

Miscellaneous Notes.

FURS.—An importer and exporter of furs gives this information: "The house cat is one of the most valuable of fur-bearing animals, and when they mysteriously disappear from the back fence, they often find their way to the furrier. It is an actual fact that over 1,200,000 house cats are annually used by the fur trade. Black, white, maltese and tortoise-shell skins are most in demand. They are made into linings and used in philosophical apparatus. As for skunks, 350,000 were used in this country last season, valued from 50 cents to \$1.20. They come from Ohio and New York principally, and, as in pursuit of the tiger and lion, the bravest men are required."

COAL DISCOVERY IN CANADA.—Further particulars as to the recent find of coal at Wapella, in the Canadian North-West, near the settlements of the Gardon-Cathcart and London East-end colonists, show that the seam is at an average depth of 6 feet from the surface of the prairie, and being situated on a side hill the coulee can be mined without any heavy expense. The width in extent of the seam has not yet been tested, but there is every indication of its permanent character. The situation of this new coal discovery within a few yards of the Canadian Pacific Railway, and its short distance from Moosomin, makes it one of the most important adjuncts to the settlement. —*Ec.*

If any proof were needed, beyond the assurance given us in Scripture, that we are "fearfully and wonderfully made," we have it revealed to us by the patient, learned researches of eminent scientific men. Take, for instance, this novel computation which has been formulated by a distinguished German histologist, who has been at the trouble to calculate the aggregate cell forces of the human brain. The cerebral mass is composed of at least 300,000,000 of nerve cells, each an independent body, organism, and microscopic brain, so far as concerns its vital relations, but subordinated to a higher purpose in relation to the function of the organ; each living a separate life individually, though socially subject to a higher law of function. The life term of a nerve cell he estimates to be about 60 days; so that 5,000,000 die every day, about 200,000 every hour, and nearly 3,500 every minute, to be succeeded by an equal number of their progeny.

PRISONERS IN RUSSIAN MINES.—Where prisoners in Russian mines conduct themselves well they are sometimes permitted to live in small houses near the prison after two or three years incarceration. This privilege is accorded most frequently to married men. Presentations of clothes are often made to help them along. The convicts consist mostly of murderers and robbers, but a very small proportion being political offenders. These latter scarcely ever work in the mines, being kept in a prison apart from the others, and possessing more comforts. The laborers are not at all in harmony with the Nihilists or their principles, and they are kept apart more for the sake of peace than for any other reason. This is the only gold mine in Siberia in which convicts are employed. About one thousand of them are worked in some of the silver mines, under the same conditions as govern the others. A working day usually consists, in summer, from daylight to dusk—6 A.M. to 8 P.M.—with two or three hours intermission for meals. The work for each one is marked out by the superintendent, and the diligent and expert miners are allowed to go home as soon as their daily allotted task is finished. Very little is done in winter on account of the extreme cold and short days, during which time the convicts do not work at all.

In this busy age of ours it is useful to be reminded, now and again, of little things which are well calculated to add to the small sum of human happiness. In point of fact, the happiness or misery of a whole life-time is impinged on trifles. All the poets have borne testimony to this fact. The practical Elihu Burritt was careful to point out in words of beautiful song that "A pebble in the streamlet scant, had turned the course of many a river." The other day we came across an article on this very subject of an extremely practical kind, and reproduce it for the benefit of our readers:—"Every movement of muscle," and this is worth noting, "whether it accomplishes anything or not, whether voluntary or involuntary, costs an outlay of bodily strength. Every thought also involves an expenditure of strength. Therefore all thoughts involving

fret, worry, fear, or borrowed trouble is so much strength unprofitably expended. It will waste you away mind and body. You may always tell a man or woman whose existence has been a life-long fret, by their careworn, hollow, emaciated faces. They are never healthy. Fret kills more people than the cholera. It leaks away strength constantly. At last the weakest organ or function gives way. This we call disease. The doctor comes and gives the disease a Latin name. The disease may attack heart, liver, lung, stomach, kidney. But the real and underlying cause had been at work for years in the patients mind. You can't help fretting, worrying, borrowing trouble? That makes no difference as to result. Merciless nature takes no account of what you can't help. Possibly you cannot help it. Years of habit may have made worrying 'second nature' for you. It may be a habit as hard to break as the 'joggle' of your heel while sitting at the desk. Both movements—the physical one of your foot and the mental one of your mind—may have become involuntary. You might call it automatic mind or body action or automatic exhaustion."

Varieties.

ELECTRIC LIGHT IN AN ENGLISH COLLEGE.—Peterhouse College, Cambridge, is said to be the first college to adopt the electric light. Not only are the courts of the college, the hall, combination room, and chapel lighted by electricity, but the rooms of the undergraduates and the master's lodge as well. It owes its introduction to Sir William Thomson who, at his own expense, has supplied the necessary apparatus.

A NEW METAL.—"Idnium" is the name proposed by Professor Websky for the metal just discovered by him as one of the components of native vanadate of lead. The mineral is rather a scarce one, of a yellow color, and contains several other metals, of which zinc, iron and arsenic are among the most prominent. Idnium resembles vanadium in several respects, both physically and chemically, while the only oxide hitherto examined forms stable salts with alkaline bases, and thus would appear to possess distinctly acid properties.

SCIENCE DESTROYS SOME OF THE MOST CHERISHED POPULAR DELUSIONS. Catgut is derived from sheep; German silver was not invented in Germany, and it contains no silver; Cleopatra's needle was not erected by her nor in her honor; Pompey's pillar had no historical connection with the personage; sealing wax does not contain a particle of wax; the tuberosc is not a rose, but a polyanth; the strawberry is not a berry; Turkish baths did not originate in Turkey, and are not baths at all; whalebone is not bone, and contains not any of its properties.

EXPERIMENTS have lately been made by the French Government with a new kind of siege gun of prodigious power. It is described as made of steel, and nearly 30 feet long, and the tube is strengthened with ten coils of plated steel wire one millimeter, or .039 inch, in diameter. The composition is such that the canon, after a few discharges, becomes elongated by three millimeters. The weight of this gun is fifty tons, and it projects a shell weighing 297 pounds, capable of penetrating armor plates nearly six inches thick at a range of seven and one-half miles.

THE AMOUNT OF WATER ABSORBED IN TREES.—In the official report of the Geological Survey of Wisconsin is an account of the determinations made by Dr. J. M. Anders, of the amount of water pumped from the earth by trees. He finds that the average exhalation from soft, thin-leaved plants in clear weather amounts to about 1½ ounces troy, per day of twelve hours, for every square foot of surface. Hence a moderate-sized elm raises and throws off 7½ tons of water per day. In the report the facts are applied to what is going on in America, where certain inland fertile districts are becoming converted into deserts by wholesale clearings; and in other places, such as the plains of Colorado, where only five or six years of irrigation and planting has already produced a measurable increase of rainfall. It is maintained that the deserts of Syria and Africa are the results of cutting down trees, and that original luxuriance may be restored by skillful replanting.—*Boston Journal of Commerce.*