

Correspondence.

INCUBATION.—Amateur, Montreal.—The heat in your incubator should never exceed 104 degrees, nor should it be allowed to fall below 99 degrees. These are the two extremes. The safe medium is found between them.

SHEEP-SHEARING MACHINE.—Quidnunc, Drumbo.—There is such an invention, now claimed to be in successful operation in New York. It is somewhat elaborate, driven by means of an air pump, and costly. It shears a sheep in five minutes.

CONCRETE.—Farmer, Winterbourne.—A mixture of sharp sand and pebble, in the proportion of eleven parts to one of hydraulic lime, will make an excellent material for concrete walls. The mortar should contain about one-third its bulk of hydraulic lime.

RUST.—W. W., Trowbridge.—You can do little now but let it run its course. As a preventive measure for the future, see that your seed is free from smut or other fungoid spores, and steep it in brine or blue vitriol. Your land should be thoroughly underdrained.

COOLING THE ROOM.—Sufferer.—Keep a large shallow basin of cool water in the room, and change its contents once or twice daily. The hot air of the room takes up the water in the form of vapor, and thus a greater coolness is diffused, until air and water have a uniform temperature.

OATS TO THE ACRE.—Inquirer, Truro.—The prescribed quantity to the acre is 75 to 100 lbs. broadcast, or 65 to 80 lbs. if drilled. An esteemed correspondent recommended, in our April number, about half these quantities, assuring those who follow the advice that they will profit by it both in quality and quantity.

R. A. G.—We decline to do gratuitous advertising for your invention. If the matter were of great public benefit the thing would be different. As it is we do not see that the invention when patented will be of service to anyone but you, and if you wish to make it known our advertising columns are at your service.

CLOVER IN THE SOIL.—Reader, Orillia.—Clover is practically a creator of nitrogen in the soil, as it is also a purveyor of potash and phosphoric acid. Experiments made in Germany by competent men show that the clover of a single acre leaves nitrogen enough for 116 bushels of wheat, phosphoric acid enough for 114 bushels, and potash enough for 78 bushels—and all, too, in the very best possible condition.

INSECTS FOR NAME.—C. Julian.—The large beetle sent to us is the Water-Beetle or Water-Tiger, *Dytiscus Harvii*. It is aquatic both in the larval and perfect forms. It lives in ponds and slow running waters, and feeds on aquatic plants and aquatic insects found upon them. A similar beetle is found in England. As the *Dytiscus* is not common, and as the specimen enclosed was broken in transit, we should be obliged to our friend if he will send us the next one he catches. The small moths were so broken as to be only recognizable as *Tenebræ*. The specimens sent resembled, as far as we could make out, a moth of that family found near Toronto, and the larvæ of which prey upon the oak.

Patrons of Husbandry.

The following new Granges have been constituted since our last issue:—

Subordinate Granges.

522. WILLOW.—W. H. Kent, Master, Medonte; Wm. Murray, Secretary, Medonte.

523. ROTHSAY.—H. H. Eaton, Master, Truro, N.S.; John S. Miller, Secretary, Truro, N.S.

524. VACHILL.—William Henry, Master, Georgiana; R. A. Riddle, Secretary, Vachell.

525. BEE HIVE.—Robert Murray, Master, Blantyre; Donald Robertson, Secretary, Blantyre.

526. EDEN GROVE.—James McDeath, Master, Eden Grove; M. Atkins, Secretary, Ellangowan.

527. SOMER.—John Cunningham, Master, Wilkesport; Wm. Fader, Secretary, Bradshaw.

528. SUFFROND.—S. S. Martin, Master, Warden; C. B. Martin, Secretary, Warden.

Division Grange.

31. YORK.—Charles McGibbon, Master, Douglas, N.B.; J. H. Murch, Secretary, Douglas, N.B.

The executive committee of Dominion Grange will meet in Toronto on Tuesday, September 5.

W. P. PAGE, Secretary.

Miscellaneous.

DR. MALHERBE says that sowing silk is sometimes impregnated with the acetate of lead, and that such silk poisons the mouth if brought into contact with it. Add to this risk the extra dentist's bills, resulting from cracks made in the teeth by the biting of the thread and silk, and women should make a resolve always to use their scissor to sever threads.

CASES OF SEVERE poisoning from eating pressed corn beef are reported from New York, Boston and Chicago. The poison is supposed to have germinated because the meat was pressed before it had cooled, after being boiled, so that it was not wholly free from air. Fermentation and decomposition consequently ensued, developing a most dangerous poison.

HOMING PIGEONS AT SEA.—A French Steamship Company is about to make some systematic experiments upon the capabilities of homing pigeons at sea. Little is positively known of this, and of course much must depend on whether pigeons fly home entirely by sight, as supposed by Mr. Tegetmeier and others of great experience, or whether there be some peculiar instinct which may at least have a share in the phenomenon. We shall await the results with much interest.

HOW TO TREAT CROWS.—It is very gratifying to see that the poor crow which only a few years ago everybody's hand was against, turns out to be one of the most valuable birds for the farmer we have. Their only sin is in eating the newly-planted grains of corn; but this can be wholly obviated by taking half a peck of corn for a field, soaking it well and scattering it over an adjoining field. Crows never eat any hard grain, but will bury it until it becomes soft, as we have often seen them do. But they at all times prefer worms, beetles, &c., when they can be obtained, and devour immense numbers of them.

THE TOAD, almost universally despised and upbraided for his ugliness, is yet a useful, good-natured, quiet fellow, who recognizes his friends and those who are kind to him. Like the sparrow, the toad has been considered a nuisance, and in some sections has been exterminated; but the exterminators have been only too glad afterwards to get him back by the expenditure of large sums of money. So useful are toads in gardens that they are sold in France by the dozen, for the purpose of stocking gardens to free them from many injurious insects. The toad lives almost entirely on winged insects, and never does harm to plants.

HOW TO USE A GRINDSTONE.—1st. Don't waste the stone by running it in water, nor allow it to stand in water when not in use, as this will cause a soft place. 2nd. Wet the stone by dropping water on it from a pot suspended above the stone, and stop off the water when not in use. 3rd. Don't allow the stone to get out of order, but keep it perfectly round by the use of a piece of gas pipe or a hacker, or use a pair of the double lung stones, which keep each other in order. 4th. Clean off all greasy tools before the sharpening, as grease or oil destroys the grit. 5th. Observe—When you get a stone that suits your purpose, send a sample of the grit to the dealer to select by; half an ounce sample is enough and can be sent in a letter by mail.

WORKING DOGS.—A New York paper states that three men and five dogs are employed by C. Moeller, of that city, in his spike manufactory, when business is good. Two dogs and a man are out of work at present owing to dullness of trade. The dog treads in a wheel, which, revolving, blows the forge bellows. While one works, the others rest. Mr. Moeller has carried on his business by aid of canine power over seventeen years. He says, "the dogs do their work well and at small expense; they never go on strike for higher wages, have no labor unions, never get intoxicated and disorderly, never absent themselves from work without good cause, they obey orders without growling, and are very reliable."

HOW TO DISINFECT CARRIAGES.—The best method of disinfecting carriages is to burn one ounce of sulphur inside the carriage, the doors and windows being closely shut, and the loose cushions stood on end. The clothes should be disinfected with sulphurous acid; except that, if the sulphur be burnt in an ordinary room, about four ounces of sulphur should be used, and if possible, the clothes should be placed in a chamber of small size, or large box, heated by gas or fire, and exposed to a temperature of from 230° to 250° Fah. as well as to sulphur fumes. Exposure to heat will do, with or without the addition of sulphur. Of course nothing that will bleach must be exposed to sulphurous acid gas, unless the owners are first told that the color of the article will probably be destroyed.

NEW CURE FOR BOILS.—Dr. Simon, a physician of Lorraine, gives a new cure for boils, namely, by treating them with camphorated alcohol. As soon as the culminating point of a boil makes its appearance, he puts a little of the liquid in a saucer, and dipping the ends of his little finger in it, rubs the inflamed surface, especially the central part, repeating the operation eight or ten times for about half a minute. He then allows the surface to dry, placing over it a slight coating of camphorated olive oil. He says that four such applications will, in almost all cases, cause boils to dry up and disappear; the operation to be performed morning, noon, and evening. The announcement of so simple a cure for such a painful malady will bear repetition.

REMEDY FOR POISON.—If a person swallows any poison whatever, or has fallen into convulsions from having overloaded the stomach, an instantaneous remedy, more efficient and applicable in a larger number of cases than half a dozen medicines we can now think of, is a heaping teaspoonful of common salt, and as much ground mustard, stirred rapidly in a teacup of water, warm or cold, and swallowed instantly. It is scarcely down before it begins to come up, bringing with it the remaining contents of the stomach; and lest there be any remnant of a poison, however small, let the white of an egg, or a teacup of strong coffee, be swallowed as soon as the stomach is quiet; because these very common articles nullify a larger number of virulent poisons than any medicines in the shops.

GETTING RID OF HAWKS.—There are several ways to get rid of hawks. One is to shoot them when they come. If you watch, you will find that they come at the same time of day, and you can get a good shot at them. Another way is to set a trap on the top of a pole near where the chickens are. The hawk will sometimes light on the highest object before going down for the chickens, and light in the trap. This is a sure way to catch an owl. Skunks and minks may be caught in traps with a very little trouble. A barrel balanced on the bilge over a pole, about seven inches high, with open end brought down to the ground, and bait put on bottom. The skunk will walk into the open end, and when he gets just past the middle the barrel will right up on the bottom, leaving the skunk a prisoner. This has often been tried successfully.

HAY-MAKING BY BURIAL.—At a late meeting of directors of the Highland and Agricultural Society of Scotland, letters were submitted from Mr. Dudgeon, of Cargen, sending sample of hay made on the Hungarian method:—Mr. Dudgeon states that the grass was put into a pit six feet deep, quite wet, on the day it was cut, covered up to a depth of 15 inches with earth. The pit was opened in the beginning of May, after having been enclosed for eleven months. He adds that the process appeared perfectly successful, and though involving a little more expense, it was worthy of consideration, in a wet season, whether it would not be worth while securing at least a part of the crop in this manner. The sample was shown to the directors, and Mr. Mackenzie stated that he had taken some of the hay home, and found that the horses and cattle ate it readily.

INSTINCT OF SWALLOWS.—As a farmer in a neighboring town was getting in his hay, he noticed an unusual commotion among the swallows, which had built a long row of nests under the eaves of his barn. They appeared greatly excited, flying rapidly about and filling the air with their cries of distress. As the load of hay upon which he was riding passed into the barn, he saw that a young swallow in a nest directly over the door had caught its neck in a crack between two shingles and was unable to liberate itself. He stopped his team and set the young bird free, restoring it to its nest. Upon his return to the barn with his next load of hay, noticing that the swallows were quiet, he examined the crack, and found that they had filled it completely with mud, so that no matter how enterprising or how foolish the young swallow might be, he could not again endanger his life or the peace of that community by any experiments upon that crack.—*Homeslad.*

BURGLAR-PROOF DOORS.—The following is said to be a perfect contrivance for rendering doors burglar-proof. It is simply a little brass wedge, with a small piece of the same metal attached to its sloping side. The wedge has only to be pushed from the inside, between the closed door and the door sill. No other fastening is necessary, as any attempt to open the door only tightens the wedge. An ordinary torpedo may be inserted between the wedge and the piece of metal rivetted upon it. The slightest attempt to force the door will explode the torpedo and create an alarm. This style of wedge may be made of hard wood, with a little piece of tin rivetted on, under which to place the torpedo. In this case the tin should begin low down at the sharp end of the wedge, to protect it. It is sometimes a good plan to have a hole bored in the wedge so that it may be temporarily secured to the floor (with a nail or pocket gimlet) about three inches in front of the door. In this way any attempt to open the door is sure to meet with failure and detection the same instant.

VEGETABLE COLORS AND LIGHT.—The influence of darkness on the colors of fruits and flowers is sometimes remarkable, and different from supposed results. It was observed many years ago that some apples grown in Northern Ohio were coloured with a higher red than the same sorts grown in the southern parts of the State, under longer summers and a more nearly perpendicular sun. The effect of darkness on the color of summer pears has been observed by fruit growers—specimens which are nearly ripened on the sunny side of the tree assuming a much more brilliant red if placed in a dark drawer a week or ten days before softening, than if left exposed to light. Some curious facts have been lately brought out by Prof. Sachs, of Würzburg, relative to a similar influence on flowers. Bulbs grown and bearing flowers in a dark room, presented their natural hues; nasturtium had more yellow flowers in the dark; wall flowers had brighter blossoms; other plants had paler flowers; the effects were diverse with different plants. Such experiments would be interesting to repeat.