

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN
THE DOMINION.

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Agents for "The Farmer's Advocate and Home Journal,"
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1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
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ness to do so. There is room for thought right here. Have Ontario farmers been too conservative—too ready to "stand pat" and not willing to put more money in equipment and improvements, or have the rates of interest been so high that the supreme object was to get rid of notes and mortgages and keep free of them, even though a little borrowed money could often be used to good advantage? Add the one hundred millions which Ontario farmers now have on deposit in the banks to the billion and one-half they have invested, and it would only be a beginning towards the proper equipment of the farms. Could a good deal more not be profitably invested on our farms? We agree that some farms are over-equipped and cannot be made pay, but a far greater majority would be the better of added equipment. Would this not mean more borrowed money? After all is this statement sufficient upon which to base our prosperity? Mortgages are said to eat like cancers. Ontario farmers seem to be successfully fighting them. Study the figures, consider the statement made in Chicago and ask yourself: Mr. Farmer are you progressive, are you making the most of your farm?

People are continually being warned that fruit growing is being over done. In the introduction of a new work on strawberry culture the encouraging axiom is laid down that "demand is increased by a crop of well-grown, well-packed, and properly sold fruit."

If one has the money to spare, instead of dabbling in stocks, about the real nature of which we are unacquainted, why not invest it in farm improvements, equipment or live stock, or in the comfort and beautification of our homes? There is a certain and gratifying return from the latter.

Medical Inspection of Schools.

Whether the speeches that some of our Health Officers are making on the condition of the schools and pupils are correctly reported or not we cannot say but we are disposed to hope that the reports are exaggerated or to think, that if correctly reported, the opinions are based on exceptional experiences. Most of the arguments lead to a plea for the multiplication of inspecting officers—dental inspectors, eye, ear, nose and throat inspectors, lung inspectors, sanitary inspectors and visiting nurses.

While it is impossible to exaggerate the importance of conserving the public health and particularly the health of the youth yet before creating new staffs of inspectors or otherwise complicating the machinery of inspection and increasing the expense it is worth while to inquire whether the teachers and the inspectors we already have are competent, or can be made competent, to do what inspecting is required. Cannot the teachers who are constantly with the children detect short-sightedness or astigmatism, mouth-breathing or carious teeth? If they can it is certainly better that the responsibility should be laid upon them than that it be removed to occasional visitors whose calls will be made at times when some of the pupils are absent.

It has to be admitted that there is better ground for believing that the teachers can be made competent for these duties than that they are already. Young people looking forward to becoming teachers receive their academic training in the high schools and so far as we know, Ontario is the only Province or state that does not teach human physiology and hygiene in its high schools. If this defect were remedied then in the normal schools the teachers-in-training could be trained to test eyes and ears and examine teeth and throat. Illustrated bulletins, clearly describing symptoms in popular language and advising as to procedure might without much cost be prepared by the Provincial Board of Health and issued in quantity to the schools, sufficient for distribution from time to time to all the homes in the school districts where children are being brought up. This literature would start and guide health inspection in the very best place and where it most properly belongs—namely in the home. Every step taken to place the responsibility for the health of the children directly on the parents and teachers is a wise one. At any rate we believe that it is the duty of the Education Department to devise methods of making the maximum use of the regular teachers and school inspectors in the matters under consideration. If these officers prove quite incapable, then the creation of staffs of special inspectors and nurses may have to be considered, but first the teacher should do his part and the inspector should exercise his authority where necessary.

Nature's Diary.

A. B. Klugh, M.A.

In the woods, and more particularly in openings in coniferous woods, the Dwarf Cornel or Bunch-berry is now blooming in great showy patches. This little plant is attractive even when it only occurs scattered through the woods, but when it is seen in huge clumps it is a striking feature of the early summer landscape.



Dwarf Cornel.

The parts of this plant which look like petals are really large white bracts, which surround the clusters of small greenish-white flowers. Later in the season, the plant bears compact bunches of coral-red berries, which are edible.

"The Catbird sings a crooked song,
in minors that are flat,
And when he can't control his voice
he mews just like a cat,
Then nods his head and whisks his tail
and lets it go at that"

So writes Oliver Davie of the Catbird. This species is a variety artist among the bird performers, having a great many "turns." These include a wide range of notes from those which it pours forth in its beautiful song to "clacks" and catcalls. Another vaudeville characteristic is its imitations of the songs of other species. He also emphasizes his various notes with gestures of the head and tail. Even when singing his tuneful melody he will interject into it a harsh "mi-au-aw".

The Catbird is a very alert species and is always on the watch for intruders upon his domains, and protests against intrusion by most emphatic "mi-au-aws." It chooses a nesting site in a low tree, shrub or briar, where the nest is usually built at about four feet from the ground. The nest is not a particularly neat structure, but is strongly made of sticks, coarse grass, weeds, strips of bark, and is lined with soft rootlets.

Concerning its economic status, the Catbird is "on the fence" since it does both harm and good. The food of the adults consists very largely of fruit, and when nesting in cultivated places, mostly of garden varieties. However there is a way to prevent entirely its depredations upon cultivated fruits and at the same time to benefit from its work in eating insects. That is to plant Elderberries or Russian Mulberries along the fences, as the Catbird, and also the Robin, prefer the fruits of these species to that of any cultivated varieties.

The greatest good done by this species is in feeding its young, since they are fed almost exclusively on insects. In one instance where the food of the young was investigated, sixty-two per cent. was found to consist of cutworms, one of the most annoying of all garden pests.

The young Eels are now ascending the rivers. The Eel is really a fresh-water fish whose real home is in rivers and lakes, but which runs down to salt water at spawning time. In this it is the exact opposite of many fishes like the Salmon and Shad which live in salt water and run up the rivers to spawn. The method of reproduction of the Eel was for ages a puzzle. Among the Greeks, who understood well enough the reproduction of most of the fishes, the Eel was supposed to be spontaneously generated from the mud. Pliny, a Roman writer on natural history, maintained that the young Eels sprang from the slime and fragments of skin which come off when the adult Eels rub against rocks. Some writers in the middle ages claimed that the young Eels were born alive, and in the seventeenth century, Leuwenhoek mistook certain parasites in the Eel for the young. Not until 1877 was the life history of the Eel fully worked out, and found to be as follows. They spawn in the fall in salt water, usually off the mouths of rivers, on mudbanks. Here the eggs hatch and at the beginning of the second spring the young Eels find their way to the mouths of rivers, which they ascend in immense numbers. In the fresh-water streams and lakes they remain until adult size, when they return to the sea to spawn. During this seaward migration they do not take any food, and when they arrive in salt water they do not remain near shore, but go out to deep water, where the development of the ovaries and testes takes place remarkably rapidly. When they reach the sea these organs are but very little developed, but within five weeks after reaching salt water the Eels are sexually mature. The spawning then takes place and the old males and females die, never returning to fresh water a second time. It was because they did not know of this very rapid development of the productive organs that the older writers were at a loss as to the method of reproduction of the Eel.

The Eel is remarkably prolific, the number of eggs produced by a single female being about 10,700,000. Oh! for a hen built on the same lines!

In their feeding habits Eels are chiefly scavengers, feeding upon all sorts of refuse but preferably on dead fish or other animal matter. They are great destroyers of the spawn of other fishes, and in this way are a serious menace in waters where fish-culture is being carried on. They also frequently eat all but the head and backbone of fish caught in nets before the nets are hauled.

About election time the country's future hangs tremulously on the height of the tariff or the old flag, but between times, as the chairman of the Toronto Manufacturers' Association the other day declared, the return of the country's prosperity depends upon how good the farmer's crops are.