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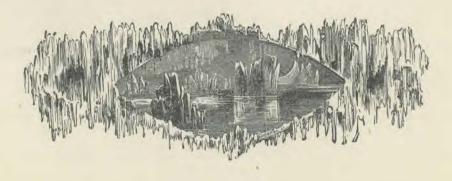
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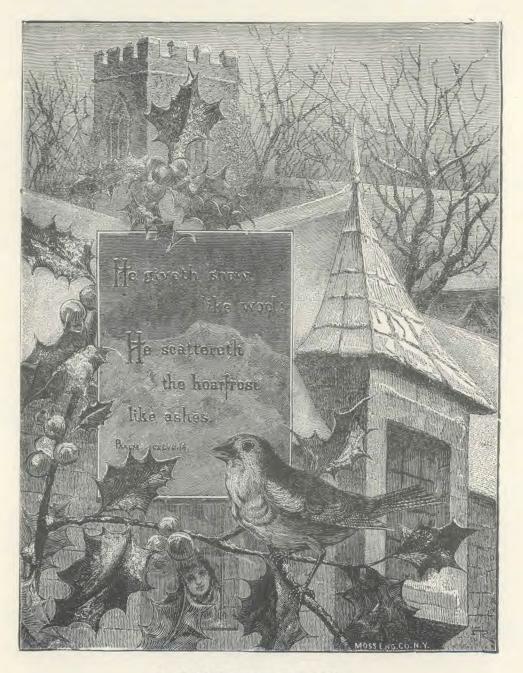
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# -\* A \* JOURNAL \* OF \* HYGIENE. \*

MENS SANA IN CORPORE SANO.

Volume XXII.

BATTLE CREEK, MICH., DECEMBER, 1887.

Number 12.

#### MASSAGE.

SYSTEMATIC rubbing of the body or of diseased portions of it has been practiced from time immemorial, and among widely separated nations, in various parts of the world. In modern times this method of treatment is known as 'massage.' An English writer in the *Nineteenth Century* translates the following extracts from a German work on the history of massage, which will doubtless interest our readers:—

"The expression 'masšage' is derived, according to Pierry (Dictionary of Medical Science), from a Greek word signifying 'to rub; ' according to Savary (Letters on Egypt) its derivation is from the Arabic word 'mass,' to press softly. In England a process of somewhat the same character is known as shampooing. It seems certain that massage was practiced by the Indians and the Chinese many centuries before the birth of our Saviour. It was combined with hygienic gymnastics.

"The Brahmans exercised the art of healing; and the priests of Buddha are known to have acquired much of their power over the people by their skill in medicine. Sir William Jones, the great Oriental linguist, discovered fragments of the third sacred book of the Brahman period, entitled, 'The Knowledge of Life,' which contained many secrets of Indian medicine. An extract from Dally's work states that when Alexander the Great penetrated as far as India, in the year 337 B. c., his soldiers suffered much from the bites of serpents, for which no cure was known by the Greeks. Alexander gathered at the royal tent the best Indian doctors, and proclaimed to the army that all who had been bitten must come there to be cured. These Indian doctors were in great repute. Illness was of unfrequent occurrence in those delightful climates; but all who were sick resorted to the wise men, or Brahmans, who cured them by wonderful or, as they professed, supernatural means. It has been ascertained that massage and shampooing were among the remedies employed by them.

"The 'Law of Manou' prescribed diet, washing, baths, rubbing and anointing with oil, as religious exercises.

"In 1854 an account was published of a German merchant who had been treated in Stockholm by medical gymnastics, and who made a journey to Calcutta, and went through a course of massage and exercises there, in order to become an authority on the subject. He afterwards founded an atheneum for rational gymnastics in Berlin.

"The gymnastic exercises of the Indians consist (1) of wrestling, (2) of what we would call boxing, (3) stick or sword exercise. They also practice movements for rendering the limbs supple, and manipulations of various sorts. Before the Indians begin their exercises, they cower on the earth, and by turns rub each other with mud from the delta of the Ganges, when they can obtain it. All the muscles of their bodies are pressed and kneaded. When Indians are sick, they frequently employ a cure called *chamboning*; the whole of the patient's body is gently kneaded, beginning with the upper extremities, and descending to the feet.

"Dr. Stein, of Heidelberg, who spent some years in the Dutch Medical Service in Java, writes that massage is practiced there, as in almost all the Dutch colonies of the Indian Ocean. It is known as Pidjet-ten, and it is also employed in the Society, Sandwich, Fiji, and Tonga Islands. Dr. Emerson, a native of the Sandwich Islands, says it is there called Lomi-Lomi, and is performed either over the whole or a part of the body, usually by old women. It consists in rubbing and kneading, and may vary from the gentlest stroke to the most powerful grip. It is considered as a high mark of honor for a host to perform this operation for his guest, or to receive this attention from him. No pain is inflicted. Occasionally the natives lie flat on the earth. and let their children trample on them. In an account of the Isle of Tonga, it is related that when people are suffering from great fatigue, three or four little children are employed to trample on the body of the patient as he lies on the grass. In those islands, massage is frequently applied to the forehead or to the top of the head with excellent results.

"In Foster's account of Cook's travels in Tahiti, we read that the friendly inhabitants rubbed the travelers' limbs in order to refresh them after their fatigues.

"The Chinese are supposed to have learned the use of gymnastic exercises from the Indians, and the subject is mentioned in the most ancient of their books, the 'Cong-Fou,' or Science of Living. The Chinese added the use of medicinal plants to the treatment of disease by rubbing and gymnastic exercises.

"The Egyptians were, and are still, proficient in the art of manipulation, friction and anointing with oil being part of the cure employed.

"The Greeks employed gymnastics and massage in order to preserve health, as well as to restore it. Pythagoras taught his disciples to practice moderation, to use a vegetable diet and gymnastic exercises. The gymnasiums and palæstriums of the Greeks were famous. Plato writes : 'The object of gymnasiums is to instruct youths and men how to preserve health and keep their frames in good condition.' Before the Greeks took part in the national games, they had to undergo a course of preparation,—bathing, friction, anointing, and also rubbing with sand. Fine sand from the Nile was preferred, and was imported from Egypt for the purpose. There were many rules for properly carrying out the process, and it was "performed in various ways.

"Among the many editions of the works of Hippocrates, there is a French one by Littre. in which the following passage occurs: 'A physician must possess experience of many subjects, among others of massage.'

"Among the Romans, as indeed every child knows, the constant use of baths, followed by friction and anointing with oil, was customary. In illness, rubbing with warm oil, other kinds of friction, and 'movement cures,' were used. Asclepiades also recommended exercise and friction. Celsus, the author of eight books on the science of healing. took for his motto, 'The best medicine is to take no medicine.' In inflammation of the brain, if he wished to induce sleep, he ordered rubbing for a considerable time. He also advises rubbing to cure acute pains in the head, though not during an attack, and recommends friction to strengthen weak limbs.

"Celsus lays much stress on passive movement for invalids. 'The gentlest is exercise in voyaging on a ship, either in harbor or on a river. If being driven in a carriage is too fatiguing, he recommends that the invalid be carried on a couch or in a chair, and advises that the patient should be rocked in bed if unable to rise. Galen, who lived in the second century after Christ, highly approved of massage and gymnastics, but he did not advise athletics. He ordered friction in the evening, to remove fatigue. The body was to be rubbed with a woolen cloth, afterwards with oil till the surface became red, and then with the bare hands in several directions. Hoffman, in 1708, seems to have advocated the principles that govern the German schools in the nineteenth century. He wrote that the conditions under which health is to be maintained are simple,—exercise of various kinds, in alternation with rest, cold water, and strict attention to diet. One of his maxims was, 'Work and tiring exercise are universal panaceas.'

"Between the years 1756 and 1786, Tronchin, a scholar of Boerhaave's, was in great repute in Paris; he was physician to the Duke of Orleans and to Voltaire, and it was owing to his advice that Voltaire went to live at Ferney. People came to consult him from distant countries, and his success was extraordinary. His system consisted in ordering friction, movements of various characters, exercise, long walks, and certain precautions in diet.

"A system of gymnastics was established in Sweden by Peter Ling, between 1805 and 1839. He was the son of a pastor, and devoted his life to the study of exercise for the development of the human frame. Swedish exercises are much used now in England.

"Massage and gymnastic exercises have more votaries in France than in England. The love of sport that seems inherent in English people is supposed to have obviated the necessity for a widely extended system of gymnastics.

"The system of massage practiced by Dr. Metzger has drawn crowds to Amsteudam, and has afforded relief to great numbers of sufferers, several reigning sovereigns—among others the empress of Austria—being among his patients. Dr. Hunerfauth carries out the same system at Homburg with equal success, and a member of his family charitably devotes much of her time to relieving the sufferings of the peasants.

"It is necessary to beware of masseurs who have no real knowledge of the art, as disastrous results follow from the violent treatment to which ignorant persons subject their patients. It is curious to find how much benefit many sufferers derive from a revival of the

same remedies practiced in by-gone ages and in distant climes. Truly, 'There is nothing new under the sun.'"

#### NECESSARY RULES OF SLEEP.

THERE is no fact more clearly established in the physiology of man than this, that the brain expends its energies and itself during the hours of wakefulness, and that these are recuperated during sleep. If the recuperation does not equal the expenditure, the brain withers; this is insanity. Thus it is that in early English history, persons who were condemned to death by being prevented from sleeping, always died raving maniacs; thus it is, also, that those who are starved to death become insane,-the brain is not nourished, and they cannot sleep. The practical inferences are three: (1) those who think most, who do most brain work, require most sleep; (2) that time "saved" from necessary sleep is infallibly destructive to mind, body, and estate; (3) give yourself, your children, your servants, give all that are under you, the fullest amount of sleep they will take, by compelling them to go to bed at some regular, early hour, and to rise in the morning the moment they awake; and within a fortnight, nature, with almost the regularity of the rising sun, will unloose the bonds of sleep the moment enough repose has been secured for the wants of the system. This is the only safe and sufficient rule; and as to the question of how much sleep any one requires, each must be a rule for himself; great Nature will never fail to write it out to the observer under the regulations just given .- Dr. Forbes Winslow.

-To insure long life, recreation should be a part of our daily life. It makes the busy man thoughtful, and keeps the thoughtful man busy. It insures health, success, and the accomplishment of more work in less time.

—There are two things which a man is bound to take on faith,—his wife's private opinion of him, and what sausages are made of.

#### IN TRAINING FOR DYSPEPSIA.

Do not give your children crackers or cookies, or even bread and butter, between meals. The practice destroys their appetite for the regular meals, interferes with digestion, makes them sallow, subject to various maladies, a ready prey for serious diseases, and tells frightfully upon their dispositions.

The process of digestion is a highly-complicated one, which goes on with wonderful smoothness in a healthy stomach, if it is not interrupted; but interruptions are firmly resented, and punished by suffering, sooner or later: A learned Frenchman, talking of the perfect and wonderful action of the stomach, once said : "And you put all this machinery to work for just one poor cracker." But after all, it is not the setting it to work that does the harm, it is doing it when it is otherwise occupied. The breakfast is, perhaps, halfdigested, and the early processes are through with, the "one poor cracker" is sent down to claim attention, and the process is begun over again, to the neglect of the material already in the field. For a length of time constant disturbances and interruptions may make no visible change; but it is tolerably certain that sooner or later, evil results will come; and the children persistently feasted between meals are in training for dyspepsia.

"The dyspepsia of Americans is due to pie," another foreigner has observed; but wiser people than he, say that the "bite and piece" between meals make more victims to the harrowing disorder than the much maligned pie. —Good Cheer.

Worth Imitating.—An Italian in his one hundred and tenth year, being asked the secret of his living so long, replied :—

> "When hungry, of the best I eat, And dry and warm I keep my feet; I screen my head from sun and rain, And let few cares perplex my brain."

—"Enough is as good as a feast." Remember that it is better to leave the table a little hungry than to suffer the pangs of indigestion after eating heartily.

#### ESQUIMAU GLUTTONY.

CONSIDERABLY above the Fuegians in intelligence, though still of a very low order of both intellectual and physical development, are the Esquimaux, who inhabit the northernmost regions of the Western Hemisphere. They live almost wholly on the flesh of the walrus, seal, and a few other Arctic animals. Many stories are told of the enormous quantitles of meat which an Esquimau will inflict upon his stomach at a single meal. To eat eight or nine pounds of raw or frozen meat at a sitting is quite an ordinary feat. An



Esquimau in the act of eating his dinner has been sketched by our artist in the accompanying picture. The process is a peculiar one. The Esquimau first cuts a strip of flesh a foot or more in length, and places one end between his teeth. Then with his knife he cuts off as much as he can stuff into his mouth, and as soon as that is disposed of, repeats the process until the whole strip is eaten. When repletion has reached a point where it renders him unable to move, he will lie on his back and let his wife feed him with bits of blubber until he becomes fairly unconscious, after which he will lie in a state of torpor for a day or so, like a boa-constrictor. After this it is not surprising to learn that the Esquimaux are a race of dyspeptics.

Many of the Arctic explorers have cultivated the habit of excessive flesh-eating, in imitation of the gluttonous Esquimaux, thinking that the consumption of large quantities of fat and oil were essential to the maintenance of the heat of the body; and some of them have recorded their ability to make way with their eight pounds of seal blubber per day. That these enormous quantities of flesh, or indeed any flesh food at all, are not absolutely essential to sustain life in the Arctic regions, should have been apparent to these explorers from their observations of the habits of the musk-ox, reindeer, and other Arctic animals, whose food is composed of mosses, lichens, and a few other hardy vegetable growths which are able to withstand the rigors of the long Arctic winter. As a matter of scientific fact, the albuminous elements, which are the most abundant in flesh food, are not those which supply the most heat to the body. The heat-producing elements are the carbonaceous, of which vegetable foods contain a large proportion in the form of starch, sugar, and fat. In the narrative of the expedition of the Polaris in the Arctic regions, a quotation from the journal of Captain Hall mentions that when traveling on foot among the ice and snow, within a few degrees of the North Pole, in the month of October, when the long, dark, cold, winter night had already begun, in company with his companion he lunched on graham crackers. The entire crew of the Polaris, as appears from other entries in the journal, maintained good health on a diet such as would not be considered extravagant for a laboring man in a mild climate, and on two meals a day, We would suggest, therefore, to any of our readers who are ambitious to win fame in searching for the North Pole, that they eschew the excesses of the ignorant Esquimaux, and confine themselves and their companions to a moderate vegetable diet. Such a diet would at any rate be efficacious in warding off attacks of scurvy, through whose ravages the purposes of many Arctic expeditions have been defeated. The evil effects of an exclusively flesh diet among the Icelanders are thus set forth by Mackenzie, in his "Travels in Iceland :"-

"The diet of the Icelander consists almost solely of animal food, of which fish, either fresh or dried, forms by far the largest pro-

portion. During the summer they have milk and butter in considerable abundance; but of bread and every other vegetable food there is the utmost scarcity, and among the lower classes an almost entire privation. As an effect of these circumstances in the mode of life of the Icelanders, cutaneous diseases, arising from the cachectic state of the body, are exceedingly frequent among them, and appear in some of their worst forms. Scurvy and leprosy are common in the island, occurring especially on the western coast. Where the inhabitants depend chiefly upon fishing, and where the pastures are inferior in extent and produce, scurvy is observed to occur with great frequency. For its cure a vegetable diet is employed, in as far as the circumstances of the Islanders will admit of such means."-Sunbeams of Health and Temperance.

#### TOBACCO BLINDNESS.

It is well known that the sight of civilized people is often inferior to that of savage tribes. The Massachusetts Indian could see an approaching vessel off the coast an hour before a white man could discern it. It is well known that tobacco powerfully affects the nerves. Persons who are in a state of mental excitement become calm, quiet, and meditative, under the influence of tobacco. On the other hand, persons accustomed to the use of tobacco become nervous, fretful, impatient, and unreasonable, when deprived of it.

Anything which affects the nerves must affect the eyes. Alcohol affects the optic nerves, changes the focus of vision, and under its influence, people frequently "see double," and see things that are not visible to the natnral eye.

Experiments with railroad men indicate that there is a large amount of color-blindness among people in general; many railway employees being unable to discern the colors of the different flags and signals on the railway, are thus rendered unfit for railway service, as accidents must occur when employees are unable to distinguish between different colored lights or flags. Tobacco being a sedative and a narcotic, naturally benumbs the nerves. When the nerves are thus benumbed, people do not see as distinctly, do not take notice, and are liable to confound colors, and overlook things which are visible to a clearer and more alert eye-sight. And this defectiveness of vision tends to increase and become permanent, and this is blindness. A recent newspaper says :—

" Tobacco blindness is becoming a common affliction. At present there are several persons under treatment for it at one London hospital. It first takes the form of color-blindness, the sufferers, who have smoked themselves into this condition, being quite unable to distinguish the color of a piece of red cloth held up before them. Sometimes the victim loses his eyesight altogether. Although smoking is to a large extent the cause of the malady, and so gives it its name, heavy drinking is also partly responsible." Let people who would preserve their eyesight, their reason, their health, and their common sense, keep clear of these vile, debasing, degrading, and benumbing indulgences.-Selected.

A Dog's Regard for Morals.—The Popular Science Monthly tells a story of the sheepdogs in the Crazy Mountains, from which it appears that these well-trained animals are so averse to profanity that they will have nothing to do with a man who swears at a sheep,—another evidence of the wonderful intelligence of these sagacious animals:—

"They deserve more than a passing mention. Their intelligence and quick apprehension of what is required of them, and their faithful performance of duty, are wonderful. Without them the working force required to care for the sheep would have to be more than doubled. These dogs appreciate kind treatment, and take to heart scolding and abuse.

"A foreman of a sheep-ranch once said that in sending out a new man, he assigned to him an old dog, thinking that if the man did not know his duty, the dog did.

"He charged the would-be herder to be kind to the dog, saying, 'He will not stay with you, if you are not." "In two days the dog was at home again. The foreman visited the man, taking another dog, and said to him, 'You were cross to the old dog, and I told you he would not stand it.'

"'I was not cross to the dog,' returned the herder; 'but, confound him! he would not even let me swear at the sheep!'"

A Quaker on Good Manners and Indecency. -Recently a Quaker was traveling in a railway carriage. After a time, observing certain movements on the part of a fellow-traveler. he accosted him as follows : "Sir, thee seems well dressed, and I dare say, thee considers thyself well bred, and would not demean thyself to any ungentleman-like action, would'st thee ? " The person addressed promptly replied with considerable spirit, " Certainly not : not if I knew it." The Quaker continued, "And suppose thee invited me to thy house, thee would not think of offering me thy glass to drink out of after thee had drunk out of it thyself, would'st thee ?" The interrogated replied, "Abominable ! no; such an offer would be most insulting." The Quaker continued, "Still less would thee think of offering me thy knife and fork to eat with, after putting them into thy mouth, would'st thee ? " The interrogated answered, "To do that would be an outrage on all decency, and would show such a wretch was out of the pale of civilized society." "Then," said the Quaker, "with these impressions upon thee, why should'st thee wish me to take into my mouth and nostrils the smoke from that eigar which thou art preparing to smoke, after sending the smoke out of thy own mouth ?" -League Journal.

-Dr. Jessup, of the British Medical Association, says that the wearing of high-heeled shoes so alters the center of gravity as to cause a return to the habit of "tailless apes, who walk upon their toes."

-Scene: Grammar class. *Teacher:* "What is the future of the drinks?"" *Johnnie:* "He is drunk."

# Seasonable Mints.

BY THE EDITOR.

—Most chronic catarrhs usually begin in the fall of the year, and owe their origin to the neglect of adjusting the clothing to the weather. Catarrhs of all sorts are much more easily prevented than cured.

-If you have not already done so, now is the time to begin to make arrangements for a regular supply of fresh air throughout the house, and the constant removal of foul air. Any ordinary dwelling can be efficiently ventilated with an outlay of fifty dollars. When we consider how many diseases are the direct result of breathing foul and stagnant air, neglect to secure a pure-air supply appears to be inexcusable.

—At this season of the year every person should wear thick flannel under-clothing. Persons whose circulation is habitually poor may need to wear two suits of woolen under-garments, and most persons will find a decided advantage in putting on an extra suit whenever they are to undergo any unusual exposure to the cold, as in riding in an open carriage or sleigh. A suit of tightly-fitting woolen under-clothing protects the body nearly as much as an overcoat, and is much less expensive.

—If your house is supplied with a fresh-air duct, and it ought to be if it is not, be careful to see that it is clear of leaves, dust, cobwebs, or whatever may have lodged in it during the summer months, when it was not depended upon for a fresh-air supply. Sometimes small animals get into the fresh-air duct and die, and the resulting decomposition poisons the air of the whole house. This inspection ought, of course, to have been made some weeks ago; but if it has not been, attend to it now.

Don't Do It .- In harmony with the prevailing custom, the reader, if a householder living in the country or in a country village, has probably made arrangements for "banking up the house" with earth, or straw, or stable litter, to keep the cellar from freezing. Arrangements of this sort are economical to the extent that it is a good means of preventing freezing in the cellar, but it is a very costly proceeding in relation to health. An unventilated cellar filled with vegetables and various decomposing substances is often a most prolific source of disease, pouring up a constant stream of gaseous poison into the living-rooms above. Vegetable cellars should be wholly disconnected from human habitations. If they must be tolerated, they should be well ventilated.

How to Take Cold .- A great many people constantly troubled with colds, complain that they do not know how they have taken cold. For the benefit of such, we suggest a few of the ways in which colds may be readily taken and are usually contracted. It is a damp, drizzly day. It does not rain hard enough to wear a mackintosh or carry an umbrella. You want to run into the next door neighbor's. Hardly worth while to put on your rubbers for so short a journey, so you leave them at home. You come back with the soles of your shoes damp. You have chilled the bottom of your feet, one of the most susceptible portions of your body. The next morning you awake with a stuffed feeling in the head, and soreness or stiffness in the throat or a husky condition of the voice; and you wonder how you could have caught such a cold.

Here is another way: It is a rather chilly, damp day, but it does not rain at all. However, the pavement is cold and damp from the precipitation of moisture, though not damp or cold enough so that you think it worth while to put on overshoes to go down town on an errand. For half an hour, the feet, clad with thin-soled shoes or boots, are exposed to the chilling contact with cold stone slabs or concrete. A few hours afterward you begin to feel or imagine that you have taken cold in consequence of a change in the weather; whereas it was in consequence of want of a change of shoes.

Another way: You have occasion to take a long walk or ride in the rain. You thoroughly protect yourself with rubbers for the feet, and a mackintosh, which covers the rest of the body. The impervious rubber cloth keeps the rain from wetting your clothing, but at the same time retains and condenses in the garments the watery vapor which is constantly escaping from the skin, and which amounts to several ounces in the course of a few hours. You return home without having received a particle of moisture from the outside, but with the clothing thoroughly damp by the moisture produced beneath the protective covering of the mackintosh. Considering your garments perfectly dry, you do not think a change necessary, and sit down indoors without special precaution to avoid a draught or other causes of rapid evaporation, in consequence of which you soon become chilly by the evaporation of the moisture from your clothing. You feel slight chills creeping about the spine. A hearty sneeze and a stuffed feeling in the nose, and pretty soon a frequent necessity for using the handkerchief, indicate that you have taken cold; and do you wonder where ?-- Under the Mackintosh.

That getting the feet wet, leaving the hair about the neck damp, getting wet in the rain, neglecting to change the clothing, and sundry other indiscretions of like character, are causes of taking cold, it is unnecessary to state, as all sensible people may be supposed to know that such exposures are hazardous, the strenge strenge at a strenge

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.

A WINTER SONG. BY LUDWIG HOLTY. (See Frontispiece.) Translated from the German by Charles T. Brooks. SUMMER joys are o'er; Flo'rets bloom no more, Wintry winds are sweeping; Through the snow-drifts peeping, Cheerful evergreen Rarely now is seen.

Now no plumèd throng Charms the wood with song : Ice-bound trees are glittering, Merry snow-birds twittering, Fondly strive to cheer Scenes so cold and drear.

Winter, still I see Many charms in thee, — Love thy chilly greeting, Snow-storms flercely beating, And the dear delights Of the long, long nights.

#### CHRISTMAS CUSTOMS.

INCE the beginning of the fifth century the twenty-fifth of December has been universally adopted throughout Christendom as the day upon which to celebrate the birth of Christ, although

there is no positive evidence that the date fixed upon is the correct one. Up to the fourth century the sixth of January was regarded and celebrated as the anniversary of the advent of our Saviour.

From the earliest times, the Romans, Celts, and Germans celebrated Christmas with great festivities, extending over many days. In the year 385, Theodosius the Great, Emperor of Rome, made a law commanding his subjects to begin their Christmas festivities on the sixth day before Christmas, and to continue them for seven days after.

Later, Alfred the Great made a similar law, stating that "the twelve days after Christmas are made a festival." The excesses committed during such a prolonged season of reveling and feasting finally led to an endeavor to moderate these festivities, and divest the occasion of its levity, with the result of modifying, but not wholly changing, the custom.

From this ancient practice comes the almost universal one at the present time, of making Christmas a day of feasting and pleasure. Indeed most of the customs so generally observed at Christmas are of very ancient origin, some of them dating back to heathen mythology. The decoration of homes and churches with evergreens has its source in an ancient belief that friendly sylvan spirits would come and dwell among the greens until the winter should be over, and the woods be sunny and warm again. The mistletoe is said to have been held sacred by the Druids. The "Yule-log," was burned in honor of the divinities of the Norse mythology at the great Scandinavian festivals. The custom of giving presents goes back to the Roman Saturnalia, when it was common to bestow upon children little images of gods. The Christmas-tree comes from Germany, and "Santa Claus" is a native of Holland.

In England, where the annual recurrence of Christmas was for centuries celebrated by rolling the great "Yule-log" into the fireplace and lighting large candles, followed by a season of extravagant festivities, there were many superstitions connected with the day. One of the most curious of these was a Devonshire custom. On Christmas eve the farmers, with their families and numerous friends, gathered together, and partook of wheaten cakes dipped in cider. Late in the evening the entire company proceeded to the orehard, one bearing a cake and another some cider, as an offering to the apple-tree. The cake was placed on a bough of the tree, the cider thrown over it; and at the same moment the men fired guns, the women and children shouting meanwhile the following lines :—

> "Bear true apples and pears enough; Barns full, bags full, sacks full, Hurrah! hurrah! hurrah!"

In Norfolk the custom was to sprinkle a little hot ale over the apple-tree, while the company sang :---

"Apples and pears, with right good corn, Come in plenty to every one; Eat and drink good cake and hot ale, Give earth to drink, and she'll not fail."

From these customs it is easy to see how the habit of drinking intoxicants, so common during the holiday season, has been handed down from one generation to another for centuries.

A beautiful custom at Christmas-time, said to have sprung from the songs of the shepherds at the birth of Christ, was the singing of carols. In England this is still practiced, though much less common than in olden times, when the Norman castles filled the land, and each baron had his gleemen and choristers, who made the walls re-echo with their jubilant voices. One of the oldest and most popular of these carols runs as follows :—

> "God rest you, merry gentlemen, Let nothing you dismay; For Jesus Christ, our Saviour, Was born upon this day, To save us all from Satan's power, When we were gone astray.

"From God, the heavenly Father, A blessed angel came, And unto certain shepherds Brought tidings of the same, How that in Bethlehem was bora The Son of God by name.

- "The shepherds at those tidings Rejoicèd much in mind, And left their flocks a-feeding In tempest, storm, and wind. And went to Bethlehem straightway, The blessed Babe to find.
- "But when to Bethlehem they came, Whereat the Infant lay, They found him in a manger, Where oxen fed on hay; His mother, Mary, kneeling, Unto the Lord did pray.
- "Now to the Lord sing praises, All you within this place, And with true love and brotherhood Each other now embrace : The holy tide of Christmas All other doth deface."

#### COMMON SENSE.

BY "QUINOTE." (Concluded.)

WHEN Farmer Styles returned from the journey of taking his son to the Sanitarium, he wore an air of placidity that had been lacking for many a day. "I tell you," said he, "Harve' is in good hands. That's a beautiful place, and there are lots of sick-lookin' folks settin' around, not cooped up in an air-tight bedroom, but meandering on the piazzas; and the whole house is full of sunshine and air.

"Things are seen common-sense ways. First thing when we arrived, was a lecture; and it was a lecture. The doctor is a spry one, and he gave it to 'em right and left. He said that it is a sin to be a dyspeptic. He said that nature has provided us with good internal organs to digest our food, and it is either willful sin or sin of ignorance that turns a good organ into a bad one.

"When the stomach turns out its work about half done, that makes the other internal machines extra jobs. The nerves get all worked up till they're very sensitive. The blood gets full of crude material not half worked up, and there goes that undigested food a-scrapin' through the system into the brain and the heart and the lungs and the liver, till the whole bein' is in a snarl from head to foot. Then, as soon as the organ grinds out its load, it just collapses from weariness, and there's a gone feelin' in the pit; and then folks ain't got no more sense than to heave onto it another load.

"Some people, he says, will eat things when they know they will have a spell of indigestion arter. They'll jest take Thanksgivin' dinners, and plum-puddin', and brandy sauce, goose and grease, and cranberry jelly, and doughnuts boiled in lard, and what not, till the poor stomach is sore and irritable beyond They'll scold their children, and endurance. abuse their best friends; and after they cool down, they get clear despairin', a-thinkin' they have committed the unpardonable sin. They need to be pitied, and to be helped to repent and forsake their evil ways, instead of repinin' agin Providence for the ills they've brought on themselves."

"Well," said Aunt Sallie, sharply, "you'll never get me there. That's a pretty way to treat sick folks,—a-harrowin' up their feelin's in that style. Harve' will have a sorry time of it."

"No; he won't. Harve's got new spunk already. By and by the doctor gave the coddling business a rap. Says he, 'The friends of the sick jest make babies of 'em. It's splendid discipline for the well ones, but it's hard on the invalid. There is just lots of overfond mothers that have humored their children into chronic invalids. They wait on 'em and coddle 'em till they hain't got no self reliance, no stamina, no back spinal columns. They jest become poor, whiney, miserable dependants, always a-leanin' their whole weight on somebody else, until their whole character is marred. A fit of sickness jest leaves a scar on a man that it's hard to rub off.' I jest wish you could have seen Harve'.

"'Now,' continued the doctor, 'we've got you here to give you a lift; but you have got to do some climbing yourselves;' and he told them to make a business of it; to dart around and take exercise and air, and not to go pokin' around to find out if they'd broke out in a new spot, but to turn their eyes out of themselves. Nature is a very modest creatur', and she won't tend to her affairs while you're inspectin' her house-keeping. "He said that there are laws which govern the bein'; and there is not one in ten that knows what they be; or if they do know, they act as though it did n't make much matter. Hundreds of folks have told the doctor that they pay no attention to their health; jest eat what comes along as long as it tastes good, and do as they please, no matter what the consequences may be.

"He said that people give way to appetite and passion till they loose control of themselves, and by and by they are called in-What's the reason there is so much sane. crime in the world? It's jest because men and women have give way to their depraved impulses; and he said that to be morally healthy, one must be in harmony with moral law; and the law of the physical bein' is all woven in with the moral. One depends on the other. The Word says, 'Out of the heart proceeds evil thoughts.' For instance, there comes an evil thought temptin' you to give way to eatin' too much, or to eat of what is hurtful. The stomach gets evil, and the tide that flows back to the heart has an increased tendency to fabricate more and worse evil. till one almost gets confused, and might think it was out of the stomach that evil springs. I tell you, I felt that that man was a-gettin' on the right track.

"When I took Harve' to his office, the spry doctor whizzed around, and sorter sized him up. Harve' looked sorter sheepish, as though he felt like a sinner, and he whispered to me that the doctor had a poor opinion of him."

"Poor dear! and to think you've left him there," sighed the farmer's wife. "He'll jest be clear down sick. That doctor is sorter heartless."

"No; he hain't. His talk sounds kinder sharp, but there's a sort of kindliness a-beamin' out of it all. 'Pears like it was jest what Harve' needed, to be whipped up a little, and feel as though he'd like to be a man agin.

"' Well,' says the doctor, after examining his lungs and his heart and his liver, and givin' him a thump here and there, 'You are a nervous dyspeptic.' "'Oh,' says Harve,' 'you don't mean it! Have n't I the consumption?'

". Not a bit of it,' said the doctor.

"Well' says Harve', 'I heard you lecture this morning, and see you have very little respect for nervous dyspeptics.'

"'Well,' says the doctor, 'I know how to pity them, for I was one myself once. I despise the disease, but love the poor victim

for the sake of what he may be. I have no respect for a man who won't get over it.'

"'Now, sir,' says he, 'stand up.' Harve' stood up, more'n a head taller than the doctor, but lookin' peeked and weak, in spite of his great bones. Harve' did n't used to be so poor lookin'; I declar', I felt sorter shamed of him.

"Then the doctor felt of his muscle. It was as flabby as dough. 'Feel of that,' says the doctor, doublin' up his own arm. And would you believe it? that man had a muscle like a farmer—beat mine all holler.

"Then the doctor give him a little more common sense. He said, that for health, the whole body must be properly worked. Jest to set down and study without exercise, is a sure way to become an invalid and of no use in the world.

"Then Harve' asked him if he could get well, and be of some account. 'Certainly,' says the doctor, 'nothing to hinder. Stay here awhile, and get built up. Use the dumb-bells, clubs, and the gymnasium. Live on a plain nutritions diet; such as good whole-wheat bread and grains, with plenty of milk, cream, and fruit. Tea and coffee and indigestible dainties must be laid aside;' and then he give him the reasons."

"Well," said Aunt Sallie, "The idee l That doctor is a regular offscourin'. There is always some new wind of doctrine a-blowin', but you do n't ketch me a-bein' stirred by sich nonsense. I'm surprised at you, Hezekiah. There's no more harm in tea and coffee than in the wind that blows." "You say so jest because you do n't know science. The scientific reasons show that they both contain poison, and are stimulants. I'm a temperance man; and when I see common sense, I intend to stand by it regular."

"Well, Hezekiah, here we've been a-drinkin' of those beverages ever since we were children, and I don't see as it has hurt us a mite," said his wife.



"Feel of that," says the doctor, doubling up his own arm.

"Look in that air tea-pot!" exclaimed the farmer. "Do you see how it's all lined with a green sorter lining? Well, that's jest the way the stomach looks. Like as not we'd been a heap better natured and not so pesky nervous, if we'd never partook. Well, I'm goin' down to clean out the cellar. It has n't been touched this year, and it smells like the Dead Sea. There's no wonder we've all had spells this fall; and I do n't believe that any of us is prepared to die, while we kin live, because of sich a corrupt cellar."

"Really, I'm a-feared fur Hezekiah. He's took sich uncommon notions lately. Jest to think of his leavin' Harve' where he'll have to sustain life on sich poor livin', and take sich talk," said Mrs. Styles.

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Several weeks went by, and one morning Harve' returned home. His step had a spring to it, and there was a marked change in his whole appearance. There was new energy in his spirit, a fresh motive to work; and life had an inspiration unknown for many a month.

"Thank you, no, Aunt Sallie," said he, as she urged him to eat of the luxuries prepared in honor of his return, and in pity for his long abstinence. "I want high thinking, so will eat of simple and healthful food. Grits and fruit are growing delightful to my taste. I want to eat what makes men, not angels. No more angel-cake for me. I should call it just the opposite; for it certainly has a demon-like effect on a man."

Four months in the open air, in accordance with the doctor's advice, on the cultivator, the reaper, and mower, shouting to the teams, and living on plain wholesome food, brought back the glow of health to the young man's cheeks.

"I tell you," said Farmer Styles, after returning from the village hall, where Harve' had delivered the first of a series of lectures on health and temperance, "Harve' is what I call a hygienic hero. Law! the way his voice rang out to-night, clear as a bell; and there was a swing to his gait that fairly did me good. His education is a-comin' in handy enough now. I tell you, he can elocute as well as any preacher I ever heard, and his ideas were fairly elevatin'. I saw some folks a-risin' off their seats, with their mouths open, to catch every word, as he towered up there and talked good common sense.

"He told 'em it was their duty to know how to live so as to glorify their Maker and benefit their feller-men, and that this slip-shod way folks have of treatin' their physical bein' is a crime. He said he had come to the conclusion that if folks would n't use common sense in treatin' their bodies, that their souls would n't go with any great vim toward the Kingdom; and that he'd come to this conclusion through logic and experience. And I said 'Amen.'"

-Health is valued most when sought.

# Temperance Notes.

-The prohibition votes in New York State at the recent election numbered nearly fifty thousand.

-It is estimated that 2,450,000,000 cigarettes were consumed in this country last year.

-Only six counties in Dakota voted for license at the late election.

—More prohibition amendments have been submitted by State legislatures this year than in twenty years previous.

-In spite of the fact that there are 1100 saloons in full operation in Leadville, Colorado, the public schools have closed a year for lack of funds.

—The police of Constantinople are closing all liquor shops kept by Europeans, on the ground that they are demoralizing the Turkish people.

—Jamaica ginger has been placed by Judge Andrews, of Augusta, Maine, in the same category and subject to the same laws as intoxicating liquors.

-Canon Farrar says that the English have made in India one hundred drunkards for every Christian, and are girding the earth with drunkenness.

-Mrs. Mary Clements Leavitt, the round-the-world missionary of the W. C. T. U., writes that all the American missions in Burmah have incorporated total abstinence in their work.

-The annual convention of the National Woman's Christian Temperance Union, which convened at Nashville, Tennessee, the 16th to the 23d of last month, was one of the most successful gatherings ever experienced by that organization.

-During the ten years which the New York Christian Home for Intemperates has been in existence, it has cared for 2500 men. The use of tobacco is prohibited, as being an incentive to drink. Of the 1788 inmates who gave up the use of tobacco during their sojourn in the Home, not one is known ever to have returned to their old vice.

-Nikita, a young American prima-donna, is creating quite a sensation in London, because of her marvelous voice. She is said to be endowed with a splendid physique as the result of careful habits; and her voice has never received the aid of any artificial stimulation, she having never even tasted tea or coffee.

# Popular Science.

—It requires a year or two to give the proper seasoning to thermometer tubes. When the glass is new, it changes and slowly contracts.

-Prof. Bell asserts that ships within half a mile of each other may readily communicate by telephone, with the aid of a wire a mile long trailing behind the ship.

-According to statistics, 53,000 wells have been drilled in the oil region of New York and Pennsylvania since the discovery of petroleum there. These wells have produced 310,000,000 barrels of oil.

-A tarantula kept for many years by Dr. H. C. McCook, of Philadelphia, recently died at the age of seven years. This has the distinction of being the most aged spider known to science.

-By experimenting with an air gun, it has been found that to drive straws into pine boards and hickory bark, as is often done by tornadoes, requires a velocity of one hundred and twenty to one hundred and seventy-five miles an hour.

-A man named Winkelmeier, one foot taller than Chang, the celebrated Chinese giant, has been on exhibition in London this year He is a native of Austria, and measures eight feet and three inches in height. He is probably the tallest known man of modern times.

—A new process has been discovered, by which the most delicate patterns, even of lace work, can be reproduced in iron, by casting the metal on carbonized fabric. Molten iron can be run on the most delicate fiber without injuring it after it has been carbonized.

—At the University of Upsula, Sweden, whenever opportunity offers, careful measurements are taken of the height and velocity of clouds. The greatest height of any cloud yet measured is 43,800 feet, and the highest velocity is 112 miles an hour for a cloud at 28,000 feet.

—A practical demonstration of the ease with which spontaneous combustion takes place was recently given in an Eastern factory. Shavings from the oiled wood used in the manufacture of planes, were put into a barrel, and twenty-four hours later were found to be almost on fire; their temperature being over  $300^{\circ}$ F. In a few hours longer, the shavings a few inches beneath the surface were charred and smoking.

—It is estimated that there are five times as many kinds of insects as there are species of all other living things put together. Two hundred different kinds of insects make their home in pine trees, while four hundred and fifty species find shelter and support in the oak. In 1849, Alexander Von Humbolt estimated that the number of species preserved in collections was between one hundred and fifty and one hundred and seventy thousand; but scientific men now say there must be something like seven hundred and fifty thousand species.

—A remnant of the great forests which once covered the south of Sweden, consisting of a boat six feet in diameter, hollowed out of a log, was not long since dug out of a bog at Kinneved. The tree from which this boat was formed must have been at least twenty feet in circumference. The boat was so heavy that two bullocks could not draw it. The wood of which it was made was very hard, and had assumed a blue color.

-Prof. Thaddeus Lowe, of Los Angeles, California, has invented a process of manufacturing gas from water. The light from such gas is said to be far more steady than ordinary gas, and as bright as electricity, but without its unpleasant glare. For heating and power purposes the water gas is also superior; and owing to the cheapness of manufacture, it is said to be a rival of natural gas, which is creating so much excitement in various parts of the United States.

Singing Sand.—There are a large number of places on the Atlantic Coast where singing sand is found. One of the most remarkable instances of this is that of the beach at Manchester, Massachusetts, where the sand for about one-fifth of a mile gives out a distinct sound when it is walked upon or even when it is stirred with a rod or cane. A stick driven violently into the sand will elicit a sound loud enough to be heard above the roar of the sea at a distance of one hundred and forty feet. Prof. Julien, of Columbia College, who has given the subject of this phenomenon much study, says :—

"The singing sand may occur in comparatively small patches in the midst of ordinary sand; it always occurs between the limits of high and Iow tide; the same sand does not produce sound at all seasons, nor does it always give forth like sounds; when it is wet, it will not emit sound; when samples are transported in bags, they lose their sounding power, but retain it when carried in bottles. The leading theory conferning singing sand is that the sound is produced by criction between the angular particles; and the conditions necessary are believed to be perfect dryness, uniformity of grain, varying from one-fifth to onetenth of an inch in diameter, and freedom from dust."

#### GOOD HEALTH



#### BALEFUL BOOKS.

"Where one good, honest, healthful book is read now, there are one hundred made up of rhetorical trash consumed with avidity. When the boy on the cars comes through with a pile of publications, look over the titles, and notice that nine out of ten of the books are depleting and injurious. All the way from New York to Chicago or New Orleans, notice that objectionable books predominate.

"Taste for pure literature is poisoned by this scum of the publishing-house. Every book in which sin triumphs over virtue, or in which a glamour is thrown over dissipation, or which leaves you at its last line with less respect for the marriage institution and less abhorrence for the paramour, is a depression of your own moral character. The bookbinding may be attractive, and the plot dramatic and startling, and the style of writing sweet as the honey that Jonathan dipped up with his rod ; but your best interests forbid it, your moral safety forbids it, your God forbids it; and one taste of it may lead to such bad results that you will have to say at the close of the experiment, or at the close of a misimproved lifetime: 'I did but taste a little honey with the rod that was in my hand, and lo, I must die.'

"Corrupt literature is doing more to-day for the disruption of domestic life than any other cause. Elopements, marital intrigues, sly correspondence, fictitious names given at post-office windows, clandestine meetings in parks, and at ferry gates, and in hotel parlors, and conjugal perjuries are among the damnable results.

"When a woman, young or old, gets her head thoroughly stuffed with the modern novel, she is in appalling peril. But some one will say : 'The heroes are so adroitly knavish, and the heroines so bewitchingly untrue, and the turn of the story so exquisite, and all the characters so enrapturing, I cannot quit them.' My brother, my sister, you can find styles of literature just as charming, that will elevate, and purify, and ennoble, and Christianize, while they please. The devil does not own all the honey. There is a wealth of good books coming forth from our publishinghouses, that leaves no excuse for the choice of that which is debauching to body, mind, and soul. Go to some intelligent man or woman, and ask for a list of books that will be strengthening to your mental and moral condition. Life is so short and your time for improvement so abbreviated, that you cannot afford to fill up with husks, and cinders, and debris.

"In the interstices of business, that young man is reading that which will prepare him to be a merchant prince; and that young woman is filling her mind with an intelligence that will yet either make her the chief attraction of a good man's home, or give her an independence of character that will qualify her to build her own home, and maintain it in a happiness that requires no augmentation from any of our rougher sex. That young man or young woman can by the right literary and moral improvement of the spare ten minutes here and there in every-day life, rise head and shoulders in prosperity and character and influence above the loungers who read nothing, or who read that which bedwarfs. See all the forests of good American literature dripping with honey. Why pick up the honeycombs that have in them the fiery bees, which will sting you with an eternal poison while you taste it? One book may for you or me decide everything for this world and the next."

#### THE FIRST STEP TOWARD RUIN.

It is indeed encouraging to the friends of purity to note that so many of the prominent newspapers of the day seem to be ready to lend a hand in the propagation of correct principles, in the uttering of warnings against the numerous social customs through which many of the young innocents are led to ruin. We take pleasure in quoting the following from the Omaha World :---

"Thousands of the best homes and kindest parents in the world turn their daughters out into society to drift about into the snares and traps lying so thick about them.-letting them go out with young men of doubtful morality. and to balls that take up nearly the whole night, keeping as late hours as they please, and with whomsoever they please,-and then are horrified when they are awakened to the fact that their girl, whom they sent out all innocence and trust, to cope with the world, has fallen a prey to some scheming, but polite, genial, and winning man who is all guilt. Can parents who are thus guilty, curse a daughter who has fallen into pits from which they could and should have saved her?

"It is the first wrong step of a girl taken innocently, and not the last, that ruins her; and nine times out of ten the watchful, careful eye of parents could have prevented that first step. Let not parents, who know how full the world is of temptation to women, blame too harshly the daughter who has fallen by reason of not knowing a little of the things of which her mother might have warned her; for it is too often the overindulgence of parents that gives the reins and license for the first step that leads to the ruin of the girl, and to the sorrow and woe of all who love her."

#### PICTURE-BOOKS.

A PRETTY boy of eight years had in his possession a magazine filled with coarse and disgusting pictures. His teacher, discovering the fact, took the book away, and scolded him sharply.

"I knew it was not the right book to have," he said apologetically, "but I have never had a picture-book of my own," and the tears rolled down his cheeks.

"What do you mean, child? Surely you have had pictures in the books your father has given you from time to time."

"My father never gives me any books."

Consulting with the child's father (he had no mother), it was found to be a fact that, with the exception of his school books, the boy did not own a book. "I do not believe in buying books for children," said the child's father, "wait until they are old enough to appreciate a book."

So while he was waiting for his child to become a man, the child was helping himself to picture-books which proved his utter downfall as the years passed by.

Ah! father, mother, buy the little ones the pretty, uplifting, educating picture-books and papers. It will take a little money to be sure, but it will tell on your dear children's characters as the days roll on.

Then besides this, it may save you many tears of agony, many heart-pangs, many bitter wails, as the birdlings leave the home nest to care for themselves. This poor father, who recently paid a heavy bill for his wayward boy, had never fortified the lad with any help toward strengthening character. He did not believe in "wasting money on trash" (thus calling good reading), and so the boy secretly obtained papers abounding in foolish and horrible stories, interspersed with pictures dreadful enough to sicken one, until his moral nature was undermined, and he became a wreck. —*Church and Home.* 

—Promiscuous dancing leads directly to impurity. It has been stated that three-fourths of New York City prostitution is caused by dancing.

#### GOOD HEALTH.



#### THE HOUSES OF THE EAST.

The artist has given us a view of one of the narrow streets of Damascus, which affords a very correct idea of the outside of an Eastern house of the better class. These houses are built of stone, usually but one story high, or gate-way, with benches on each side, where the master of the family receives visits, and dispatches business; few persons, not even the nearest relations, having a further admission, except on extraordinary occasions. From hence we are received into the court,



A STREET IN DAMASCUS.

and have a very plain and insignificant exterior, but within are often luxurious and gorgeous to a marvelous degree. The little balcony that overhangs the street often contains the only window in the front of the house, and this is usually covered by shutters.

The structure of one of these ancient houses is thus described by Dr. Shaw :---

"The streets of these cities, the better to shade them from the sun, are usually narrow, with sometimes a range of shops on each side. If from these we enter into one of the principal houses, we shall first pass through a porch,

or quadrangle, which, lying open to the weather, is, according to the ability of the owner, paved with marble or such material as will immediately carry off the water into the common sewers. Now, as this part of the house is always allotted for the reception of large companies, being also called the middle of the house, literally answering to "the midst," as referred to by Luke, it is probable that the place where our Saviour and the apostles were frequently accustomed to give their instructions, might have been in a

like situation; that is, in the area, or quadrangle, of one of this kind of houses.

"In the summer season, and upon all occasions when large companies are to be received, this court is commonly sheltered from the heat or inclemency of the weather by a velum, umbrella, or veil, which, being expanded upon ropes from one side of the parapet wall to the other, may be folded or unfolded at pleasure. The psalmist seems to allude either to the tents of the Bedouins, or to some covering of this kind, in that beautiful expression, of spreading out the heavens like a veil or a curtain. The court is for the most part surrounded with a cloister, over which, when the house has one or more stories, there is a gallery erected, of the same dimensions as the cloister, having a balustrade or else a piece of carved or latticed work going round about it, to prevent people from falling from it into the court. From the cloisters and galleries, we are conducted into spacious chambers, of the same length as the court, but seldom or never communicating with one another. One of them frequently serves a whole family; particularly when a father indulges his married children to live with him; or when several persons join in the rent of the same house. Thus it is, that the cities of these countries, though in general much inferior in size to those in Europe, are so exceedingly populous that great numbers of people are always swept away by the plague or any other contagious distemper." -Sunbeams of Health and Temperance.

#### TEMPERATE IN ALL THINGS.

And every man that striveth for the mastery is temperate in all things. 1 Cor. 9:25.

The battle between self-control and selfish indulgence is here clearly set forth. There is a stern, earnest work for us all to do, to decide which shall obtain the mastery. All our habits, tastes, and inclinations should be in accordance with the laws of health and life. By this means we may secure the very best physical conditions, and have mental clearness to discern between the good and the evil.

There are many expensive indulgences that are at the same time very injurious. They derange the digestive organs, and destroy the appetite for simple, wholesome food; and sickness and suffering are the result. With dyspepsia and its attendant evils comes the loss of a sweet disposition. There is irritability, fretfulness, and impatience, often resulting in harsh, unkind words and wrong acts.

God is not unwilling that we should enjoy the blessings of life. He has placed in our hands abundant means for the gratification of a natural appetite. In the products of the earth there is a bountiful variety of food that is both palatable and nutritious, and of these articles we "may freely eat." Such a diet will nourish the body, and preserve its natural vigor, without the use of artificial stimulants and luxuries.

Intemperance commences at the table, in the use of unhealthful food. After a time, as the digestive organs become weakened, the food does not satisfy the appetite, and there is a craving for more stimulating foods and drinks. These produce an immediate effect, and are freely indulged in. Under their influence, the nervous system is excited, and in some cases, for the time being, the intellect seems to be invigorated, and the imagination to be more vivid. But there is always a reaction. The nervous system, having been unduly excited, borrows power for present use from its future resources; and all this temporary invigoration of the system is followed by depression. The appetite, educated to crave something stronger, soon calls for tobacco, wines, and liquors.

The more the appetite is indulged, the more imperative are its demands, and the more difficult it is to control. The more debilitated the system becomes, and the less able to do without unnatural stimulants, the more the passion for these things increases, until the will is overborne, and there seems to be no power to deny the unnatural craving.

We are to be temperate in all things. Not only should we be careful to exercise judgment in the selection of proper food, but strict temperance in eating and in drinking is essential to a healthy perservation and vigorous exercise of all the functions of the body; for intemperance in eating, even of healthful food, will have an injurious effect upon the system, and will blunt the mental and moral faculties. —Mrs. E. G. White.

—I beseech you, therefore, brethren, by the mercies of God, that ye present your bodies a living sacrifice, holy, acceptable unto God, which is your reasonable service. Rom. 12:1.



BATTLE CREEK, MICHIGAN, DECEMBER, 1887.

#### PROHIBITION A FAILURE.

Some months ago, the writer, while traveling on the cars, accidentally fell into conversation with a traveling man, who, in the course of his remarks, took occasion to pronounce prohibitory legislation, as regards the manufacture and sale of alcoholic liquors, a failure wherever it had been tried. He remarked that his views upon this subject were based upon personal experience in Maine, the banner prohibition State. "Some years ago, when in Portland," said the gentleman, "I met a young man who invited me to take a drink with him. I remarked that I did not suppose anything of that sort could be obtained. +No trouble whatever,' said he : ' come along, and I will show you the way.' So I followed him along through several streets until we came to a place which did not look at all like a saloon, nor was it. Taking a key from his pocket, he unlocked the door, the place being closed, as it was Sunday evening. We both passed in, when he again locked the door. We groped our way to a door in the rear, which led to the basement. Finding ourselves in the basement, my friend led the way to still another door, through which we passed, and by means of another stairway descended to a sub-basement. Here, striking a light, I found that we were in the midst of kegs of beer, barrels of whisky, bottles of gin and wine of every description. He helped himself freely to gin and other liquors, and offered the same to me ; but I refused to take anything except a glass or two of beer, as I did not like the looks of

the surroundings, and felt as though the circumstances were a little queer, and I had better keep my wits about me.

"After an hour or two we returned to the hotel, where I learned that the young man who had accompanied me was the son of the State liquor-inspector. A young man who accompanied us, having less prudence than myself, or less ability to control his appetite, became very much intoxicated. I had some difficulty in getting him back to the hotel. I saw him safe in bed, however, and left him at ten o'clock the next morning still sleeping off the effects of the liquor he had swallowed the night before. I left Portland that day, and never have seen or heard from either of the parties since, but I have always since declared that prohibition is a failure in Maine."

The gentleman related another experience, to demonstrate the failure of prohibition to prohibit in Maine. He said he happened to be in a store trading, when the honorable Neal Dow came in and had a few moments' pleasant chat with the proprietor, who was apparently on very intimate terms with Mr. Dow. After the latter gentleman had withdrawn, the store-keeper said, "That was Mr. Dow, the champion of prohibition. Would n't you like a glass of beer ?" Whereupon, he produced a pitcher of fresh beer from underneath the counter, and gave his customer a glass. Three years later, on visiting Portland the third time, he found the store-keeper occupying the position of mayor of the city, and the liquor-shops were all open.

From this experience, our traveling companion was thoroughly convinced that prohibition was a failure in Maine, and never could be made to succeed anywhere. Although, on his first visit, he was able to obtain liquor only by the aid of a special guide, and he the son of the State liquor inspector, the liquor itself being stolen, the fact did not seem to have impressed itself upon his mind as having any bearing upon the question. We have recorded the conversation only for the purpose of illustrating the weakness of the arguments adduced by the enemies of temperance legislation.

#### THE CAUSE OF CONSUMPTION.

WE clip the following question and answer from one of our leading agricultural papers, devoted especially to the breeding and care of live-stock :---

" I have a heifer that had a bunch come on her throat last spring, and I thought she had been kicked, or bitten by a snake. The bunch finally got as large as my head. I caught her, and on opening it, thick matter ran out, which was like the discharge from the nose of a horse with the distemper in its worst stages. After I opened it, the size of the lump diminished some. It runs sometimes, and then will dry up, leaving a big seab, and in a week or two more will run again. She often scratches it. She has a calf that looks well, and in flesh is about the same as the other heifers with calves. What is the matter with her? and what shall I do to cure her? It does not seem to be contagious, as no others of mine have it; but a great many cattle around here are affected in the same way. How would it do to cut the bunch out? It is on the side of the throat below the jaw-bone, and just back of it. Any information you can give in regard to it will be gladly received.

"Reply. The malady you describe is tuberculosis, and the swelling of the glands at the upper part of the throat is one of the most common manifestations of the disease. There is, properly speaking, no cure for tuberculosis, and the best course to adopt with the heifer would be to fatten her for the butcher. It is

a contagious disease, though cattle running at pasture would not contract it from an affected animal; the case is different, however, when cattle are stabled."

We have long known that many stock-raisers are in the habit of hastening off to market any animal showing evidences of constitutional disease, but we have never before seen in any reputable journal the recommendation that diseased animals should be sent to market to be used for food. It is possible that the writer of the above is not acquainted with the fact that the use of the flesh of such animals is one of the surest means of communicating the infection; but it is well enough known to sanitarians that this is the case; and the writer has no doubt that the alarming increase of consumption in our civilized communities is due, to some extent at least, to the consumption of the flesh of animals suffering from this malady.

#### SCHOOL AND CHURCH BELL-RINGING.

No person who has not been a nervous invalid is prepared to properly appreciate the distress often suffered by a sensitive invalid from the prolonged ringing of church and school bells. Sounds which are scarcely noneed by well persons are often extremely painful to a nervous invalid, and the agilation of the nerves produced by such sounds as the long tolling of a bell, which really seems to be quite unnecessary, often excites such a person's feelings to the point of exeruciating agony. Cases are recorded in which death has certainly been hastened, and perhaps occasioned, by this cause. We cannot see any real utility in the prevalent practice of ringing a bell for four or five minutes consecutively as the last call to school or worship. The custom seems to be a relic of an age long past, when clocks and other timepieces were not in general use, so that the town or the church bell, as the case might be, was really the only means of informing the community of the time of day. In behalf of thousands of individuals who daily endure more suffering from this cause than

any kind-hearted person would wish to have imposed upon them, we would earnestly appeal to the managers and janitors of schools and churches to give this matter consideration; and we doubt not that, after a due deliberation, all intelligent people will agree with us that the prevailing custom can certainly be greatly modified. Surely no one can give a satisfactory reason why a few taps of the bell will not serve the same useful purpose as a prolonged ringing, and certainly the relief which would thereby be afforded many grateful sufferers can scarcely be estimated.

One of the best-managed schools in the country is carried on without the use of anybell whatever; and the principal challenges comparison with any school, as regards the record for punctuality in attendance.

#### ADVANTAGES OF COLD WEATHER.

The chilling winds of winter and the sharp nips from Jack Frost naturally lead us to regard the winter season as the most undesirable portion of the year, and to dread its approach as we would the expected arrival of an unpleasant visitor. A few moments' consideration, however, must lead us to largely modify, if not wholly reverse, this notion in regard to winter; and as long as winter is surely coming, in spite of any protest we can make, it may really be profitable for us to consider some of the many physical blessings it will bring to us :—

1. Winter air is pure air, unless contaminated by contact with human habitations. Probably this fact is not often thought of, yet it is really an important one. During the summer season, the air is constantly loaded with germs and foul gases, the result of decomposition of animal and vegetable matter; but the freezing temperature of winter puts a stop to all processes of decay. Consequently, the air of winter is free from these causes of disease. It is chiefly for this reason that the diseases of winter are of a wholly different character from those which prevail during the summer. In a country which has no frost, the air is perpetually polluted. This, then, is one of the greatest blessings of winter, and one, the value of which can scarcely be estimated. In tropical countries, where frost and snow are unknown, cholera, yellow fever, and other diseases which are propagated by means of germs, are always prevalent; while in countries which, like this, are blessed with a cold season, these disorders are killed out by the winter's frosts, so that they rarely prevail to any extent more than a single season.

2. Aside from its purity, the air of winter is advantageous on account of its coldness. It is true that cold air may sometimes be productive of disease, but cold air is a physiological tonic of the most powerful character. This fact every one appreciates when the coldness of a summer evening succeeds the hot sultriness of mid-day. Cold air is dense. It contains more oxygen than warm air, which is expanded and diluted by the heat. The zero air of winter contains one-fifth more oxygen than the hot atmosphere of summer. This means more thorough purification of the blood, better digestion, better liver action, indeed, a higher grade of activity generally. On this account it is that in winter all the functions are more active than in summer, with the exception of the perspiratory function, which, in summer, is stimulated by excessive heat.

It is evident, then, that those who habitually run away from cold weather, unless actually driven to do so by some pulmonary or other grave disorder which requires special protection from cold, make a great mistake in so doing. Florida and other southern States are filled every winter with a multitude of refugees from the cold, whose yellow eyes, sallow faces, and general bilious appearance indicate that breathing of pure zero air for a few months is what they stand most in need In fleeing from cold weather, such persons of. leave behind them their best friend; and in the warm, relaxing, germ-laden air of a southern latitude, they will certainly add to the already clogged and bilious state of body from which they would fain be delivered.

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The cold weather toning-up which winter brings us adds a brightness to the eye, color to the cheek, keenness to the appetite, and elasticity to the step, which no one not compelled by forbidding physical infirmities can afford to forego.

It is true cold weather is a medicine which, like all powerful remedies, needs to be taken with some care; but it is much easier for one to supply himself with extra needed warmth than to protect himself against a surplus of heat.

It is getting to be quite fashionable among well-to-do people in northern latitudes to immigrate to some warmer climate as cold weather approaches ; and just now the annual pilgrimage is beginning, and will continue until after the holidays. Of the vast numbers who thus desert their homes, perhaps ten or twenty in a hundred will return really benefited by the outof-door life, and the release from accustomed cares and duties which they have enjoyed; but the great majority will suffer serious loss by not inhaling the pure tonic atmosphere of winter, thus failing to receive the benefit nature intended for them. If only a few influential persons in the South would set the fashion and advertise the results, we might soon see almost as great a throng of bilious dyspeptics and ague-ridden valetudinarians from the South immigrating northward to enjoy the advantages of our pure winter atmosphere as we now see going in the opposite direction for the purpose of getting away from it.

Another consideration which is by no means of minor importance as regards the comparative merits of a cold and a warm winter climate, is this: unless one goes sufficiently far south to bring him within the tropics, he simply exchanges a uniform cold, dry, and invigorating atmosphere for one which is alternately relaxing, sultry, germ-laden, debilitating, or cold, damp, penetrating, chilling, and thus prolific of rheumatisms, neuralgias, and catarrhs of every description. In northern latitudes, nature prepares the system for cold weather by toning-up processes, which quicken and invigorate every fiber and function of the body. In southern latitudes the continual alternations

of heat and cold give no opportunity for such a cold weather preparation; and the constant changes from warm and damp to cold and damp which prevail in almost every semi-tropical climate are vastly more taxing to the constitution than the steady cold weather of the north. The writer is enabled to speak upon this point from personal observation and experience in the climates visited by invalids in both this country and Europe; and he feels confident that the views expressed will be endorsed by most thoughtful and intelligent persons who have given the matter consideration.

The most that has been written respecting the southern climates which are sought by invalids, has been written by enthusiasts in the interests of land speculators or other parties interested in money-making schemes, from whose representations one might fairly draw the conclusion that in the particular locality of which he happened to be reading, was a veritable Elysium,-a newly-found paradise. in which disease and discomfort must be as impossible as perfect and uninterrupted health is difficult of attainment at home. The disenchantment of one who visits some of our more celebrated rural resorts is often so sudden and effectual that he buys a return ticket, and starts home again within a week after his arrival at the Mecca toward which, perhaps for years, he has been longingly gazing. Some time since, while in conversation with a very intelligent and conscientious ticket broker, who had been engaged in the business for some years in a large southern city, the writer was told that the great majority of persons who visited the South during the winter season, return within three or four weeks, not only disappointed, but with even more decided feelings upon the subject of warm winter climates.

The above has been written for the purpose of calling attention to the fact that there are at least two sides to the question of making a change of climate for the winter; and we invite those of our readers who are thinking of joining in the annual flight from cold weather, to give the facts presented careful and candid consideration before finally formulating their plans.

#### HOT WATER DRINKING.

A FACETIOUS writer in a London newspaper, in commenting upon an address made before the Sanitary Congress, indulged in the following remarks, which he evidently thinks are very witty and appropriate :---

"He told his audience that 'systematic hot water drinking had been proved in America to be destructive of the appetite for alcohol." We entirely believe him, and if he extended the destructive effect to the appetite for muttonchops, fruits, or wheaten bread, we should believe him also. But why limit us to hot water when tartar emetic, ipecae, unrefined cod-liver oil, and perhaps twenty other drugs, would be at least equally potent? The old remedy of Rechab, total abstinence, is an easier one than that, and as perfectly effect ive as long as'it is pursued."

Evidently the writer of the above has never made a personal test of the virtues of hot water drinking. Possibly he may be altogether a stranger to water in any form. Any one who knows enough about the subject to he competent to express an opinion must be aware of the fact that copious hot water drinking is one of the most effective and efficient means of sharpening the appetite, indeed counteracting to a considerable degree the bad effects of a diet not the most wholesome. A man who would as soon take a dose of ipecac or tartar emetic, must be the possessor of a taste which is hopelessly depraved.

One Hundred and Thirty Years of Age.— We clip the following from one of our exchanges, which is in itself a sermon for temperance and simple habits of life :—

"In Hungaria there lives a man who is over one hundred and thirty years of age. He enjoys good health, and, what is more, still retains the full possession of his mental faculties. Franz Nago was born in 1756. The profuse hair and full beard of the old man are yellowish white. He has a few of his lower teeth left. He trips along lightly, and speaks in measured tones. He only takes one meal a day, and is very temperate." A Smoker's Blood.—Some time ago, a lady who was lying upon the bed from exhaustion, was subjected to the process of transfusion. Her son, a young man who had become addicted to the use of tobacco, furnished the blood. The lady rallied for a time, but within a few moments after the operation, complained that she could taste tobacco, and inquired if some one had been smoking in the room. The smoker's blood was so saturated with nicotine that even a small quantity used in the operation was sufficient to produce the effect observed. What must be the condition of the brain and nerves of a man whose system is thus saturated with a narcotic poison ?

A Dialogue in a Bake-Shop.—A porter who was investigating the cracker business, had the following dialogue with the proprietor of a bake-shop, the moral of which it is unnecessary to impress:—

<sup>44</sup> How long after they are baked, are these erackers good ? <sup>10</sup>

" In this kind of weather, a month; in winter, six weeks. Hot weather makes them ranoid."

"Is it a proper question to ask of what you make butter crackers ?"

"O yes; they are made of flour, yeast, and lard—*nothing else*. We set a sponge, let it stand for about twenty-four hours, then make it into dough in large troughs, where it is beaten up by machinery. All our work is done by machinery, which insures perfect cleanliness,"

"How do you make milk crackers ?"

"About the same way that we make butter crackers, except that we use more lard and a different kind of flour. Milk is not used in milk crackers now, nor is butter used in butter crackers, "

—Some medical writers assert that there is danger that the male portion of the American people will develop into a hairless race. There seems to be ground for the fear expressed, in the fact that one-half of all men of American birth, above thirty years of age, living in large cities, are found to be more or less bald headed. Bug Diet.—It is usually supposed that the eating of grasshoppers and similar insects is confined to a few wretched Arabs, Hottentots, and Digger Indians; but according to the London Standard, not only grasshoppers, but beetles, are eaten by various nations. The authority mentioned gives the following recipe for making "beetle paste" and "grasshopper pickles:"—

"The beetles which are used are the common black ones. They should be soaked in vinegar for six hours, then dried in the sun for two hours. The outer shell can then be easily removed, leaving the flesh, which resembles a shrimp. Now mix with flour, butter, pepper, and salt, into a thick paste, and set in a cool oven for two hours. When cold, serve with bread and butter. The grasshoppers should be steeped in salt or pork brine for two hours, then boiled in the brine for twenty minutes, then rinsed in lukewarm water. The heads, legs, and wings (if any are left) should then be removed. They are now ready for the table use, and should be eaten with crackers.

Danger in Musty Meal .- It has long been known that moldy and decayed vegetable foods are sometimes productive of violent disease, but the subject has not received that amount of public attention which it deserves. This is especially the case respecting flour and meal. Musty or stale flour and meal are frequently used, and until recently no very serious results have been directly traced to this cause. A short time ago, however, a case of poisoning occurred which clearly demonstrates the exceedingly deleterious character of such food. In a boarding-house of Mt. Holyoke, Massachusetts, forty persons were made violently sick by eating brown-bread. An examination showed that the meal from which the bread was made was stale, and that this was undoubtedly the cause of the sickness.

Meal and flour should always be kept in a cool, dry place; and if it becomes stale or musty, should be devoted to some other purpose than human consumption. **Dietetic Experiments.** — Japanese soldiers, like the majority of their countrymen, subsist almost exclusively upon rice. Some time since, the experiment was tried of feeding a company on nothing but bread and soup, with the addition of beef once a day, for one month. At the end of this time, it was found that every man had lost from three to seven pounds of flesh, indicating very plainly that the flesh diet supposed to be so necessary by Englishmen and Americans, is by no means essential to the maintenance of good health.

Unhygienic Smells .- By unsanitary smells are generally understood such vile odors as escape from cess-pools, vaults, barn-yards, sewers, and other sources of decomposing matter. There is, however, real danger in smells ordinarily considered harmless. For example, the smelling-bottle, which generally contains a preparation of ammonia, known as smellingsalts, is by many persons so frequently resorted to as to become an active cause of disease, particularly disease of the nose and throat. Ammonia is a very irritating gas, and when the delicate mucous membrane of the nose is frequently exposed to its fumes, chronic disease is set up, which may result in total loss of smell. Cases of this sort are frequently encountered among fashionable ladies. Perfumeries, even the most agreeable odors, are also not infrequently harmful. Most of the volatile oils used in the preparation of perfumeries are more or less poisonous in their nature. They may be inhaled to such an extent as to produce distinctly poisonous effects. Many a chronic headache may be traced to this cause. Strong odors as well as strong flavors are to be avoided.

Eyes of School-Children.—A Massachusetts doctor has been examining the eyes of schoolchildren, and finds that over one-half of the boys in the higher classes of the high schools are suffering with some sort of disease of the eyes. Over one-third are near-sighted. Disease of the eyes is found to increase in proportion to the length of time the students have been in school.



#### WATER AS A DIURETIC.

DR. BRUNTON says, in the Practitioner, that water is, perhaps, the most powerful diuretic that we possess, although fewer experiments have been made with it upon animals than with the others. The diuretic action of water drunk by a healthy man is very marked, and it appears impossible to explain its elimination by a mere increase in blood-pressure, whether general or local. It has the power of increasing tissue-change, and thus multiplying the products of tissue-waste which result from it; but it removes these waste products as fast as they are formed, and thus, by giving rise to increased appetite, provides fresh nutriment for the tissues, and acts as a true tonic. In persons who are accustomed to take too little water, the products of tissue waste may be formed faster than they are removed, and thus accumulating, may give rise to disease. Many gouty persons are accustomed to take little or no water, except in the form of a small cup of tea or coffee daily, besides what they get in the form of wine or beer. A large tumbler of water drunk every morning, and especially with the addition of some nitrate or carbonate of potassium, will prevent a gouty paroxysm. Still more numerous, possibly, is the class of people who arise in the morning feeling weak and languid. Many such people are well fed, they sleep soundly; and it seems almost impossible to believe that the fatigue which they feel in the morning can result from imperfect nutrition, more especially as one finds that after moving about, the languor appears in a great measure to pass off. It seems that this languor must depend upon imperfect removal of the waste products from the body, as we know that the secretion of urine in healthy persons is generally much less during the night than during the day. Such people should drink a tumbler of water before going to bed, in order to aid the secretion of urine and of the waste products during the night, *—Selected*.

An Ice Poultice .- Ice compresses are often very useful, but in their employment it is necessary to be careful not to allow the parts covered by the compress to become too greatly chilled, as serious harm has sometimes been done in this way. The ice poultice overcomes this difficulty, and also prevents the rapid melting of the ice. This is the way it is made: Spread upon a cloth of the proper size linseed meal to the thickness of one-half or threequarters of an inch. Embody in the meal bits of ice as large as a medium-sized marble. Sprinkle some of the meal over the ice so as to cover it about one-eighth of an inch. Cover first with a single thickness of muslin, then lay over all a flannel cloth folded to three or four thicknesses. The meal protects the skin from immediate contact with the ice, and by excluding the air prevents rapid melting of the ice.

**Chilblains.**—Frost-bite, or chilblain, is a malady from which persons exposed to the cold not unfrequently suffer at this time of the year. If treated soon after exposure, the affected parts may be easily restored to a healthy condition by the following very simple treatment :—

After undressing the feet for retiring at night, take an alternate hot and cold footbath, holding the feet first in hot water then in cold water, alternating every half minute for ten or fifteen minutes. By this means the circulation in the affected parts is stimulated, and the diseased condition thereby relieved. By persistent use of this remedy, not only temporary but permanent rener, may be secured, even in cases in which the affection has existed for quite a long time.

Freezing .- Parts which have been frozen should not be thawed too quickly, as more harm will be done by the rapid thawing than by the freezing. If a person has been exposed to the cold so long that considerable portions of the body are frozen, he should be carefully kept away from the fire or a very warm room, being first brought into a room of quite low temperature, where the frozen parts should be rubbed with melted snow, or very cold water, until they become pliable. The temperature of the room should be gradually raised, as the parts are thawed. Sometimes it is necessary to continue rubbing for several hours before the interrupted circulation is restored. After this has been accomplished, the parts should be anointed with sweet-oil or vaseline. By this course, much of the injury which generally results from freezing may be avoided.

If ulceration takes place, the sore should be treated the same as a burn.

If a person finds himself in danger of freezing, through exposure in the open country in very cold weather, he should resolutely resist the drowsiness which will come over him, and keep moving until the last. If a piercing wind is blowing, he should take shelter in some hollow in which there may be an accumulation of snow. The snow itself is not a bad protector from the cold, and a person would be much safer buried in a snowbank than when exposed to the wind.

How to Keep Sweet.—An exchange speaks thus pointedly on a subject, which may be of practical interest to more persons than would willingly like to acknowledge the truth :—

" 'Philip the Fair' wishes to know what he can do to prevent an unpleasant odor from his feet. This is a delicate question. The most suitable answer is, Wash them. There is not, in general, half enough attention paid

to bathing. Persons will let themselves get all clogged up with the foul and diseased emanations which the skin very sensibly insists on throwing out, expecting the individual to thereupon remove them. This he does not do half the time; but he sometimes writes to the newspapers, asking what he can rub on himself so he will not smell bad.

"The answer is plain : Take a daily bath, a good rubbing in soap and water, taking care to rinse the soap-suds off. Rub dry. If you do this, depend upon it there will be no bad odor from any part of your body. If your feet perspire much, change your stockings twice a week.

"Another point about the daily bath is that one who makes a habit of it, is not half so liable to take cold as one who neglects it."

For Ingrowing Toe-Nails.—This very painful condition may often be greatly relieved, if not entirely cured, by the application of a strong solution of tannin. Obtain at a drug store one dram of tannin. Place it in a bottle, and add an equal bulk of water; and every night before retiring moisten the affected parts with the strong solution thus obtained. After the course of a few days, there will be observed a great change for the better. If, at the same time, the affected toe is protected from pressure of the shoe or boot, an entire cure may often be obtained.

Simple Eye-Drop.—In the application of medicines to the eye, most clumsy methods are often employed to take the place of a medicine-dropper. A simple and very efficient dropper may be made by simply rolling up a bit of soft paper, or a little absorbent cotton twisted into a roll of moderate thickness may be made to serve the same purpose.

Seasickness.—The latest remedy proposed for seasickness is vigorous rubbing of the side of the head just behind the ear, over the bony prominence found at this point. A medical professor, writing to a prominent medical journal, claims that he cured himself of seasickness in this manner.

#### GOOD HEALTH.



#### HOW ALICE MISSED THE CHRISTMAS-TREE.

ALICE LONG was a winsome little maiden of eight years, who lived with her parents in a Univing New England town. She was of a light-hearted, happy disposition, and on this particular morning was fairly dancing for joy ; for had not mamma just received a letter from Aunt Lizzie saying that Uncle Hal, Aunt Annie, Aunt Lizzie, and the two consins, Robert satchel; for this letter has been delayed, and I have no doubt the party are now on their way, and will reach here in a few hours."

As Mrs. Long had anticipated, they had scarcely finished their preparations before the party arrived; and taking in Alice, they were soon speeding away over the glistening snow, along the country roads which led to Winthrop farm, at which place they



and Joey, were going in the big sleigh to spend Christmas at Grandpa Winthrop's ; and if mamma was willing, they would stop and take Alice with them.

Alice knew that a visit to grandpa's meant the most delightful season of romps and games with the cousins, interspersed with interesting stories, such as only grandpa knew how to tell; and on Christmas eve, just the loveliest, brightest of Christmas-trees, decked with lights and beautiful gifts, in which each member of the family shared.

"Oh, how delightful ! May I go, mamma ?" asked Alice, half fearing that because mamma herself would be unable to go, it might not be thought wise to allow her to do so. But mamma, who desired her dear little girl to have a most happy Christmas, answered, "I think you may, Alice; and we will at once pack your arrived soon after sunset the day but one before Christmas.

The following day, which, though cold, was bright and pleasant, the children planned to spend coasting, for which there was an excellent opportunity on a littic hill near the house. Now Alice, although generally a most obedient child, had one great fault; she "never stopped to think." Her kind mother had often told her that when she made a change from her warm grayflannel suit, which she was in the habit of wearing each day to school, to the dainty garnet cashmere which delighted her heart on all festive occasions, that she must not forget to add an additional suit of under-garments, which had been provided to make up for the lesser warmth of the cashmere. But Alice, with her mind so full of thoughts of the wonderful tree of which she had caught glimpses, as her aunties passed in and out through the parlor doors the evening previous, and of anticipations of the day's sport, quite forgot to put on the additional suit when she dressed herself in the morning, and afterward she thought it too much trouble to make a change. "Just for one day, I guess it will do no harm," she thought to herself.

After breakfast, Robert and Joey were in great haste to be off with their sleds, and Alice, in her desire to accompany them, neglected to take the time to put on her warm leggins and hood, as she ought to have done: the pain in her head increased, and another in her chest began, so that when evening came, and the Christmas candles were lighted on the beautiful tree in the parlor, poor Alice was too ill to be present. For three long, weary days and nights she tossed and moaned upon her bed of pain, losing all the gay pleasures she had anticipated during her visit; but she learned a lesson which she never forgot,—to be more thoughtful and careful, especially in regard to such things as are necessary to keep the body well and strong.



for while sitting upon the sled, which her courteous little cousins took turns in drawing, her limbs, insufficiently protected and body less warmly clad than usual, would be far more apt to become chilled than if she were walking and running.

The feet and limbs are so far away from the heart, which is the center of warmth for the body, that they naturally need more clothing than any other part of the body to keep them warm; and especially is this the case when keeping still out in the cold, as when one is riding. If one is running and jumping, the exercise will help to keep him warm. Alice had learned this fact at school, but she was in such a hurry to play that she "did not stop to think ;" and the result was that when the children came in from their sport, although they all declared they had had a capital time, little Alice was blue and shivering with cold, and so hoarse she could hardly speak aloud. Her head ached too, and in a little while she was so ill that Aunt Lizzie said she must be put to bed, and be given some thorough treatment.

In spite of all the kind care and treatment that Aunt Lizzie and Aunt Annie and grandma gave ber, Ale and Beer Measure, —One day, when the lesson was the table called "Ale and Beer Measure," a little boy, remarkable for his correct lessons, was quite unprepared.

"How is this, John ?" said the teacher.

"I thought it was of no use," said John.

- "No use !" said the teacher.
- "No, sir; it's ale and beer measure," said John.

"I know it is," said the teacher.

"Well, sir," said the little boy, "father and I think it is no use to learn about ale and beer, as we never mean to buy, sell, or drink them."—Scleeted.

Cigarette Smokers at a Discount.—A story comes from California which indicates that boy smokers of eigarettes are heavily discounted in that part of the world. According to the account : "A rancher in Proche a week ago offered to swap his eighteenyear-old boy who smokes eigarettes, to any person for a dog; and finding no takers at that, offered five dollars to boot, but even then could not make a trade."

# Question Box.

[ [ ] All questions must be accompanied by the full name and address of the writer, as it is often necessary to address by letter, the person asking the question.]

Fermented Food—Canned Fruit—Salicylic Acid —etc.—D. H. J., of Missouri, makes a number of inquiries, as follows :—

1. Has it been thoroughly proved that fermented food is in any way hurtful to the system ?

2. Is fruit preserved in air-tight cans perfectly wholesome ? and is ripe fruit dried in the sun wholesome ?

3. Are cider, fruit, vegetables, etc., preserved from souring by salicylic acid, in every way healthful?

4. Is apple-butter, made by cooking fresh boileddown cider from ripe apples carefully prepared, a healthful food ?

5. Does fermentation take place in molasses made from cane juice, or in honey or molasses that is candied ?

6. As eggs and milk are liable to contamination by disease, why should we not discard them as well as flesh food?

7. Are vegetables, such as beets, potatoes, cabbage, tomatoes, peas, onions, beaus, lettuce, rhubarb, etc., as healthful and nutritious as fruits and cereals ?

8. How much food ought a working man to eat a day? How much is required for one who leads a sedentary life?

9. I am afflicted with catarrh. Will wholesome diet and proper clothing effect a cure?

Ans. 1. No; fermented foods are undoubtedly more or less harmful, especially when taken in a state of fermentation, or without subjecting them to such a process as will destroy the spores of the yeast-plant which causes the fermentation. We know of no way in which fermented foods can be considered in any way beneficial. These remarks, of course, apply to fermented bread, which is much less wholesome than unleavened bread, though the action of the gastric juice of healthy persons probably prevents the growth of the yeast spores in the stomach, and thus prevents the injury which would otherwise arise, and which is often noticeable in persons suffering from slow digestion, who cannot eat fermented bread without having "sour stomach." Fermented bread may be made wholesome by cutting it into thin slices and rebaking, or toasting, in an oven until brown.

2. Yes; some dried fruit, however, is more likely to be unwholesome than canned fruit, from the deposits of insects, dust from the air, etc.

 No; food of any sort preserved by salicylic acid is in no way healthful. Salicylic acid is a poison, and cannot be habitually used without injury. 4. Fruit which has been subjected to boiling down until its juices are sufficiently concentrated to prevent fermentation, is less wholesome than fresh fruit, as the long boiling renders the fruit more difficult of digestion. However, it may be used in small quantities by healthy persons without detriment.

5. No.

6. Diseased milk and diseased eggs are certainly unwholesome, and great care should be taken to secure these articles in a wholesome condition, or they should not be eaten. The principal reason we have to offer why eggs and milk may be used even by those who diseard flesh food is that their use does not involve the taking of animal life.

7. Fruits and grains are more naturally adapted to the digestive organs of man than vegetables of any sort. Of the articles mentioned, the onion is a very questionable article of food. Rhubarb should be discarded altogether, as the acid which it contains is a rank poison, while tomatoes should be classed with fruits instead of vegetables.

8. The amount of food a working man requires depends upon the size of the man, and the amount of work which he does. We may say from twenty to thirty ounces of food which is free from water. The amount of food required by a sedentary person depends also upon the degree of his sedentariness. Persons who are absolutely inactive, as one who lies in bed, and engages in no physical effort, can subsist upon a very small quantity of food, perhaps four to six ounces daily ; while a person who has little physical exercise, but is active mentally, may require from a pound to a pound and a half of water-free food. But this is a question which cannot be answered specifically. Each individual should carefully adapt his food to his own conditions, giving special regard to the amount and kind of work accomplished, the temperature to which the individual is exposed, the amount of clothing worn, and the kind of food taken. We should always remember that it is what we digest that nourishes us, rather than what we eat.

9. Probably not. Cases of chronic catarrh usually require local treatment in addition to proper hygienic conditions.

Callus.-D. P. A., of Washington Territory, wishes to know what to do for a callus on the ball of the foot?

Ans. A linseed or slippery-elm poultice to which a tea-spoonful of carbonate of soda has been added, should be applied over the callous portion several nights in succession, so that when the thick skin is soft, it can be easily rubbed or scraped off. At the same time the part should be relieved of pressure by placing over and around the affected part a piece of buckskin or soft leather of proper thickness, with an opening cut in the center of sufficient size to admit the callous part. In resting the weight upon the foot, the pressure will fall upon the ring of leather outside of the callus. **Indigestion.**—A. F. H.: From your description, I think the patient is suffering from a form of indigestion. Would recommend fomentations over the stomach and bowels for half an hour on going to bed at night.

Catarrh.—Mrs. M. F. W.: I think you are suffering with chronic bronchial catarrh. Would advise that you change your residence to a warmer, dryer, and more equable climate.

The Syphon Syringe.—A subscriber wishes to know where a syphon syringe may be obtained.

Ans. You will find a syringe of the description you wish, which we believe to be the best made, described in the advertising pages of this number.

Literary Notices.

THE WOMAN'S JOURNAL: Brattleboro, Vermont. Subscription price, \$1.00 per year.

This, one of the most excellent monthlies, is especially devoted to the interests of woman's work in industries, missions, charities and reforms. Its aim is a worthy one, and we feel no hesitancy in commending it as an interesting and valuable periodical for the home circle.

THE SANITARIAN: New York City: A. N. Bell, M. D., Editor, Published monthly, Subscription price, \$4.00 per year.

This, the oldest sanitary journal in the country, comes monthly to our table, filled with most valuable instruction on sanitary topics. It is a standard journal, and well deserves the patronage of all interested in sanitary subjects.

THE HOUSEHOLD.—Of the various magazines issued in the interest of housekeeping and home-making, we know of none of more practical value than the *Household*. It always contains a large stock of useful knowledge, and imparts it in such plain, familiar language that the reader feels she has in reality found a helpful friend. Subscription price, \$1.10 per year. Published at Brattleboro, Vermont.

THE CULTIVATOR AND COUNTRY GENTLEMAN is one of the standard agricultural papers, as well as one of the oldest in the country. All departments of agriculture are represented in its pages. Bee-keeping, poultry-raising, dairying, horticulture, and stockraising all receive a share of attention. Neither are the farmers' wives forgotten, for a fireside department contains many valuable thoughts and suggestions especially for their reading. Published weekly, at Albany, New York, at \$2.50 per year.

THE December number of Arthur's Home Magazine closes the fifty-sixth volume of that wellknown periodical. It is filled with a choice variety of literary articles, stories, and poems, interspersed with beautiful illustrations. The following are some of the many things of interest contained in this number:—

Christmas Carol; Some American Impressions; Hoppity's Christmas Blessing; Fir Cones; The Christmas Light; Religious Readings; Texts for Christmas Decoration in Churches; and Hints for Bread Winners.

T. S. Arthur and Son, Publishers. Subscription price, \$2.00.

EARNEST WORDS is the title of a new magazine which has, with the December number, reached its third issue. It is devoted to literature, science, and reform. The following articles appear in the table of contents of the current number: A Dime per Diem Diet; The Anarchists; A Secret; What to Do in Emergencies; A Pin; American Politics; History of Mind-Cure; Reduction of Corpulency. It is edited by Doctors Ernest, Helen Densmore, and S. H. Preston, and is published at 1398, Broadway, N. Y. Subscription price, \$1.00 per year.

THE HOME GUARDIAN, with its December issue, completes its forty-ninth volume. As usual, it comes laden with very many good and interesting things for both old and young. It is a monthly magazine, containing departments of general literature: Woman's Work; Health; The Mother's Bureau; Young Ladies: Satchel; The Children's Fireside; and Editorial. It is issued by the New England Moral Reform Society, No. 6, Oak Place, Boston, at \$1.25 per year. The profits accruing from its publication are devoted to the work of the Society at the Woman's Temporary Home, for which reason, as well as for its own value as an excellent periodical, it deserves the patronage of all persons interested in moral reform.

NATURAL LAW IN THE BUSINESS WORLD. By Henry Wood: Lee and Shepard, Boston. Price 30 cents.

This is a cheap edition in paper covers of Mr. Wood's valuable contribution to economic science, in which he discusses the entire labor question under the following heads :---

General Principles; Supply and Demand; Labor, Laborers, and Production; Labor Combinations and their Effect on the Laborer; Socialism; Dependence and Poverty; Employers and their Duties; State Arbitration; Can Capital and Labor be Harmonized? Economic Legislation and its Proper Limits; Wealth and its Unequal Distribution; Centralization of Business; Alternations of Prosperity and Depression; Railroads and Railroad Consolidation; The Corporation; Conclusion.

# GOOD HEALTH



# NATURAL BREAD.

UNDOLETERLY many of the tired housewives of the land have sometimes wished, as did a little girl of our acquaintance, "that bread grew on trees, and did n't have to be made every day." Such is indeed the case in many of the tropical islands in the Pacific, where is found a tree bearing a large fruit, about the size of a melon. This fruit occupies the important position that is held by cereals in temperate elimines, and forms the chief food staple of the inhabitants. There



THE BREAD FRUIT.

are several varieties of the bread-fruit, as it is called, which ripen at different periods, thus affording a nearty constant supply throughout the entire year. It is gathered for use just before it ripens, when it is found to be gorged with starchy matter, to which its esculent value is due. It is cooked in a variety of ways, the more common method being to bake it entire in hot embers, and scrape out the interior, which, when woll done, is of a soft, smooth consistency, with a taste which has been compared to that of belled potatoes and sweet milk. Mr. A. R. Wallace, the celebrated traveler, says of the bread-fruit:—

"Here (In the island of Amboyna) 1 enjoyed a luxury I have never met with before or since—the true bread-fruit. I compared it to Yorkshire pudding; others thought it was like mashed potatoes and milk. It is generally about the size of a melon, a little fibrous at the center, but everywhere else quite smooth and much like pudding, something between yeast dumplings and batter pudding. With sugar, milk, butter, or treacle, it is a deficious pudding, having a very slight and deficate but characteristic flavor, of which, like that of good bread and potatoes, one never gets fired.<sup>55</sup>

## CARE OF CABBAGES.

As this is the season of the year for storing this vegetable, the following suggestions which we quote from the *Country Gentleman* may prove serviceable 5—

"Cabbages, carefully stored, will not lose anything, and often gain much by being altended to in a proper manner. The general practice is to pull, turn over with roots up, and allow them time to 'dry' before storing. Now a cabbage, if it lies a day in the bright sum with its roots up, loses considerable moisture by evaporation, leaving it in a wilted condition; and if kept long in this state, is unfit for use. By pulling on a dry day, about the account work in November, and storing at once, they have not had enough frost to injure them, nor are they allowed to get dry and lose their succulent condition.

"When pulling them, all hard heads should be selected and kept by themselves, to be packed in irenches with the leaves carefully tucked around them, and roots up, using for a covering finely pulverized soil, packed closely around the heads. If the weather is warm at the time, only about an inch or two is put on, and more added as the severity of the weather domands.

<sup>11</sup>The loose heads should be kept by themselves, and buried with roots down and heads up; in this condition they gain in solidity, if not in size. They must never be allowed to get very dry, or have much of the soil shaken from the roots when plauted. It takes a good deep furrow to get them suitably set in, with roots down, but it can mostly be done with a plow. Much of the covering can also be done by bringing the soil up against the plants with the plow, and then shoveling it around them as compactly as possible. If packed firmly, they keep better, and mice are less likely to injure them by burrowing around and eutting them.

"In order to get at them during the winter, a covering of leaves or any rough material which will keep out the frost, is necessary."

# GOOD ENOUGH FOR JUST OUR OWN FAMILY.

WE have sometimes heard such remarks made when the mistress was arranging a room for common, everyday use, or preparing or selecting the food for the home table. At the same time we have seen no thought of economy, either of money or strength, when preparing the guest-chamber, or purchasing or cooking the food for expected company. Indeed, we have known the family, the home, pinehed in such comforts as add to the peace and harmony of a family, both before and after the advent of expected guests, in order that they could be able to make an ostentatious display of hospitality.

This ought not so to be. The family comfort, and the care that is so necessary to build up a happy home, should be the first thought. Provide for them the best that can be reasonably obtained, and cordially welcome friends to share the good and pleasant things with the family. How can a mother hope her children will be refined, attentive, and good-mannered, if they see only the most common of everything when alone with their parents, but are called upon to put on company manners just for the occasion, when a guest arrives. Love of home will grow cold, attempts at refinement will be a farce, and good manners will rust or become bashfulness, awkwardness, or sullen disrespect, if called into active use only on stated occasions. Constant and daily use can keep all the best qualities bright, and develop a natural, graceful exhibition of them, if children understand that this will be always expected of them. When this attention is daily given to father and mother, sister and brother, It becomes a second nature, and not an awkward, translent exhibition, only to be used for company.

Because we place the family first, we would not be the family, its comforts and happiness, has claims superior to all others. We do not understand why there should be any difference. But if for any unavoidable reason, this may seem necessary, we trust it will be only occasionally. Let the family have the best that can be reasonably afforded; and cordially welcome your friends to share, not monopolize, all good things with you. We know that in oblen times the best room in the house was set apart for the "guest-chamber." It was thought necessary to furnish it more elaborately and daintily than any other room in the house, and by so doing manifest respect and affection for those who might be expected occasionally to occupy it. We think this a great mistake. Make the guest-chamber as pleasant, home-like, dainty, and convenient as your income will allow; but the comfort, taste, and convenience of the home, the family, must not be curtailed or encroached upon. Your guests should receive all kindness and courteous attention possible. They should find their apartments so mynang that they will be sure they are surrounded with cordial and thoughtful care.

All this can be done without any necessity of selecting the largest and most imposing room in the house. That should be the parents' room. There is not the least reason for making a revolution — an entire change in the regular routine of home life—when a guest arrives. Do not disarrange or break up the usual home life. If you do, your children will be in danger of looking upon guests as an affliction, rather than as a pleasure. If thus defrauded, in after life, when they have homes of their own, remembering the discomforts of their childhood homes, they may not develop anything like courteous hospitality.— Selected.

To Dry Sweet Potatoes.—Wash them clean, drop them into a pot of boiling water, let them stand on the stove until the skins slip off easily; then cut them into slices, and spread them out to dry. If the weather is clear and bright, two days will dry them sufficiently. To prepare for cooking, put them into water the night before. Boil them the next day.

Orange Tapioca.—Wash a supful of tapioca in several waters. Cover with cold water, and soak over night. In the morning, put it over the fire, with a piut of boiling water. Simmer slowly until the tapioca is clear. Remove the skin and seeds from one dozen sour oranges, cut in slices, and stir into the boiling tapioca. Sweeten to taste. Cool, and serve with cream and sugar.

Hoe-Cake.—A correspondent says: "To prepare hoe-cake with the genuine Southern flavor, make a very stiff batter of corn meal and water, adding just a trifle of sait. Heat a clean, smooth griddle; and when hot, drop on enough of the batter to cover it quite thickly, pat it down smooth, and cook slowly. When browned, turn it over and brown on the other side. Break in pieces instead of cutting, and serve quite hot."

Keeping Nuts,—It is well known that chestnuts are much sweeter after being dried for a little time than when first gathered. But if the drying process is allowed to go on for a long time, they are apt to become too hard to be eatable. These and other nuts can be kept from becoming too dry by mixing them with sand. If mixed with an equal bulk of sand, in a box or a barrel, and kept in a cool place, the nuts may be preserved in an eatable condition until spring.

-To remove spots from broadeloth or woolen goods, take an ounce each of glycerine, alcohol, and sulphuric ether, two ounces of aqua ammonia, half an ounce of powdered castile soap, and water enough to make one quart of the mixture. Use with brush and sponge, and rinse with pure water.

# Publisher's Page.

We have received from Eld. C. L. Boyd an interesting article on "South Africa," which we shall take pleasure in presenting to our readers, in an early number of our journal.

This number closes the twenty-second annual volume of this journal. The efforts which the publishers have made to improve the journal during the past year, have called forth from both old and new subscribers many words of commendation. The managers of the journal have certainly endeavored to excel all their previous efforts to make the journal an ideal health journal for the people. If their success in this direction may be measured by the prosperity of the magazine, it is, to say the least, gratifying ; for at the present time each monthly edition is nearly four times as great as one year ago.

Nevertheless, neither editor nor managers feel at all content with the degree of merit or the measure of prosperity yet attained. If that point has not been already reached, the managers of this magazine are determined to make it superior to any health journal ever published in this or any other land; and they see no reason why its circulation should not be increased from a comparatively limited number to a hundred thousand or more. If each one of our sixteen thousand subscribers will send us six additional subscriptions, when renewing his own, the thing will be accomplished.

For more than twelve years, GOOD HEALTH has been a monthly visitor to various parts of South Africa. Recently our list of subscribers in this remote region of the earth has been very largely increased, chiefly through the efforts of Eld. D. A. Robinson, who, in company with Eld. C. L. Boyd, has recently established a mission in Cape Colony, with headquarters at Cape Town. A prominent feature in the work of this missionary enterprise is health and temperance reform, in which particular we believe it to be unique. Elds. Robinson and Boyd, with their wives, have been actively engaged in this line of work for many years, and we are glad to know that they are meeting with such excellent success in their new field. We are glad to say to our old patrons and subscribers in South Africa that hereafter they can find a full assortment of our publications at Cape Town, descriptive circulars of which they can obtain at any time by addressing Eld. D. A. Robinson, at that place.

The managers of this journal take this opportunity to express their sincere appreciation of the interest which has been taken the year past in the circulation of Goon HEALTH by many of its friends and patrons. Through this increased interest the circulation of the journal has been nearly quadrupled. While expressing our gratitude for the efforts which have been made, we would also express the earnest hope that these efforts may not be relaxed, but that they may be continued during the year to come; and we trust that at the end of the year 1888, we may be able to report a circulation very much larger than at present.

The Sanitarium, a new cut of the buildings of which appears upon the last page of our cover, is enjoying a larger patronage than ever before at this season of the year. It is probable that no institution in this country is so largely resorted to by persons suffering from difficult chronic diseases which have resisted ordinary modes of treatment. To such, this institution offers advantages which are probably not equaled elsewhere, certainly not in this country. The medical staff consists of eight able physicians, who give unremitting attention to the wants of those under their care. The medical facilities of the establishment have been drawn from all scientific sources, and embrace every appliance and remedy known to the scientific medical profession. Those who desire further information concerning this institution, its modes of treatment, its facilities, etc., should address the managers for a circular. Letters should be addressed, SANITARIUM, *Battle Creek*, Mich.

The inhabitants of Tampa, Florida, where yellow fever has been for some time prevalent, are jubilant over the fact that Jack Frost gave them a hard nip the other night. For years they have been extolling their climate because it is below the frost line, but just now they feel much more friendly toward Jack Frost than they do toward Yellow Jack.

A Good Winter Climate.-At this moment, thousands of persons are saying to themselves, their friends, and their physicians, "Where shall I go to spend the winter ?" Undoubtedly many persons require protection from the extreme degree of cold which is sometimes experienced in northern latitudes; and unquestionably, there are a few who should be altogether protected, if possible, from exposures to cold. The latter class is, however, a very small one, and is chiefly made up of hopeless cases of consumption and of other incurable diseases, for whom the most that can be done is to render them more comfortable while they live. By far the larger class of those who require protection from extreme cold would be greatly benefited by the tonic influence of cold dry air taken in moderate doses, and by breathing the exceptionally pure atmosphere with which the dwellers in frosty climates are blessed during the cold months of the year.

For those who require this sort of protection, we know of no place which affords the advantages offered by the Medical and Surgical Sanitarium, of Battle Creek, Michigan. The main building of this establishment, which is altogether the largest ever erected for the purposes of a scientific Sanitarium, is heated throughout by warm air. Halls, parlors, of fices, and all public rooms, as well as bedrooms and private rooms, are properly warmed and maintained at an equable temperature by an elaborate system of heating and ventilating, and apparatus for the distribution of air, which includes two five-foot ventilating fans, such as are not in use in any other establishment in the world. All interested in this subject should read the Winter Circular sent out by this establishment. See advertisement on cover.

#### A SPLENDID HOLIDAY GIFT.

At this season of the year, everybody is looking about for something to offer as a Christmas present or New Year's gift. Millions of dollars are annually expended at this time for useless, and oftentimes worse than useless gifts. The majority of articles offered as Christmas presents are mere trinkets, which are regarded by those who receive them only for a very brief time; and then, sooner or later, find their way to the waste-box. Sensible people will pursue a sensible course in presenting their sensible friends with sensible presents.

To those who desire something which is useful as well as ornamental, which is instructive as well as entertaining, which will be of lasting rather than of momentary interest, we would suggest that all these desirable qualities will be found combined in a new work recently issued at this office, entitied "Sunbeams of Health and Temperance." A glance at the condensed table of contents of this work, found in the advertising pages of this number, will convince any one that the work is all that is here represented.

The work is sold by subscription at the following prices: Cloth, \$1,90; cloth, gilt edges, \$2.25.

This work is being introduced by canvassing agents; but as it is so late that our agents will not be able to reach all who may desire to purchase a copy of this work before the holidays, we will, for the next sixty days, send the work post-paid, at the prices named.

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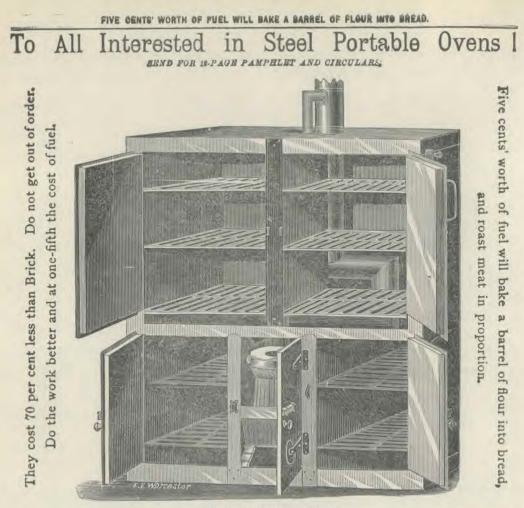
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SANITARIUM,

Battle Creek, Michigan.





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 repeat-edly 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, Read-ing, Pa.; the Forest City House, Cleveland, O.; H. C. Austin, Binghannton, 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, Mach-Inac, Mich.; Louis Bach, Wellsburgh, N. Y.; J. Geo, Davis, Mohawk, N. Y., B. F. Simmons, Castle, N. Y.; A. E. Potter, Mich.; Louis Bach, Wellsburgh, N. Y.; Joseph Mecklinherger, Suspension Bridge, N. Y.; Avery & Miller, Kalamasoo, 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 3, 1886.

Mr. Adams 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 Yours respectfully, SISTER MARY FIDELIA.

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

Rochester, N. T., December 7, 1886.

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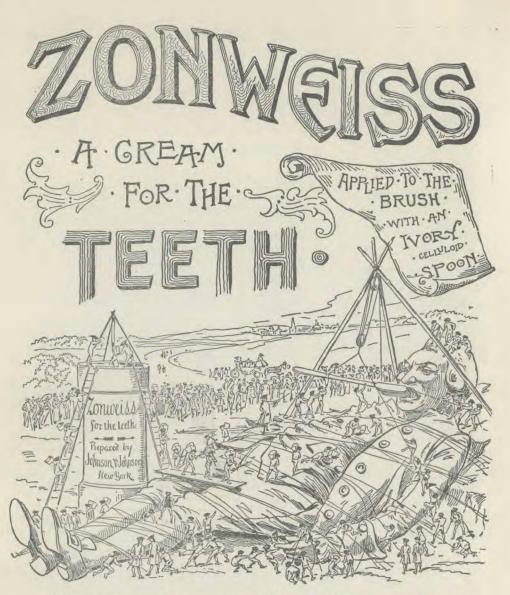
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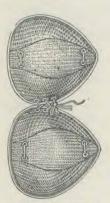
tume" is an interesting account of the origin of many absurdities in fashion, while pointing out the better way in dress. : : : : : : : : : Health and Temperance Miscellany. In this department is contained a choice selection of articles, stories, sketches and poems relating to the various practical and interesting phases of sanitary and temperance reforms. : : Hygiene for Young Folks Contains a mine of instructive informa-tion for boys and girls on various is in the second secon . . . . Other Departments Add to the interest of the book entertaining and practically useful information on numerous health topics, making this volume almost an encyclopedia of health and tem-perance subjects. . . . . Profusely Illustrated. The volume is illustrated by hundreds of en-gravings, many of which were made expressly for this book, together with EIGHTEEN FULL PAGE ILLUSTRA-TIONS, five of which are beautifully colored plates. : : : : : : One of the Most Unique and Interesting Volumes Ever Published. It contains the results of many years' research on the part of the authors. Its popularity is well shown by the fact that the publishers received orders for 10,000 copies of the work in advance of publication. Just the Thing for a Christmas Present. This attractive work is now in press and will be ready for delivery before the holidays. . . . . . . . . . . . Over 220 Quarto Pages. PRICE, CLOTH, \$1.90; CLOTH, GILT-EDGE, \$2.25. · · · · · · · · · · · Sold by Subscription. . . . . AGENTS WANTED IN ALL PARTS OF THE UNITED STATES AND CANADA. Address HEALTH PUBLISHING CO. BATTLE CREEK, MICHIGAN.

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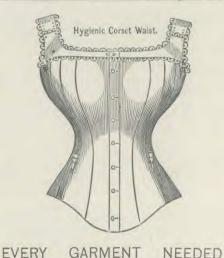


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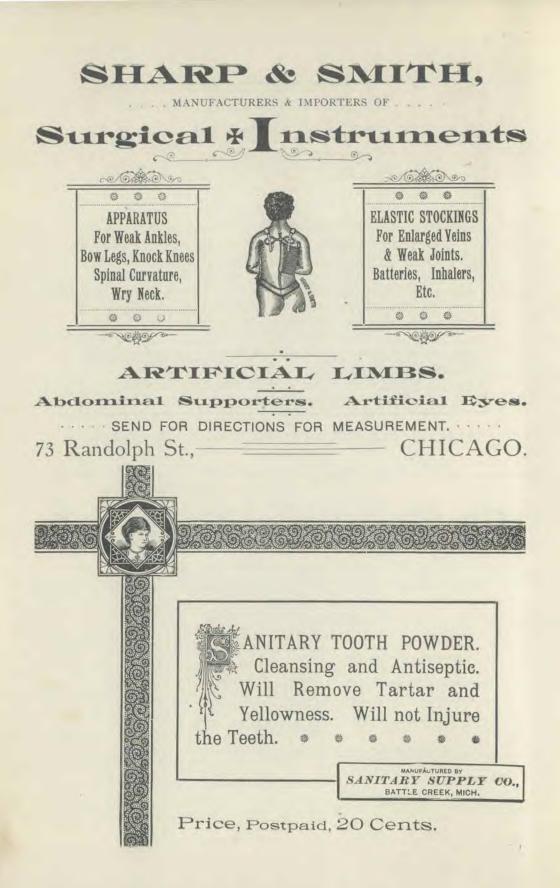
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# NEW TEMPERANCE CHARTS.

# By J. H. KELLOGG, M. D.

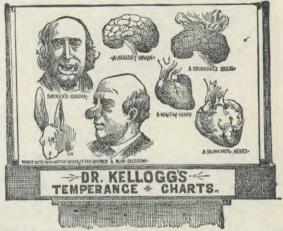
FTER a careful study for several years of the PEYSICAL EFFECTS OF ALCOHOL AND TOBACCO upon the human body, with unusually favorable opportunities for observation through post-mortem examinations, chemical analyses, and microscopical investigations, the author has prepared, by the aid of the best artists to be secured, a series of

# TEN COLORED PLATES.

Which depict in the most graphic manner possible, the ravages of alcohol among the delicate structures of the human body. The following is a list of what is exhibited by the several Charts :-

## PLATE 1. The Alcohol Family.

- 11 2. A Healthy Stomach.
- ... 3. Stomach of a Moderate Drinker.
- 10 4. Stomach of a Hard Drinker.
- 11 5. Stomach in Delirium Tremens.
- ω. 6. Cancer of the Stomach.
- 7. A. Healthy Nerve Cells. B. Fatty Degeneration of Nerve Cells. C. Healthy Blood. D. Blood of an Habitual Smoker. E. Blood of an Drunkard. F. Blood Destroyed by Alcohol. G. The Drunkard's Ring. H. Healthy Nerve Fibres. I. Faty Degeneration of Nerve Fibres, J. Healthy Muscle Fibres. K. Fatty De-generation of Muscle Fibre.
- 8, Smoker's Cancer. A Rum Blossom. A Healthy Brain. A Drunkard's Brain. A Healthy Heart. A Drunkard's Heart.



9. A. A Healthy Lung. B. Drunkard's Consumption. D. A Healthy Kidney. E. Enlarged Fatty Kidney of Beer Drinker. F. Atrophied Kidney of Gin Drinker. G Healthy Liver. H. Liver of Drunkard showing Nutmeg Degeneration. I. Magnified Section of Fatty Liver of Drunkard. J. View of an Eye diseased from the Use of Tobacco and Whisky. K. View of the Interior of a Healthy Eye.

- 10. ALCOHOLIC DRINKS, showing the percentage of Alcohol contained in the common Alcoholic Beverages. ADULTERANTS OF ALCOHOLIC DRINKS, showing a list of the various poisons used in adulterating the various liquors. SPHIGMOGRAPHIC TRACINGS OF THE PULSE, showing the effects of alcohol and tobacco upon the pulse. A. Pulse of a Healthy Person. B. Pulse of a Moderate Drinker. C. Pulse of a Drunkard. D. Pulse of an Old Tobacco User. E. Pulse of a Young Smoker.
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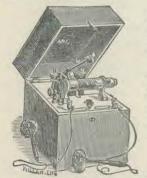


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SANITARIUM BATTERY,

"HE above cut represents one of the simplest, cheapest, and most efficient steam inhalers ever advertised. It consists of an outer cup for holding hot water, and an inner cup in which is placed a small quantity of hot water, to which the medicament is added. The construction of the inhaler is shown in Fig. 1. As will be seen, the air passes down through the cover and over the top of the inner cup through the liquid, and is drawn up through the innermost cup into the tube, thence into the mouth, as shown in Fig. 2. All kinds of volatile remedies for throat ailments, such as the essential oils, balsams, etc., may be used with this inhaler. There is no simple remedy so effective in relieving sore throats, either acute or

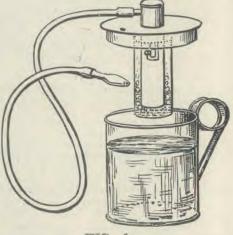


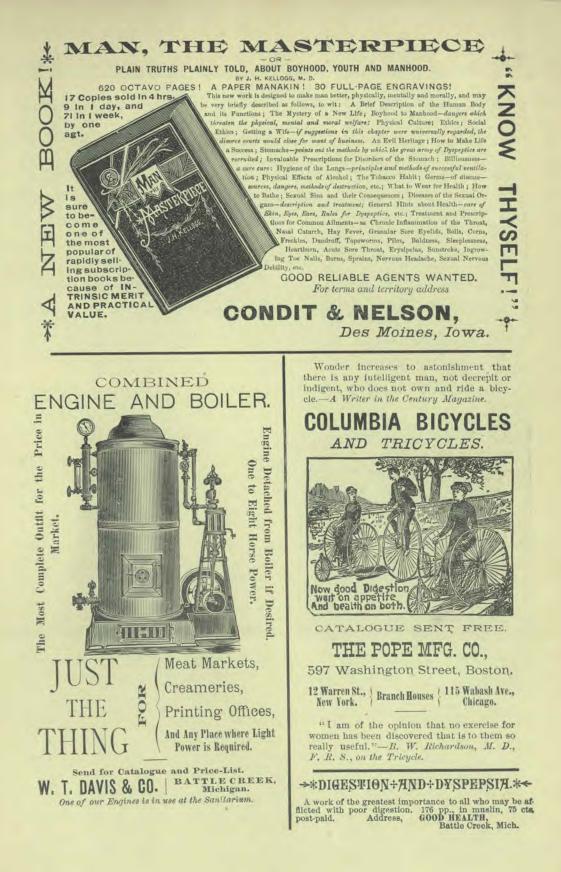
FIG. 1.

The popular faith in electricity as a curative agent is to be seen in the enormous sale of electrical belts, brushes, and so-called magnetic and electrical garments of various descriptions which are being constantly effected through liberal and deceptive newspaper advertising. It is well enough known to scientific physicians that the majority of these appliances supply either no current at all, or a current so feeble as to be absolutely worthless as regards results.

The battery shown in the engraving is manufactured expressly for us, and is one of the most efficient, durable, and easily managed family batteries ever offered for sale. Many hundreds of these batteries have been sold, and the great satisfaction which those who have need them have expressed, warrants the belief that future purchasers will be equally well pleased with this very efficient and convenient electrical apparatus.

Full Directions for the use and care of this Battery accompany each instrument.





# THE LARGEST SANITARIUM IN THE WORLD!

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THIS Institution, one of the huildings 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 methods employed :--

Turkish, Rassian, Roman, Thermo-Electric, Electro-Vapor, Electro-Hydric, Electro-Chemical, Hot Air, Vapor, and Every Form of Water Balh: Electricity in Every Form;

Swedish Movements--Manual and Mechanical--Massage, Pneumatic Treatment, Vacuum Treatment, Sun Baths. All other agents of known curative value employed.

An Artificial Climate Secured for those needing special care during the cold months.

BANITARIUM

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

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