

Scientific.

THE strength of an insect can be finely illustrated by a feat that was once performed by a beetle, -oryctes maimon, - a variety that is quite common in the United States. The beetle, for want of any box at hand, was put beneath a quart bottle full of milk upon a table, the hollow at the bottom allowing him room to stand upright. Presently to the surprise of all in the room, the bottle began slowly to move and glide along the smooth table, propelled by the muscular power of the imprisoned insect, and continued for some time to perambulate the surface. The weight of the bottle and its contents could not have been less than three pounds and a half, while that of the beetle was about half an ounce, so that it readily moved a weight one hundred and twelve times exceeding its own. A better notion than figures can convey will be obtained of this feat, by supposing a lad of fifteen to be imprisoned under the great bell of St. Paul's, which weighs 12,000 pounds, and to move it to and fro upon a smooth pavement by pushing within against the side.

EXTERMINATING RATS.—Catch, by any ordinary trap, three rats, put them in a cage constructed of wire, in any place which is plagued by this animal, and give them no food whatever. On the third day you will find only two rats, one being eaten up by the two others, and on the sixth day, only a single rat in the cage. Then give the survivor his liberty on the seventh day, and you will be in the course of one week, rid of all the rats, except the one monster which ate up his two brothers and which you may feed for sympathy's sake. This mode was adopted with great success in a building in the former Thiergarten, at Vienna, where all other means to expel these animals were useless.—Scientific American.

CEMENT FOR METAL OR GLASS.—The following cement will firmly attach any metallic substance to glass or porcelain: Mix two ounces of a thick solution of glue with one ounce of linseed oil varnish, or Venice turpentine; boil them together stirring them until they mix as thoroughly, as possible. The pieces cemented should be tied together for two or three days.

FOR SQUEAKING BOOTS.—Saturate the soles with kerosene oil. A much pleasanter way is to have your boots made to order, and, between each layer of leather in the sole, have a piece of oiled silk inserted. This is a sure preventive.

CURE FOR DIPHTHERIA.—A simple and successful treatment of diphtheria may be found in the use of lemon juice. Gargle the throat freely with it, at the same time swallowing a portion, so as to reach all the affected parts. A French physician claims that he saved this own life with this pleasant remedy.

The Aquarium in the London Crystal Palace is of mammoth proportions and capacity. It is four hundred feet long by seventy wide, holds two hundred thousand gallons of water, which weighs a million pounds. It contains three thousand specimens of the sea anemone, which flower-like animals, being deprived of their natural food in their dainty prison, have to be fed at stated seasons with morsels of the food next best suited to their wants.

A Model Engine is on exhibition in France which carries five hundred gallons of petroleum in the tender, which oil is forced by a hand pump into a reservoir near the boiler. The process of lighting is both easy and safe. The engine consumes its own smoke, and is easy to manage; and if, on further trial, it proves a success; it may mark a new era in propelling powers for machinery.

Those who are cursed with an ill-formed nose can have it "quickly shaped to perfection" for the ridiculously small sum of ten shillings and sixpence. A contrivance has, it seems, been patented by an enterprising London tradesman which, "if applied to the nose for an hour daily," so "directs the soft cartilage of which the member consists," that the ugliest proboscis in creation becomes "in a few days" a nice-looking nose. Whether, while it is being worn, this new and wonderful instrument is ornamental to the patient and soothing to the soft cartilages we are not informed.

Agriculture.

On the eastern shores of Canandaigua Lake, according to the Rochester, N. Y., Union, live two very singular people.

Sloping down in emerald turf to the lake there lie, affirms our authority, two beautiful farms which have been entirely worked out of primitive wilderness by women. The owners are two sisters, daughters of a pioneer named Fuller, who, more than half a century ago, made his way into the forest regions surrounding the romantic lakes of interior New-York. At his death he left his children land, but little else, and the two girls, Laura and Electa, resolved to become farmers. Both are now past sixty, and, since early womanhood, they have cultivated their ground with their own hands. Each has a smiling farm and a snug cottage, the latter nesting among shade-trees, close to the edge of the lake. The lands, bearing "fruit, vines, grass, and other crops," stretch far-away up the rolling hills. The editor of the journal named has lately "interviewed" the proprietors, and thus became aware of the facts he has made public. "All about," he says, "looks thrifty," and the farm-work appears to be thoroughly and judiciously done. Miss Laura Fuller was first called upon. This lady wears "a short and rather loo-ely-fitting dress, a hood and a pair of men's boots. She has "a beard as heavy as is often seen upon a man, and a voice that would not be mistaken for that of a woman." She is "tolerably well informed," and showed that her heart was in her vocation. That she plies it without masculine help and with decided prosperity is unquestionable. Her sister Electa is, however regarded as the best manager and "most business like of the two." Her visitor found this lady to have much the appearance of her sister, but she is "more dignified and patriarchal, with a head considerably bald, and locks whitened by the frosts of many winters." Miss Fuller, we are assured, cut away the virgin forest that once covered her farm with her own hands. All the toil that was needed to bring the land into condition she performed, solitary and alone. She has reared stock of all kinds, "including fine horses and colts, for which a great fancy had been taken." The wild beasts that formerly infested her neighborhood, this Diana of the wilderness herself slew; and rumor has it that "men who had presumed to trifle with Electa had fallen as did the beasts and trees." We take it for granted, however, that this is a delicate exaggeration.

There seems to be no reason to doubt the fact that two enterprising and courageous women have gone into the heart of a new country, and there, by the sweat of their brows, and by the calling assigned to our first ancestor, have carved out for themselves an honorable independence. They have got from the ground an honest living, and have enough laid up to sustain them in age, when they cease to labor.

A SCIENTIFIC LOSS.—Among the disastrous losses occasioned by the Chicago fire, the very valuable entomological collection of the late Dr. Walsh was totally destroyed. After the death of the eminent entomologist, the collection became by purchase the property of the State. It was not only very extensive, but the specimens were arranged and labelled with great care and accuracy; and it will be many years before another can be collected to replace it.

A Brama hen in Muscatine, Iowa, recently laid an egg seven and a quarter inches in circumference, and nine inches around the ends, and contained a triple yolk.

A French chemist asserts that if tea be ground, like coffee, before hot water is poured upon it, it will yield nearly double the amount of its exhilarating qualities.

Examine the roots of fruit trees near the surface of the ground. If gum exudes, the grub is certainly at work under the bark. Dig it out at once. Should you chance to see a copper-colored substance exuding from the stem of an apple tree, a borer may be found there also.

AUNT ELIZA'S CAKE.—One cup of sugar, one cup of sour cream, nearly two cups of flour, and one teaspoonful of soda. Flavor as preferred.—American Agriculturist.

HALIFAX, N. S., JANUARY 3, 1872.

MESSENGER ALMANACK.

JANUARY, 1872.

Last Quarter, Jan. 3rd, 5h. 45m. afternoon. New Moon, " 10h, 10h. 44m. morning. First Quarter, " 17h, 7h. 48m. morning. Full Moon, " 25th, 1h. 0m. afternoon.

Table with columns: Day, SUN, MOON, High Tide. Rows for days of the month from 1st to 31st.

THE TIDES.—The column of the Moon's Position gives the time of high water at Parrsboro', Cornwallis, Horton, Hantsport, Windsor, Newport, and Truro.

High water at Pictou and Cape Tormentine, 2 hours and 11 minutes later than at Halifax. At Annapolis, St. John, N. B., and Portland Maine, 3 hours and 25 minutes later, and at St. John's, Newfoundland 20 minutes earlier, than at Halifax. At Charlottetown, 2 hours 56 minutes later. At Westport, 2 hours 54 minutes later. At Yarmouth, 2 hours 20 minutes later.

FOR THE LENGTH OF THE DAY.—Add 12 hours to the time of the sun's setting, and from the sum subtract the time of rising.

FOR THE LENGTH OF THE NIGHT.—Subtract the time of the sun's setting from 12 hours, and to the remainder add the time of rising next morning.

A. V. P. B.

ARCHIBALD'S VEGETABLE PAIN BALSAM is an article worthy of patronage and should be found in every house. It is equal if not superior to any other Pain Killer now in use. Also, Archibald's Cough Mixture for Coughs, Colds, and all Lung Diseases. The Proprietor has removed to Truro, Colchester Co., N. S., is now extending his business, and will be prepared to furnish his numerous patrons with the above, as well as many other valuable remedies compounded by him. Sold by all the principal Dealers and Druggists in the Province. Oct. 21. 1 yr.

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The tone possesses a most fascinating quality, closely resembling the real VOX HUMANA, being delicate and sympathetic, and free from the disagreeable tremor that hounds most of the mis-called VOX HUMANA stops. Numbers Four and Five will stand especially effective in churches of moderate size. Number Four has an Octave of Sub-bass, and Number Five both Sub-bass and an Octave Coupler, giving a great increase of power, but with no sacrifice of sweetness. LARGER AND MORE COSTLY STYLES are also offered, of which the catalogue of the manufacturer will give information. Send for circular! Address The Smith American Organ Co. BOSTON, MASS. C. E. GATES.

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In Liver complaint and Dyspepsia, No. 2 Bitters must be taken with No. 1 Syrup.

In bad cases of Dropsy, No. 2 and No. 3, Bitters must be taken with No. 1 Syrup.

For Gravel No. 3 Bitters and No. 1 Syrup, together with Gates' Vegetable Plaster and Nerve Ointment applied to the back near the kidneys.

For pains and Rheumatism in any part of the body, No. 1 Syrup, and Gates' Nerve Ointment and Aesdian Liniment mixed together applied to the painful parts.

For sore throat, rub the Linctum and Ointment (mixed together) into the parts affected, at the same time taking No. 1 Syrup to cleanse the stomach.

For Piles, take No. 2 Syrup and No. 2 Bitters, and use the Nerve Ointment freely.

For Sore Eyes, bathe with Gates' Eye Relief when retiring at night. This preparation will also be found beneficial in cases of Piles, to be used externally.

Gates' Catarrh Snuff will cure Catarrh and Colds in the head.

In all cases of weak back, arising from Liver Complaint, strains, weakness, &c., the vegetable Plaster must be used.

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Gates' Certain Check for Cholera and Diarrhoea never fails to give satisfaction.

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The Bitters and Syrup may be taken separately under any circumstances, but in chronic cases both must be taken to effect a cure.

These medicines will be promptly forwarded by the manufacturers when orders are accompanied by the cash. Address CALEB GATES & CO., Middleton, Wilmot, Annapolis Co.

This is to certify that I was suffering from weakness and general debility. Having tried many remedies without being benefited, I was induced to try Dr. Gates' Medicines two years ago, and have enjoyed much better health, since using them than for many years before, and can safely recommend them to the public. Mrs. L. F. PALMER.

Aylesford, Oct. 2nd, 1869.

PRICE. Bitters \$1 per quart; Syrup 50 cents per pint bottle; Linctum 30 cents per bottle and the ointment 30 cents per box.

Address CALEB GATES & CO., Farmington, Wilmot, Annapolis Co.

A large number of certificates, similar to the above, have been received and will be published at times for the information of the afflicted and the people generally.

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