or with a little cream added.

Baked Tomatoes.—Fill an earthen pudding-dish two-thirds full of strained stewed tomatoes, season with salt, if desired, and sprinkle grated crumbs of bread over the fruit, until the top looks dry. Brown well in the oven, and serve with a little cream dressing.

DRUDGERY.

THERE are few of us who do not remember some beautiful homes, where the poet's ideal was carried out, and drudgery seemed made divine. It is only when the rough edges of the housework are deftly smoothed over by an able, willing hand that all the machinery of the house runs smoothly. This guiding hand must be the mistress of the house. The roughest parts of the housework are those most likely to be neglected. We remember a distinguished Congressman's wife who, though a beautiful woman and a society leader, made it a systematic practice to spend two hours or more each morning in the kitchen. "I do not do much fancy cooking in the kitchen," she said laughingly; "I am generally engaged in overlooking kitchen sinks, seeing to garbage pails, etc. These are the things my servants will not attend to unless I see to it that they do. I must do it to feel sure my house

is clean in every part." The Virginia colored help looked askance, at first, at this Northern woman's uncompromising ideas of neatness, but they fell into her ways finally, as servants usually do into the ways of the mistress, whether they be good or bad. It is utterly useless to expect an ignorant girl in the kitchen to appreciate the danger to the health and comfort of the family, which may lurk even in the folds of an unclean floor-cloth, and often in the nondescript, unhemmed, uncared for cloths which are used in some families as dishcloths. Every sink, every receptacle for garbage, and every cloth used in cleaning, should be systematically washed. . . . If the educated mistress of the house, who has been taught in schools and colleges the positive danger to health arising from sewer gas, and the various poisonous gases generated by unclean cellars, unclean garbage pails, or even old scrubbing cloths and brushes, neglects to at end to such matters, is it reasonable to expect the untutored servant to attend to them? . . .

There is no drudgery that serves a useful end that has not its divine side, that does not minister to the higher life of the man or woman by ministering to his physical comfort and well-being, leaving him free to think great thoughts and do noble deeds. Those who are able to take their religion into their lives, into the little daily matters that lie around them, they indeed are wise and happy.

"Who sweeps the room as for thy laws
Makes that and the action fine." —*Sel.*

WHEN TO PICK FRUIT.

WHEN fruits are mature, they make preparation for falling, just as mature leaves do. A distinct line is formed upon the stem of the fruit, in preparation for the separation. When the apple or pear is mature, it will separate from the tree without any pulling; merely lifting the fruit from its hanging position to a horizontal one, will cause the separation from the tree to take place at once. A little observation will teach when the fruit is ready to be gathered. At this time, the fruit, having made its growth, derives nothing more from the tree. After the fruit is full-grown, its next step is towards decay. Decay in early kinds comes in a few days or weeks. In the late sorts, it requires several months; but whether early or late, there is a stage in this progress from maturity to decay, when the fruit best suits our purpose, and we say, "That is ripe," or "mellow," or "in eating." This time in early kinds comes very quickly, and other varieties do not assume it before spring. Early kinds come "into eating condition" so soon that they will bear but little transportation, hence are suited only to near markets. But these vary greatly, and there are from very early and autumn ripening kinds, to the very latest. The fruit-grower should be a careful observer of these points. The best fruit may be spoiled or materially depreciated in value by careless picking and handling. Properly constructed, cold storage houses will do much towards keeping fruit in good condition, but unless the fruit is picked at the right time, it cannot be kept profitably, even in the best fruit house.—*American Agriculturist.*

Hints for Painting and Varnishing.—An exchange offers the following, which may be found serviceable by those who have their own painting and varnishing to do:—

"PAINTING.—For painting chairs and other furniture, select any color desired, of the paint put up in small tin packages, ground in oil. Take out such portion as may be needed, and put in a well-cleaned tin fruit can or other vessel. For almost any color but white, add about one-half as much ligh colored japan dryer as there is paint, and thin with turpentine, so that it will spread smoothly and evenly. Use small round paint brushes of a size corresponding to the work to be done. Give one, two, or three coats, as may be required, allowing each coat to dry thoroughly before putting on another. This will give a bright, glossy finish. For white paint, inside work, add light copal varnish and turpentine. Linseed-oil makes a fine body, but requires time to dry. For inside or outside house-painting, use the ready-mixed paints, of good quality, and stir everything up thoroughly from the bottom before using.

"A CHEAP BLACK-WALNUT STAIN.—A cheap, quick-drying stain for fine bass-wood, etc., in imitation of black walnut, is made by dissolving gum asphaltum in spirits of turpentine, about one-fourth pound gum to one pint of turpentine; dissolve in a warm place, shake frequently, add a very little dry Indian red to the solution. It can be made dark or light by adding more or less turpentine. Apply with a brush, and allow it to dry thoroughly before varnishing.

"VARNISHING.—Give the work two or more coats of shellac varnish, according to hardness of the wood; rub down lightly with fine sand-paper, and apply one or two coats of hard oil finish, using a soft flat varnish brush. Apply just enough, so it will not run down the wood-work in streaks."

—An exchange says that lemon juice may be kept fresh for quite a length of time, in the following manner: "Squeeze the juice into a basin, then strain it off, perfectly free from the least pulp or pith. Have ready some perfectly clean and dry bottles, fill them just up to the shoulder, then add sufficient sweet-oil to cover the top of the lemon juice entirely. Cork the bottles tightly, and keep them upright in a cool place. The bottles must be small (medicine phials are best), because when the oil is removed, the lemon juice does not keep long. The peel also will keep, if dried and kept free from dust, and is quite as good to grate."

Publisher's Page.

☞ W. S. Chapman is still at work in Indiana, lecturing to interested audiences, and receiving great encouragement from men of influence and from the local press where he is laboring. We ought to have at least one hundred health missionaries engaged in the wide field afforded by this great country.

☞ In referring recently to the attractions of our city as a health resort, the Battle Creek *Journal* remarked: "With its world-famous Sanitarium, and its beautiful Goguac Lake, within less than a mile of its corporation limits, Battle Creek furnishes attractions, both to health and pleasure seekers, superior to any to be found elsewhere in our State, and not excelled by any in the entire country."

☞ D. R. Brownlow & Co., of Middletown, Conn., manufacture a convenient little article which they call the "Paraffine Safety Lantern," and which they furnish at the wonderfully low rate of two dollars per dozen. It is one of the handiest little lanterns we have seen, does not blow out in the wind, and for use in a tent while camping out, nothing better could be desired.

☞ Western papers do not ordinarily expect high compliments from the literary centers of the East, and hence, the publishers felt more than usually gratified on receiving from the Brooklyn *Daily Eagle* the following complimentary notice of this Journal: "GOOD HEALTH for April, Battle Creek, Michigan, presents a handsome title page and entertaining contents, both as to text and illustration. It shows how the star of empire is taking its way westward in hygienic as well as other matters. It is quite as lively, to say the least, as Atlantic Coast health journals. In fact the latter might take a hint from it. There are cuts of a Zuni home and a Chinese restaurant, and articles on 'Social Purity,' 'Bible Hygiene,' etc."

☞ The Sanitarium is full almost to overflowing. The present family of the institution numbers something over four hundred and fifty persons, much the largest at any time in its history. The managers assert that they still have room for more, however, having prepared themselves by the hiring of a large number of cottages in the immediate vicinity of the institution. A large corps of physicians, medical attendants, well-trained nurses, and general employes, together with the thorough system in every department, enables the managers to carry on the great work without jar, commotion, or friction; and there probably never was a time in the history of the institution when such universal satisfaction was expressed by its patients as at the present time.

☞ The managers of the Sanitarium have recently added to the numerous attractions which the institution has long offered to health seekers, another feature, which promises to be one of the most valuable of recent additions. Finding the capacity of their buildings severely taxed to accommodate their increasing patronage, especially during the summer months, they conceived the idea of accommodating a part of their summer family at Lake Goguac, a beautiful sheet of water, whose shores have for several years been a favorite resort for hundreds who seek invigoration by an out-of-door life during the warm summer months. To this end, we have recently leased for a long term of years a fine tract of land adjoining the lake, which includes altogether the finest portion of the lake border. Such improvements will be made as are needed to render this lake-side retreat one of the most beautiful and attractive spots to be found anywhere.

☞ Our subscription list continues to grow at an unprecedented rate. The number of subscriptions received during the past month far outnumbers those received during any preceding month in the history of the Journal. The circulation is several times larger than at any time in its previous history, and at its present rate of growth it promises to reach proportions far beyond the highest expectations of its most sanguine friends.

☞ We call special attention to the advertisement of the Sanitarium Training School for Nurses, as found on another page. This excellent institution affords rare advantages for the training of skilled nurses. Indeed, there is probably no place in the United States, if in the world, where nurses can receive such extensive, thorough, and rational instruction, practical as well as theoretical, in the care of the sick, as in this institution. A score of young men and women have successfully availed themselves of its advantages during the past year, and the way is now open for another score or two of persons who wish to fit themselves for usefulness in one of the most useful of all professions, that of scientific nursing. For further information, etc., address Sanitarium, Battle Creek, Mich.

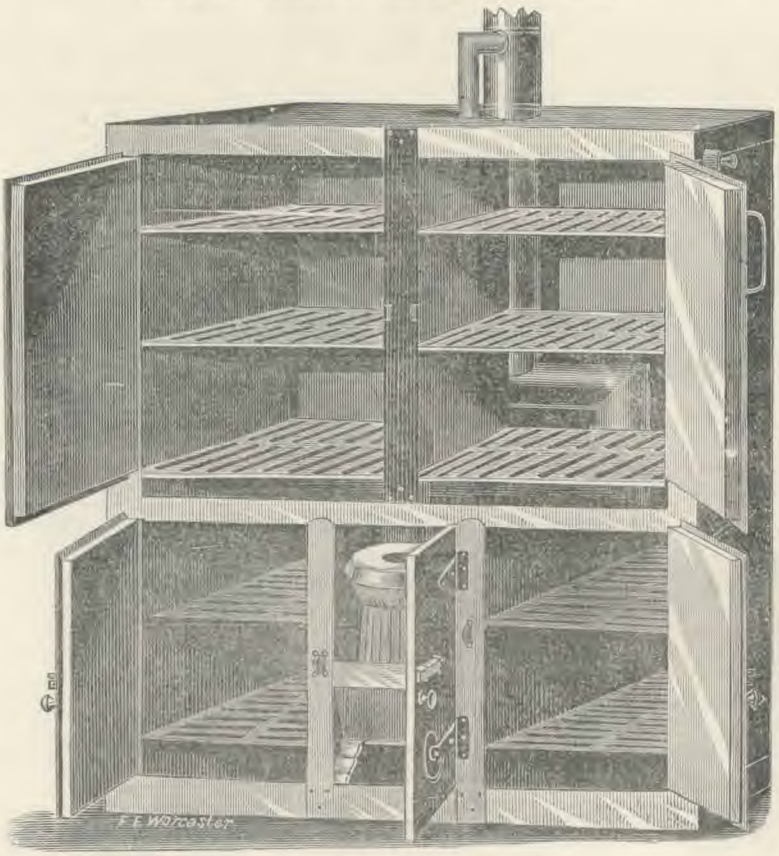
☞ The city fathers of Battle Creek, Michigan, have recently done their city credit by authorizing the city Board of Health to undertake a sanitary survey of the city. The city contributes about one-half the amount to be expended for the purpose. The balance has been raised by subscription. Battle Creek is already noted as one of the healthiest cities in the United States, the death rate for several years being only about seven per thousand. The educational influence of the sanitary survey will undoubtedly result in still further improvement of the vital statistics of this phenomenally healthy community. We hope that other cities in the State that do not enjoy the same advantages from a health standpoint which are possessed by this city, may follow its good example by inaugurating at an early date an efficient sanitary survey.

☞ The Sanitarium has recently had the pleasure of entertaining Pundita Ramabai, one of the six learned women of India, who is traveling in this country in the interest of a college for high caste Hindoo women in India, which it is proposed to establish, as soon as the sum of seventy thousand dollars shall be raised. Pundita Ramabai is a widowed lady of middle age, who has for many years been laboring for the elevation of her country-women, and long since saw the need of some means whereby high caste Hindoo ladies, particularly widows, of whom there are in her country more than twenty millions, could be made independent by giving them such an education and industrial training as to enable them to be self-supporting. The Pundita has been very well received wherever she has been in this country, and her mission promises to be a very successful one. On Sunday evening, July 31, she addressed a large audience in the Tabernacle in this city. She remains at the Sanitarium a short time for medical treatment, after which she will go East to fill lecture engagements in the interest of her mission. We find the Pundita a very interesting personage, and are pleased to find that although she embraced Christianity some years ago, she still adheres to the simple habits of diet in which she was reared, having never tasted flesh during her whole life. She stated to us that her friends in this country were constantly advising her to eat meat in order to sustain her strength in this climate. We were very glad to assure her that more than twenty years' experience as a vegetarian had convinced us that one may enjoy the best of health in this country as well as in India, without tasting flesh. The work in which the Pundita is engaged is a purely humanitarian enterprise, being in no sense sectarian.

To All Interested in Steel Portable Ovens !

SEND FOR 12-PAGE PAMPHLET AND CIRCULARS.

They cost 70 per cent less than Brick. Do not get out of order.
Do the work better and at one-fifth the cost of fuel.



Five cents' worth of fuel will bake a barrel of flour into bread, and roast meat in proportion.

THIS FROM A PRACTICAL BAKER.

LeRoy, N. Y., May 20, 1887.

To Whom it May Concern :—

I bought a No. 70 Oven from Mr. Reid about a year ago. About six weeks ago I bought another No. 70. I am using them in preference to brick. I like them. I have seen all the kinds. This "takes the cake."

J. W. BROWNELL.

School of Domestic Economy, Iowa Agricultural College, Ames, Iowa, April 3, 1885.

Adam Reid, Esq.,—

(LETTER NO. 1.)—It is nearly a year since I first used your Bake Oven (No. 60), and I can say now what I have repeatedly said, that in all my experience I have never seen better work than that which your oven turns out. The one in use here works just as well as the one I first used at Chautauqua, N. Y., last year. Yours respectfully, EMMA P. EWING.

May 2, 1887.

(LETTER NO. 2.)—The oven in use here is still in "good shape," and continues to give satisfaction.

EMMA P. EWING.

I have recently sent them to the New Osborne House, and the new Powers Hotel, Rochester, N. Y.; the Central House, Reading, Pa.; the Forest City House, Cleveland, O.; H. C. Austin, Binghamton, N. Y.; James Dick, Dansville, N. Y.; A. A. Alvord, Elmira, N. Y.; W. W. Whittaker, Lockport, N. Y.; W. W. Clemmons, Geneva, O.; Mansion House, Buffalo, N. Y.; Monteagle House and DeVeaux College, Niagara Falls, N. Y.; Geo. Davis, Mohawk, N. Y., B. F. Simmons, Castle, N. Y.; A. E. Potter, Mansfield, N. Y.; S. K. Kimball, Alexandria, N. Y.; I. G. Corbett, Austin, Pa.; E. E. Proud, Saegerstown; Geo. Truscott, Mackinac, Mich.; Louis Bach, Wellsburgh, N. Y.; Joseph Mecklinberger, Suspension Bridge, N. Y.; Avery & Miller, Kalamazoo, Mich.; H. T. Williamson, Waterford, Pa. Here is a copy of an order for three after the fullest inquiry had been made:—

St. Teresa's Academy, Kansas City, Mo., June 5, 1886.

Mr. Adam Reid,—

DEAR SIR,—Yours received in due time. You may send three ovens as soon as you possibly can. Address one to "Mother Clemence, St. Mary's Orphan Asylum, St. Joseph, Mo."; address the second to "Mother Liquori, St. Joseph's Hospital, Seventh and Penn Streets, Kansas City, Mo."; and a third you may send to the Academy, as also the bill for the three, and I will forward amount. Yours respectfully, SISTER MARY FIDELIA.

THIS FROM THE PROPRIETOR OF THE WHITCOMB HOUSE, ROCHESTER, N. Y.

Rochester, N. Y., December 7, 1886.

Mr. Adam Reid,—

DEAR SIR,—Your oven is such a success, both as a baker and roaster, that you can write out something good and strong—you cannot make it strong enough—and put my name to it. I will honor your draft at any time. [Signed,]

RUSSELL COATS,
Prop. Whitcomb House.

THREE SIZES, NOS. 50, 60, 70. Baking from 50 to 150 loaves. The readers of this magazine will please communicate with the undersigned. Shipping them in all directions; ride as easy as a packing trunk. **OVER 2,600 IN USE.**

ADAM REID, Patentee and Manf'r,
119 Main St., BUFFALO, N. Y.

Sanitarium Training School for Nurses.

COURSE OF INSTRUCTION.

TERM FOR 1887-8 WILL BEGIN ABOUT NOV. 2, 1887.

THIS School has now been in operation for several years with constantly increasing patronage and success. A large number of young men and women have been fitted for eminent usefulness and are now engaged in positions in which they are proving the value of the instruction received in the relief of suffering and earning an independent support. There is no field of usefulness in which intelligent and well-trained young men and women can more easily find employment and opportunity for philanthropic effort accompanied by fair remuneration.

COURSE OF INSTRUCTION.

The course of instruction comprises two series of lectures continuing through forty weeks each. The whole period covered by the course is twenty-one months, which includes three months vacation during the months of August, September and October.

METHODS OF INSTRUCTION.

The instruction is both theoretical and practical. Three lectures are given each week, and several recitations are held in addition. Lectures are illustrated by means of charts, models, fine French Manikins showing every organ of the body in a manner closely resembling life, and by numerous experiments. Each student is required to become familiar with the subjects taught by actual practice :—

The following are among the leading topics which are taught :—

Anatomy. Physiology. Elementary Chemistry. Nature and Causes of Disease. Language of Disease. Principles of Cure. Management of Common Diseases. Dressing of Simple Wounds and Injuries. General and Individual Hygiene. Ventilation. Disinfection. Air and Water Contamination. General Nursing. Surgical Nursing. Monthly Nursing. Bandaging. Hydrotherapy--Theoretical and Practical. Electricity--Faradic, Galvanic, Static. Diet for the Sick. Massage. Swedish Movements. Calisthenics. What to Do in Emergencies.

SPECIAL ADVANTAGES.

The advantages offered by this school are in many respects superior to those offered by any other, not excepting the older schools in the large cities. Its special advantages may be briefly stated as follows :—

1. This school is connected with the largest Sanitarium in the world, which affords opportunities for practical observation not to be found elsewhere.

2. The methods, appliances and facilities which are utilized here far surpass in extent what can be found anywhere else, affording a better opportunity for gaining familiarity with scientific methods than any other school.

3. Students in this school have an opportunity to acquire a practical knowledge of much that is only taught theoretically in other schools, or is omitted altogether.

4. A pleasant home and agreeable social surroundings instead of the prison-like atmosphere of the ordinary hospital.

5. Permanent employment will be given to those who prove themselves competent and worthy of encouragement.

QUALIFICATIONS REQUIRED.

Persons who desire to enter this school must possess the following qualifications :—

1. A good moral character, with satisfactory recommendations.
2. Ability to become first-class nurses.
3. Good health.
4. Sufficient intelligence and education to enable them to enter upon the course of training with a fair prospect of success.

Those who pass a satisfactory examination at the close of the course will receive a diploma.

TERMS.

As regards expenses, there are two classes of students, those who are well-to-do and take the course simply for the information received, and are able to pay for board and tuition in cash, and those who are in limited circumstances and desire to meet expenses by labor, so far as possible. Terms to the two classes are respectively as follows :—

1. Those who pay tuition in cash, for board and tuition for forty weeks, $200.00.

2. Those who are able to put in full time in work can pay board and tuition in work the first term, and will be paid something in addition the second term, according to the value of their services. There will also be an opportunity for such to earn wages during the summer vacation.

Members of the training school will be expected to conform to the same rules as regular employes.

For any further information desired, address,

SANITARIUM,
Battle Creek, Michigan.

PLAIN FACTS FOR OLD AND YOUNG.

By J. H. Kellogg, M. D.,

Member of The American Public Health Association, The American Society of Microscopists, The State Medical Association, The Association for the Advancement of Science, etc., etc.

NEW EDITION.

Revised and Enlarged.

This work has passed rapidly through several large editions, aggregating nearly

100,000 COPIES,

All of which have been sold within the last five years. The book is commended by leading journalists, clergymen, physicians, and all who examine it thoroughly. The new edition contains many new and interesting chapters, making a handsome octavo volume of 644 pages, handsomely bound in the following styles:—

Cloth, Embossed in Gold and Jet,
Leather (Library Style),
Half Morocco, Gilt Edges.

This work is sold exclusively by subscription, and is one of the best selling books published.

RELIABLE AND ENERGETIC AGENTS WANTED

In Canada and in every township in the United States, to whom liberal compensation will be paid. For Agent's outfit and full information, address,

I. F. SEGNER, Publisher,

Burlington, Iowa.

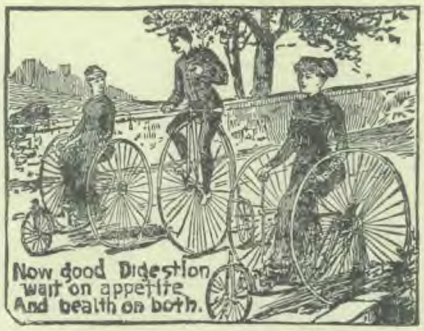
Or, PACIFIC PRESS, Oakland, Cal., Agents for Pacific Coast, Australia, and New Zealand.

THIS PAPER is on file in Philadelphia at the Newspaper Advertising Agency of Messrs. **N. W. AYER & SON,** our authorized agents.

Wonder increases to astonishment that there is any intelligent man, not decrepit or indigent, who does not own and ride a bicycle.—*A Writer in the Century Magazine.*

COLUMBIA BICYCLES

AND TRICYCLES.



CATALOGUE SENT FREE.

THE POPE MFG. CO.,

597 Washington Street, Boston.

12 Warren St., New York. } Branch Houses { 115 Wabash Ave., Chicago.

"I am of the opinion that no exercise for women has been discovered that is to them so really useful."—*B. W. Richardson, M. D., F. R. S., on the Tricycle.*

The Syphon Syringe

Is the BEST SYRINGE MADE. Is automatic in action, and CANNOT get out of repair. For circular, address,

SANITARY SUPPLY CO., - Battle Creek, Mich.

A NEW BOOK! "KNOW THYSELF!"

MAN, THE MASTERPIECE

—OR—

PLAIN TRUTHS PLAINLY TOLD, ABOUT BOYHOOD, YOUTH AND MANHOOD.

BY J. H. KELLOGG, M. D.

620 OCTAVO PAGES! A PAPER MANAKIN! 30 FULL-PAGE ENGRAVINGS!

17 Copies sold in 4 hrs. 9 in 1 day, and 71 in 1 week, by one agt.

It is sure to become one of the most popular of rapidly selling subscription books because of INTRINSIC MERIT AND PRACTICAL VALUE.

This new work is designed to make man better, physically, mentally and morally, and may be very briefly described as follows, to wit: A Brief Description of the Human Body and its Functions; The Mystery of a New Life; Boyhood to Manhood—*dangers which threaten the physical, mental and moral welfare;* Physical Culture; Ethics; Social Ethics; Getting a Wife—*if suggestions in this chapter were universally regarded, the divorce courts would close for want of business.* An Evil Heritage; How to Make Life a Success; Stomachs—*points out the methods by which the great army of Dyspeptics are recruited;* Invaluable Prescriptions for Disorders of the Stomach; Biliousness—*a sure cure:* Hygiene of the Lungs—*principles and methods of successful ventilation;* Physical Effects of Alcohol; The Tobacco Habit; Germs—of disease—*sources, dangers, methods of destruction,* etc.; What to Wear for Health; How to Bathe; Sexual Sins and their Consequences; Diseases of the Sexual Organs—*description and treatment;* General Hints about Health—*care of Skin, Eyes, Ears, Rules for Dyspeptics,* etc.; Treatment and Prescriptions for Common Ailments—as Chronic Inflammation of the Throat, Nasal Catarrh, Hay Fever, Granular Sore Eyelids, Boils, Corns, Freckles, Dandruff, Tapeworms, Piles, Baldness, Sleeplessness, Heartburn, Acute Sore Throat, Erysipelas, Sunstroke, Ingrowing Toe Nails, Burns, Sprains, Nervous Headache, Sexual Nervous Debility, etc.

GOOD RELIABLE AGENTS WANTED.

For terms and territory address

CONDIT & NELSON,

Des Moines, Iowa.

MEDICAL AND SURGICAL

SANITARIUM,

BATTLE CREEK, - MICHIGAN.

THE LARGEST SANITARIUM IN THE WORLD.

THIS INSTITUTION, one of the buildings of which is shown in the cut, *Stands Without a Rival* in the perfection and completeness of its appointments. The following are a few of the special methods employed: *Turkish, Russian, Roman, Thermo-Electric, Electro-Vapor, Electro-Hydric, Electro-Chemical, Hot Air, Vapor, and every form of Water Bath; Electricity in every form; Swedish Movements—Manual and Mechanical—Massage, Pneumatic Treatment, Vacuum Treatment, Sun Baths.* All other remedial agents of known curative value employed.

AN ARTIFICIAL CLIMATE

Secured for those needing special care during the cold months. ***SPECIAL DEPARTMENTS*** for the treatment of diseases of the ***EYE, EAR, NOSE, THROAT, LUNGS,*** and Diseases of Women.

Good Water, Perfect Ventilation, Steam Heating, Perfect Sewerage.

The managers have permission to refer to leading members of the medical profession. For circulars, with particulars, address

MEDICAL and SURGICAL SANITARIUM, Battle Creek, Michigan.