

thing sour, for lemons, on an attack of fever. But this being the case, it is easy to see, that we nullify the good effect of fruits and berries in proportion as we eat them in their natural state, fresh, ripe, perfect, it is almost impossible to eat too many, to eat enough to hurt us, especially if we eat them alone, not taking any liquid with them whatever. Hence also is buttermilk or even common sour milk promotive of health in summer time. Sweet milk tends to biliousness in sedentary people, sour milk is antagonistic. The Greeks and Turks are passionately fond of sour milk. The shepherds use rennet, and milk-dealers alum to make it sour the sooner. Buttermilk acts like watermelons on the system.—*Hall's Journal of Health.*

GLASS-DRILLING.

MESSES. EDITORS:—In your last issue I noticed an article entitled "To Bore a Hole through Glass," and as a variety of opinions are supposed to be better than a single one (if based upon experience), I venture the liberty to express mine. A short time since, I had occasion to bore some holes through a piece of French crown glass, one-quarter of an inch in thickness. The glazier who cut it for me assured me that nothing but a round bar of lead used with emery and water would bore the desired holes. And (by the way) I think lead is preferable to iron, as emery adheres to it much better. But not fancying his slow but sure process, I determined to perform the work more expeditiously. Accordingly I procured a small Stubbs' file, and grinding the point to what I thought the proper shape, bored four holes, one-quarter of an inch in diameter, in the short space of half an hour. By trying the same thing since, I am confident that a triangular file of Stubbs' manufacture will never fail, if used with water or turpentine, either of which I consider equally good.—H. W., in *Scientific American.*

WHITE MAPLE SUGAR.—A Montpelier, Vt., correspondent of the *Boston Traveller*, writes:—The art of making good maple sugar is now fast advancing, and the time is near at hand when it will vie in purity and whiteness, with the most beautiful samples of the cane sugars. But our sugar makers are beginning to find out methods of producing pure white sugar without going through any subsequent refining process. They have discovered that the sap, as it comes from the tree, is perfectly colorless, and that if it can be caught and evaporated without bringing it in contact with vessels imparting stains, it will make colorless and perfectly pure sugars. To obviate the old difficulties of making white sugar, therefore, they are now adopting new tin instead of the bottoms of the boilers. The substitution of enamelled iron pans may, perhaps, be all that is now required to perfect the process.

PHILOSOPHY OF OLD AGE.

In Prof. Kent's art of prolonging life, the following are leading propositions—

I.—The life of man, physically considered, is a peculiar phenomenon, effected by a concurrence of the united powers of nature with matter in a continual operation, can be promoted or impeded accelerated or retarded.

II.—Natural death, or death from old age, as it is termed, is a condition of the body resulting from a general ossification, or consolidation, of its various parts.

III.—The different stages of life, called infancy, childhood, youth, manhood, old age, and decrepitude, but so many different degrees of this process of consolidation—each stage being characterized by an increased density and induration.

IV.—This process of ossification is the result of a gradual deposition of solid earthy matter (phosphate of lime, etc.) from the blood.

V.—The blood derives this earthy matter from the food and drink only.

VI.—Different kinds of food and drink contain this matter in different proportions.

VII.—In proportion as we subsist upon those articles which contain the least amount, shall we prevent or retard the process of ossification, and thus prevent or retard old age and "natural" death.

VIII.—That thus it is possible to make such a selection of aliment (according to its chemical properties), still preserving the greatest variety, that health, activity and life may be preserved for a period much greater than anything of which the mass of mankind are able to conceive.

THE OIL WELLS.

A correspondent of the *Erie (Pa.) Gazette* states that among all the hundreds of wells which have been commenced in the oil region, not one has been abandoned as hopeless. The oil sites are usually leased, the owner receiving a certain proportion—from $\frac{1}{4}$ to $\frac{3}{4}$ of the fluid, and sometimes a bonus in money. The first part of the operation of sinking a well is to dig a shaft about 8 feet in diameter down to the rock, the distance varying from 10 to 40 feet. A wooden conductor made of plank, with a chamber of some five or six inches square, is then set down on the rock, reaching to the surface of the ground, when the work of boring is ready to commence. Some

bore with a steam engine and some with a spring pole. The boring generally goes on at the rate of from two to six feet per day, and, to sink a shaft of four inches, probably cost about \$2 per foot. After the rock is ground to sand beneath the drill, it is drawn up by means of a sand pump. The quantity of oil flowing from what is called "the Crosby well" is still held to be almost incredible, though the figures are not now held as high as they were in the first outbreak of the excitement. It is estimated that the well yields 60 barrels a day of 40 gallons each. Another yields nearly pure oil, the amount of water not exceeding one-tenth of the whole. A stream of pure and transparent fluid, far superior to the ordinary petroleum flows incessantly into a mammoth oil vat, whose capacity is 8,000 gallons, and which yields 25 barrels a day.—*Scientific American.*

SCHOOL DISCIPLINE.

The way teachers are sometimes used in Canada, *The Globe* gives the following:—

A boy about thirteen years of age, in the Victoria school at Brockville, refused to obey the teacher, when commanded to keep order; the teacher thereupon whipped him with a leather strap, leaving some marks upon his person but doing no injury of any consequence. The boy left the school and complained to his father, who had the teacher arrested in the school and brought before a magistrate, in order to secure an immediate conviction. Bail was put in, however, and the case brought before a whole bench of magistrates. It was shown that the boy had been persistently disobedient, and that there was insubordination in the school, a former having been driven away by the opposition of the boys. Nevertheless seven magistrates voted for convicting the teacher of an assault, and only six decided for an acquittal. The case is to be taken on appeal to the Quarter Sessions, when the *Brockville Recorder* from whom we learn the facts, says the decision will probably be reversed by a jury.

DEAD SEA, also called Lake Asphaltites, about 48 miles from the Mediterranean. It is about 35 miles in length by ten in breadth; the extreme saltness, great density, and other pernicious qualities of its waters have for several ages caused many absurd opinions to obtain credit regarding it. Though the neighbouring soil partakes in such a degree of salineness that vegetation is foreign to it, and a death-like aspect reigns around, still it has been ascertained beyond a doubt, that fish are to be found in this lake, and also that certain birds make it their resort. Bitumen and salt are so abundant that any quantity of water contains more than a fourth of the last named, according to the specific gravity so great as to sink stones of equal size in the sea.

of the adjacent mountains where the city of Jerusalem and the Arabs derive a supply. Sulphur and bitumen are also met with in various parts, and the neighbourhood abounds with volcanic products. The Dead Sea receives the river Jordan, and the torrents of Kedron, Arnon, and Zared; and on the space which it occupies, formerly stood fine cities, including the ruins of Sodom and Gomorrah, which, according to Scripture, were destroyed by the wrath of God.

WRIGHT'S U. DICT.

At a morning prayer meeting in the Old South Chapel, in Boston, on Wednesday morning last, a gentleman made a statement of a sad case of gambling which occurred on board the Steamer Empir. State the night before. A party of men who appeared to be professional gamblers were playing cards in the cabin, and urging the bystanders to bet upon the cards. They induced one gentleman, who had been apparently interested in the game, to put down \$40, and by one turn of the cards it was swept into the gambler's pocket. The loser appeared to be much agitated and was seen soon after to go out on deck, and in a few minutes afterwards a man who was supposed to be him jumped overboard and was lost. His name was not known. It is supposed that the chagrin and mortification which filled his mind when he came to reflect how foolishly he had lost his money, led him to commit the act.—The occurrence should warn all honest men not to put themselves in the power of the sharpers who infest the lines of public travel.

THE LIGHTNING CALCULATOR.

One of the most amusing and astonishing exhibitions of mental power that we have ever seen is the addition of a row of figures by Professor Wm. S. Hutchings, the mathematical phenomenon. During his absence from the room, several rows of figures are entered upon a board, and on his return, he picks up the chalk, and, giving it a whirl in the air, with a sort of convulsion, he announces the sum of the first column, setting down the digit. Another whirl of the hand and down goes the next figure, and thus the several columns are added, almost instantly, the operation exciting the wonder of the spectators. He also performs multiplication and the squaring of large numbers with marvellous quickness, setting down the result in a single row of figures. We have examined his process, and are satisfied that almost any of our intelligent accountants, who are pretty quick at figures, might learn to calculate with nearly the same rapidity.

ORANGE COUNTY MILK.—New York City is dependent upon the adjacent agricultural districts for its supply of milk and a vast amount of it is required for daily use. The above named county had been distinguished for many years for its excellent butter; but since the facilities offered by railroads permit of the sweet milk being carried from a considerable distance daily, little butter is now made in comparison with the make of former years. Last year there were not less than 5,350,830 gallons collected at nine stations in Orange county, and sent down to the city on the Erie Railroad.

KEEP YOUR EYE ON YOUR NEIGHBORS.—Take care of them. Don't let them stir without watching. They may do something wrong if you do. To be sure, you never know them to do anything very bad, but it may be on your account they have not. Perhaps if it had not been for your kind care, they might have disgraced themselves and families, a long time ago. Therefore don't relax any effort to keep them where they ought to be, never mind your own business, that will take care of itself.—There is a man passing along—he is looking over the fence—be suspicious of him, perhaps he contemplates stealing something these dark nights; there's no knowing what queer fancies he may have got into his head. If you see any symptoms of any one passing out of the path of duty, tell every one else that you can see, and be particular to see a great many. It is a good way to circulate such things, and though it may not benefit yourself or any one else particularly, it will be something important about some one else. To keep something going—silence is a dreadful thing; though it is said there was silence in heaven for the space of half an hour, don't let any such thing occur on earth, it would be too much like Heaven for the inhabitants of this mundane sphere. If, after all your watchful care, you can't see anything out of the way in any one, you may be sure it is not because they have not done anything bad, perhaps in an unguarded moment, you lost sight of them—throw out hints, they are no better than they should be—that you should not wonder if people found out what they were after a while, and then they may not carry their heads so high. Keep it a going, and some one will take the hint and begin to help you after a while—then there will be music, and everything will work to a charm.—*Exchange.*

GIRLS, DON'T DO IT.—In "Advice to Young Women," occurs the following:—"There is a practice quite prevalent among young ladies of the present day which we are old fashioned enough to consider very improper: We allude to giving daguerreotypes of themselves to young men who are merely acquaintances. We consider it indelicate in the highest degree. We are astonished that any young girl should sell herself so cheap as this. With an accepted lover it is of course all right. Even in this case the likeness should

daguerreotype to any gentleman acquaintance, let her know that the remarks made by young men when together, concerning what is perhaps on her part but a piece of ignorance or imprudence, would if she heard them, cause her cheeks to crimson with shame and anger. 'Where is a sister of ours,' we have often said, with a flashing eye—where is a sister of ours! But that not being the case, we give this advice to anybody's sister who needs it, most anxiously desiring that she should at all times preserve her dignity and self respect."

MISS WHEELER ALIVE.—We scarcely know whether our readers will be more pained or relieved to hear that Miss Emily Wheeler, the daughter of Gen. Wheeler of Cawnpore, is still alive. Capt Harvey Superintendent of the Department for the abolition of Thuggee, has had communication with the unfortunate young lady, who we understand, is so utterly broken in spirit that she entreats his friends not to seek to bring her back again, but to leave her to her wretched fate. Yet it were better surely for the poor girl herself that her request should not be complied with. Time may obliterate the remembrance of even her sorrows; and it were no real kindness to her to obey what wild wishes her present morbid nervousness of feeling may suggest. It is necessary too, that the Government should vindicate its own dignity and justice, by ascertaining the true particulars of this sad story, and punish the guilty parties with relentless severity.

It is said that Mr. Hatch, the Commissioner appointed by the U. S. Government to examine into the working of the Reciprocity Treaty, will report in favor of its repeal. The Western cities of New York State are opposed to Reciprocity with Canada, and Mr. Hatch reflects their opinions. On the other hand, Massachusetts and Maine are strongly in its favour, and will use every exertion to preserve it intact. Should any evil befall the Treaty arrangements, under which Trade in these Colonies has been so largely benefitted, the blame will rest on the protective legislation of Canada for the late few years, which has given the people of Western New York a pretext for the present agitation.—*Halifax Chronicle.*

HEALTH.—We learn that that fearful disease "putrid sore throat" exists to some considerable extent in Queen's County. Several deaths have recently occurred in Hampstead, and adjoining places. We hear from various parts of the country that the state of general health is not as formerly; many sudden deaths in several places have recently occurred.—*Intell.*

VARIETIES.

The tails of comets generally point from the sun, so that when they are receding they push their tails before them. Appearances do indicate that the tails are hollow, but this is not probably owing to the comet's shadow, most comets not being sufficiently dense to cast a shadow, even the light of the stars passing through them freely. The tails of comets are very mysterious; they seem to be subject to forces, which do not manifest themselves on this earth. The earth, in its revolution around the sun, revolves about the common centre of gravity of the earth and the sun, which is a point within the body of the sun near its centre. If the earth were annihilated, with all its inhabitants except one man, his body would revolve about the common center of gravity of the sun and the body, which would be a point nearer the center of the sun than that about which the earth revolves. The orbit would be nearly the same as that in which the earth revolves, and would be elliptical. The cause of the ellipticity of the earth's orbit is wholly unknown. It is now going very slowly less elongated, and will continue to do so for some thousand years, till it becomes nearly or quite circular, when it will gradually return to its present shape, and will thus continue to oscillate forever.

It is stated that all the fixed stars, as they are called, are in motion; but though some of the motions are very rapid, the distance of the stars is so great that it will require many thousands of years to produce any considerable change in the appearances of the constellations.—One of the most common causes of baldness, is the presence of an animal invisible to the naked eye, at the root of the hair.—When dead bodies decay, they are converted principally into gases, and pass off into the air, where a portion of them is absorbed by the leaves of plants, and being formed into grain or fruit, is again eaten by animals, and thus travels the great circle of change ordained by the Creator.—The editor, of the *Warrentown (Va.) Flag* has in his possession a plain gold ring, 130 years old. It has engraved on it, in the old style these words: "J. W., obit March 9th, 1721." It was plowed up by one of the servants on a plantation, in the county of King George. The ring is of pure gold, and is supposed by some to have been the property of the father of General Washington, as the initials we believe, are the same. The owner has been offered and refused the sum of \$200 for it.—A man died very suddenly in Pennsylvania from the effects of whisky. The beverage was analyzed, when the chemist reported that he found in it the poisoner constituent of cocculus indicus. The proportion found was two grains to the pint of whisky. This poison is considered fatal to human life in quantities of from five to ten grains, according to circumstances and conditions.—The Pacific waggon

wood, and water are found abundantly along the route. It commences at the South Pass, leaving the Sage Plains to the southwest, and going directly through the Wasatch Mountains, by way of Thompson's Pass, crosses the head waters of Bear and Great Snake rivers. An iron steamer was launched in Philadelphia Oct. 25th, from the yard of Reaney, Neffie & Co. The steamer is 200 feet long, 29 feet beam, 12 feet hold, and will be propelled by a beam engine having a cylinder 45 inches in diameter, and 11 feet stroke. She is built in a very substantial manner, and will it is expected be a fast steamer. She will connect with the Delaware Railroad—Sweden and Norway are slowly being lifted out of the sea at the rate of from one half to one tenth of an inch per annum. The West coast of Greenland is as gradually sinking.—Coats of arms came into vogue in the reign of Richard I. and became hereditary in families about the year 1192. They took their rise from the knights painting their banners with different figures to distinguish them in the crusades.—The first standing army of modern time was established by Charles VII. of France, in 1455. Previous to that time the King had depended on his nobles for contingents in time of war. A standing army was first established in England in 1638 by Charles I. but it was declared illegal, as well as the organization of the Royal Guards in 1379. The first prominent military band instituted in England, was the yeoman of the guards, established in 1486.

Guns were invented by Swartz, a German about the year 1378, and were brought into use by the Venetians in 1382. Cannons were invented at an anterior date, they were first used at the battle of Cressy in 1345. In England they were first used at the siege of Berwick in 1405. It was not until 1544, however, that they were cast in England. They were used on board of ships by the Venetians in 1535, and were in use among the Turks about the same time. An artillery company was instituted in England for weekly exercise in the year 1610.—The first railroad constructed in the United States was at Quincy, Mass., connecting the granite quarries with tide water. It was about three miles in length. The Baltimore and Ohio was the first passenger railroad. It was opened in 1830, a distance of 15 miles, with horse power. Next in the order of time came the Mohawk and Hudson, from Albany to Schenectady, 16 miles, opened for travel also with horse power, in the summer of 1831, the first locomotive used in this country was on that road, in 1831. Locomotives were in operation in South Carolina and upon the Ohio and Baltimore road in 1832.—*Scientific American.*