

sugar (brown will do); let it stand in an open vessel for 24 hours; skim and strain it, then barrel it. Let it stand for 8 or 9 months, when it should be racked off and bottled and corked close; age improves it.

WHALE LEATHER.—Squeezing oil out of stone coal was a thing to be thought of as a miracle that might some day convert the heathen; but to get show leather from the skin of a whale is so reasonable a probability, that one is amazed it should not have been long ago attempted. A Frenchman has obtained a patent for whale leather, and remarkably plain stuff it is. The skin is so thick that, after removing the inner portion, which is spongy, the remainder is split to make it of the usual shoe thickness. It is remarkably tough, but as soft as buckskin, and it repels water well. The Yankee boot is most miserable; the leather is spoiled by bad tanning and worse working up. This makes unfair relation between supply and consumption, which it will need all the whales of ocean to equalize. The discovery comes at time when land leather is growing alarmingly scarce; and we behold in it a beautiful provision of Providence, only excelled by the discovery of coal oil at a juncture still more critical in the history of human progress.

CURING GREEN CORN.—The following is the Indian method by which they treat green corn for making succotash, etc. during winter.—When the green corn is fit for use, a pit dug from two to three feet in diameter at top, and gradually enlarging it at bottom, to five feet down, from six to eight feet in diameter. A large fire is then built near by, on which stones are heated, and when red-hot the stones and live coals are shoveled into the bottom of the pit, and sprinkled over with fine loose dirt. The corn is then thrown in with the husks or, just as it is pulled from the stalk, until the pit is nearly full. Then comes a thin layer of loose dirt, then hot stones (enough to char the pit,) and the whole covered with earth to retain the heat. When the whole cools off (which takes several days,) the pit is opened and the corn is found to be delightfully cooked. When cool, the are stripped off and the corn dried in the sun; when thoroughly dried the corn is shelled off easily, and is then packed away in bags for use.

CONSUMPTION AND ITS CAUSES.

At a recent meeting of the Geographical and Statistical Society, held in this city, a valuable paper was read on the mortality of consumption by Henry B. Millard, M. D. He estimated that nearly one-sixth of the deaths among the human race occur from consumption. From statistics extending over a considerable period, he found that one death in every 5.7 occurred from consumption. In New York, from 1804 to 1820, one death in every 1.3 was caused by consumption; from 1820 to 1835, one in 5.4; from 1836 to 1850 one in 6.5; 1848 to 1859, one in 8.11. Of deaths in the army, he found that the greatest number of cases of consumption was from 6.9 to 9.2 annually for every thousand men, between latitudes 36° and 25°, characterized by high temperature, copious rains and excessive moisture. The smallest number of deaths was 1.3 per thousand men, in New Mexico, characterized by a high land and dry atmosphere. While consumption is rare in countries of high latitudes, it is various in tropical countries the proportion of deaths is often too small to be calculated. In all Judea, in 43 years, only 29 died of consumption. The theory that the sea air may prevent, as well as cure, consumption, is supported by statistics. In the British army, out of 14,500 men, 51 died of consumption; while out of 12,942 men in the navy, only 19 died of that disease. Consumption is not necessarily more prevalent in large than in small cities. Among the trades and professions the following order of mortality by consumption was mentioned; the greatest was among the tailors, shoemakers; next came blacksmiths, gardeners, bakers, butchers and lawyers; the mortality among tailors being four times that of the lawyers. The greatest mortality by consumption among males is said to be in the city. There is greater liability to consumption between the 20th and 30th years of age than at any other period of life. The general conclusion was, that humidity of the atmosphere is favorable and dryness unfavorable to the generation of the disease, but moist earth water is not calculated for its developments. Want of exercise and air tends to produce it. It is more prevalent among females than among males. There are no reasons for the conclusion that the disease is either on the increase or decrease.

At conclusion of the reading of Dr. Millard's paper, the thanks of the meeting were presented to him and a copy requested for the archives of the society.—[New York Paper.

METEORIC MYSTERY.

A correspondent to the Scientific American writes from Ohio, on April 21st, "our town and vicinity was visited with the most extraordinary meteoric phenomenon every known in this country. About half past 12 o'clock a loud report, resembling the report of a cannon, was heard,

apparently at the northwest corner of the town. This produced much astonishment, as we have no cannon in our town; and just as everybody was ready to ask what caused the report, another burst upon the ear, directly over the town, as it appeared to us. This report was followed by eight or ten more, in quick succession, resembling the loud beating of a bass drum. After these reports a singular rumbling, whizzing noise followed for about two minutes. The greatest consternation was created. People ran into the streets, horses took fright, and cattle and sheep in the fields ran to and fro with wild excitement. The earth seemed to tremble, and the concussions were felt sensibly in many houses. Soon after the explosions, I was told by several persons that many large and peculiar stones had been found scattered all over the town. Men working in the fields, dark balls flying in different directions striking upon the earth, shaking it considerably, several hundred feet around. On proceeding to the several spots, they found large, rounded, bedded two or three feet in the earth. Several of these stones have been found and brought to town, weighing (seven of them respectively) 30, 36, 40, 42, 51, 53, 53½. These are different from any in this country. The outside is black—being burnt to that color, but when broken the body appears a species of sandstone, of a bluish cast, and is supposed to contain a large quantity of iron.

They are very heavy for their size, and all have the same appearance. The nearest one was found one-half a mile, and the farthest off about four miles from town. It is supposed that many more will be found, and searching parties of citizens and strangers (who have come here for the purpose) are out during the day "looking up" the wonderful stones. At the time of this singular occurrence, the sky was clear; the only large cloud visible was whirled about unceremoniously by the rushing mass of rock proceeding from the northwest to the southeast. The shock was felt and the reports within the radius of about 20 miles from this place, in different directions; but the stones seem to have fallen but short distances southeast of our town. No small pieces of stone have yet been found—the smallest weighing about 30 pounds. The phenomenon created much excitement, and at the time of its occurrence, many persons (especially the superstitious) supposed that the "end of all things earthly" was at hand. It was, to say the least of it, a wonderful event. I leave speculation (as to its cause) for the consideration of your scientific reader.

SIMPLE EXPERIMENT IN NATURAL MAGIC.

When a person looks into a mirror that is placed perpendicular to another, his face will appear entirely deformed. If the mirror be a little inclined, so as to make an angle of 80°, he will then see all the parts of his face except the nose and forehead. If it be inclined to 60°, he will appear with three noses and six eyes; in short, the apparent deformity will vary at each degree of inclination; and when the glass comes to 45°, the face will vanish. If, instead of placing the two mirrors in this situation, they are so disposed that the line of junction is vertical, their different inclinations will produce other effects.

ILLUSTRIOUS DUNCES.

An interesting chapter might be written on the subject of the illustrious dunces—dull boys and brilliant men. We have room, however, for only a few instances. Pietro di Cortona, the painter, was thought so stupid that he was nicknamed "Ass Head" when a boy; and Tommaso Guidi was generally known as "Heavy Tom," (Massocia Tomasaccio,) though by diligence, he afterward raised to highest eminence. Newton, when at school, stood at the bottom of the lowest form but one. The boy above Newton having kicked him, the dunce showed his pluck by challenging him to fight, and beat him. Then he set to work with a will, and determined also to vanquish his antagonist as a scholar, which he did, rising to the top of his class. Many of our greatest divines have been anything but precocious. Isaac Barrow when at the Charter school-house, was victorious chiefly for his strong temper pugnacious habits, and proverbial idleness as a scholar, and he caused such grief to his parents, that his father used to say that if it pleased God to take from him any of his children, he hoped it might be Isaac the least promising of them all. Adam Clarke, when a boy, was proclaimed by his father to be "a grievous dunce," though he could roll large stones about. Dean Swift, one of the greatest writers of the pure English, was "plucked" at Dublin University, and only obtained his recommendation to Oxford "speciali gratia." The well-known Drs. Chalmers and Cook were boys together at the parish school of St. Andrew's, and they were found so stupid and mischievous, that the master, irritated beyond measure, dismissed them both as incorrigible dunces.

The brilliant Sheridan showed so little capacity as a boy, that he was presented to a tutor by his mother, with the complimentary accomplishment that he was an incorrigible dunce. Walter Scott was all but a dunce when a boy always much readier for a "bicker" than apt at his lessons. At the Edinburgh University, Professor Dalzel pronounced upon him the sentence that "Dunce he was, dunce he would remain." Chatterton was returned on his moth-

er's hand as "a fool, of whom nothing could be made." Burns was a dull boy, good only at athletic exercises.

Goldsmith spoke of himself as a plant that flowered late. Alferi left college us wise as when he entered it, and did not begin the studies by which he distinguished himself until he had run over half of Europe. Robert Clive was a dunce, it is not a reprobate, when a youth: but always full of energy, even in badness. His family, glad to get rid of him, shipped him off to Madras; and he lived to lay the foundation of the British power in India. Napoleon and Wellington were both dull boys, not distinguishing themselves in any way at school. Of the former the Duchess d'Arantes says, "he had good health, but was in other respects, like other boys." John Howard, the philanthropist, was another illustrious dunce, learning next to nothing during the seven years he was at school. Stephenson, as a youth, was distinguished chiefly for his skill at putting and wrestling, and attention to his work. The brilliant but Humphry Davy was no cleverer than other boys; his teacher, Mr. Davies Gilbert, says of him, "While he was with me, I could not discern the quantities by which he was most distinguished." Indeed, he himself, in after life, thought it fortunate that he had been left to "enjoy so much idleness at school." Watt was a dull scholar, notwithstanding the pretty stories told about his precocity; but he was what was better patient and persevering, and it was by that means, and by his carefully cultivated inventiveness, that he was enabled to perfect his steam-engine.

HISTORICAL.—Wednesday, the 20th of June completed the 23rd year of the reign of Victoria, the 1, who ascended the British throne in 1837, a month after she had completed her 18th year. Though she had only reached to middle life, her reign has already been a long one, longer we believe, than the average of reigns, and she may have the longest reign of any English sovereign, and still not die at a very advanced age. Of the monarchs who have worn the English crown since the Conquest, 20 did not wear it so long as it has been worn by this lady, who may have it for 30 years longer, and then not be much older than was Elizabeth when she died. William I., William II., William III., Richard I., John, Edward II., Richard II., Henry IV., Henry V., Edward IV., Mary I., James I., James II., Mary II., Anne, George I., George II., and William IV. all reigned less than twenty-three years, but some of them ascended the throne at advanced ages, particularly the immediate predecessors of the present Sovereign, George IV., and William IV., who were her uncles. The Hanoverian sovereigns of England have mostly begun their reigns when they were old. George I., became King at 51. George II., at 44. George IV., at 58, and William at 64. George III. was in his 23rd year when he began to reign, and had he lived nine months longer he would have had a reign of sixty years. The next longest English reign was that of Henry III., which lasted fifty-six years or thereabout. Edward III. had about half-a-century of rule; Elizabeth had not quite forty years; Henry VIII. nearly thirty-eight years, and Henry VI. twenty-nine years. The shortest reign in England—for that of Lady Jane Grey counts for nothing in figures, though the poor girl found it a serious thing in fact, seeing that it made her and hers so well acquainted with dull blocks and sharp axes—was that of Edward V. which lasted eighty-eight days. Edward VI. reigned six years and a half; and his sister and successor, Mary I., five years and four months. Three of the female sovereigns of England—the two Marys and Anne—reigned, altogether, not much longer than Victoria has already reigned. No such thing has ever occurred in England as once happened in France, namely; that there were but two monarchs in 131 years. Louis XIV.'s reign began in 1643, and that of his successor, Louis XV., terminated in 1774.

SCHOOL HOURS AND EXERCISE.—Mr. Edwin Chadwick, whose name is identified with so many important social reforms, has of late been prosecuting an educational inquiry of great interest. He was, as our readers may remember, appointed by the British government a commissioner to enquire into the excessive labor of young persons in cotton factories. The results he obtained led him to propose measures, which were in part executed, for reducing the working time of children under thirteen years of age to six hours a day, and for ensuring their attendance at school the residue of the time, say three hours. The children under this provision are called "half-timers;" and it turns out, according to Mr. Chadwick's investigations, that in well-conducted schools their attainments are quite equal to those of the "full-timers," who attend school six hours daily, while in aptitude for the application of their knowledge they are said to be superior. As they gain in bodily condition by the reduction of their physical labor, so they do in mental condition by the reduction of the time devoted to menial labor.

Mr. Chadwick made also a close examination of the best of the long time schools for young children, and found, upon the testimony of the most intelligent teachers, that they could not keep up voluntary attention to study beyond two hours in the morning and one hour in the afternoon. By force, even, they cannot get more than a half-hour, and that proves in the end a mental mischief as well as a bodily injury.—From those facts it would seem to follow, as he contends

that our school systems are a violation, in this respect, of the laws of physiology.

Boys are enabled to repair the injury of undue mental work, to a certain extent, by their athletic games. Not so with girls. In boarding schools they are fastened to their sedentary occupations often eight hours a day, but with slight intervening relaxation or exercise. Mr. Chadwick finds that the daughters of mothers who have worked, but whose fathers have got on in the world and have sent these daughters to day or boarding schools, and kept them from work, are shorter and generally of inferior strength to the working mother's; that the proportion of mothers of the well-to-do classes who can suckle their own children is diminishing; that among women who have one servant there are ailments which are unknown among women who no servants; and that these ailments are worse with women who have two servants, and get very bad indeed, and with new complications of hypochondria, among women who have three servants.

The remedies recommended by his gentleman are the reduction of the ordinary school hours by one half, and the devotion of them either to manual labor or gymnastics. But no form of exercise he thinks, is equal to the naval and military drill.—[New York Evening Post.

A JOURNEY UNDER PARIS.—A correspondent of a Swedish Journal furnishes an interesting account of a subterranean voyage made through one of the admirably constructed sewers of Paris. The boat which conveyed the party was reached by descending a flight of steps to the depth of about forty-five feet. The boat a flat-bottomed affair, was lighted by four lamps. The sewer is an archway, fifteen feet high and of equal breadth with a ditch or canal about ten feet wide, wherein all the dirt and filth of Paris is carried away. On the side-walks, which together are about four feet wide. The whole is built of beautiful white sand-stone, and is kept remarkably neat and clean. No stench or bad smell was perceptible. The denser portion of the filth is carried away through large drains beneath the side-walks.

The side-walks are excellent, and exhibited no signs of dampness, while the walls of the archway are kept white-washed and are at all times white as the driven snow. The structure possesses the properties of an immense speaking tube, the workmen being able to converse at the distance of two miles from each other. The echo is very strong and lasting. The fabric is said to be built after a model of the Catacombs of Rome, aided by the latest improvements. On both sides, at about two hundred yards distant from one another, are openings, through which the workmen can ascend, by means of permanent iron ladders, in case a sudden rain storm should cause the water to rise over the side walks, which is, however, of rare occurrence.

The contents of the sewer, of course flow into the river Seine, and the current is sufficient to carry along the boat used with considerable velocity. Large reservoirs are constructed at intervals, into which the water can be turned for a short time in case it should be necessary to have the canal dry for a little while.

The whole work was completed in two years. Beside the main canal, there are many minor ones constructed under the principal streets, all of which can be made to communicate with one another. These admirable underground works are accessible from the Louvre, the Tuileries, and from all the barracks, and should the Parisians take a notion to barricade the streets in any portion of the city the imperial government might at short notice, and without any person being aware of it, transport troops, and, if there is time to make use of the reservoirs, so can cavalry also be transported the same way.

There is an end to shooting on the soldiers from the windows, and a revolution in Paris will soon only be remembered among things that have been, never to occur again. Through these underground passages a prisoner can easily be taken from the Louvre to the Seine without attracting attention, and thence sent off by railway, which is near at hand. This splendid system of sewerage was one of the pet schemes of the first Napoleon.

AN INVENTOR'S EXPERIENCE IN PROCURING AN ENGLISH PATENT.

Dickens, in his own peculiar way, thus relates the "circumlocution" experiences of an inventor in attempting to procure an English patent:—"When the Christmas holidays were over, I went up to London by the Parliamentary train, and hired a lodging for one week from Thomas Joy. He informed me that the first step to be taken in patenting the invention was to prepare a petition unto Queen Victoria. A declaration before Master in chancery was to be added to it. These we likewise drew up. After a deal of trouble I found out a Master in Southampton Buildings, Chancery Lane, nigh Temple Bar, where I made the declaration, and paid eighteen-pence. I was told to take the declaration and petition to the Home Office, in Whitehall, where I left it to be signed by the Home Secretary (after I had found the office out), and where I paid two pound two, and sixpence. In six days he signed it, and I was told to take it to the Attorney-General's chambers, and leave it there for a report. I did so, and paid four pound, four. Note:—Nobody (all through) over-thankful for their money, but all uncivil. "My lodging at Thomas Joy's was now hired for another week, whereof five days were gone. The Attorney-General made what they called a