

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

Published weekly by
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

Agents for "The Farmer's Advocate and Home Magazine",
Winnipeg, Man.

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.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s., in advance.
3. ADVERTISING RATES.—Single insertion, 20 cents per line, agate. Flat rate.
4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.
5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued.
6. REMITTANCES should be made direct to us, either by Money Order, Postal Note, Express Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
7. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
8. ANONYMOUS communications will receive no attention. In every case the "Full Name and Post office Address Must be Given."
9. WHEN A REPLY BY MAIL IS REQUIRED to Urgent, Veterinary or Legal Enquiries, \$1.00 must be enclosed.
10. LETTERS intended for publication should be written on one side of the paper only.
11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P. O. address.
12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known. Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
13. ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL and will not be forwarded.
14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (Limited),
London, Canada.

Co-operation Hardly Begun.

One frequently hears expressions of wonder at the rapid spread of the co-operative idea that war conditions seem to have brought about. In one branch of agriculture after another changes can be pointed out which have come easier by far since the war than was ever thought possible previous to August 1914. Farmers seem to get together with greater ease and freedom and, this done, they are willing to work shoulder to shoulder, to give and take and to "consider thy neighbor", as never before.

This is a good sign, but we have as yet barely touched the fringe of co-operation. All we are now witnessing is the willingness to co-operate beginning to make itself manifest. As an example of this it will probably be fair to take our fruit industry as an example of a branch of agriculture that has advanced further along the pathway of co-operation than any other. At least this is true in Ontario. There are probably 70 or more co-operative fruit shipping associations in Ontario, a large number of them being chiefly or even solely concerned with the apple crop. A Central Selling Agency was organized and has eked out an existence full of sorrow and disappointment, in spite of the fact that our apple industry is rapidly declining and needs a guiding hand such as a central body should be able to hold out. A strong cohesive organization of those 70 associations could do mighty things for the Ontario apple, but, instead, the tree that bears it is dying of neglect. In the Niagara Peninsula the same thing is being enacted among the tender fruit associations, except that an attempt to even organize a badly needed sales organization was unsuccessful.

Co-operation can show its true value if we stick to it. As yet we have not stuck very well; we have hardly begun to appreciate co-operation. When we do, co-operative effort will virtually revolutionize whole branches of agriculture in Eastern Canada. This is not only true as regards the marketing and distribution of farm products, but its effect will be shown in changed cultural methods.

What One Woman Did.

BY SANDY FRASER.

I hadna been feelin' quite as spry as usual for a couple o' weeks back, whatever the reason was I canna say unless it wis from readin' ower muckle bad war news this past spring. Gin it wisna that I dinna ken what it could hae been. Onyway I used to get tae botherin' mysel' by wonderin' how I wis gaein' to get all the wark done in case I kept on gettin' worse, an' the hayin' comin' on alang wi' everything else. I would lie awake for as much as half an hour some nights thinkin' about it. Then one day Jennie, my niece, sent me a copy o' a magazine that's printed in New York, and as I felt mair like readin' than warkin' oot in the hot sun the day it came, I juist stayed in the hoose an' read it frae cover tae cover. And there wis one article in it that I went back to an' read over the second time. If ye dinna mind and hae the time I'll be relatin' it to ye, maybe for yer benefit. It's a true story a'right, for the standin' o' the magazine that printed it guarantees that. It's an account o' a farm an' a farmer doon in one o' the Eastern States. Or maybe I should say "a farm an' a farmeress," because it's a woman that is runnin' the institution. There's a hundred an' twenty acres in the place, wi' sixty o' this in bush. Lots o' the farms aroon it hae been deserted by their owners who went further west wi' the idea o' makin' money faster than they found they could in the East. It's a hard enough country an' a lang way behind the times in most ways, but the farm I'm tellin' ye about doesna show ony signs o' the general run-doon appearance o' the community as a whole. The woman who owns it looks out for that. The house an' barns are all in guid shape, painted an' repaired as often as they need it. An' the live-stock the barns shelter are as thrifty an' good-lookin' as everything else. This live-stock consists o' one horse o' about eleven hundred weight, (kept for drivin' as well as daein' the wark, which the owner bought as a three-year-old and broke in herself), three cows, some pigs an' about a hundred hens.

Noo this woman has lived alone on this place for ten years. None o' her neebors are within callin' distance an' she does practically all the wark connected wi' the farm hersel'. For instance, in 1916 she raised fifteen tons o' hay, all o' which she mowed and raked hersel', with machinery where she could and by hand where the ground was rough. She pitched on all these loads in the field and did all the moving away in the barn. The same year she raised seventy-five bushels o' oats, daein' a' the wark hersel' except the pittin' in o' a couple o' loads. She had ploughed the land and harrowed it an' sowed it wi' no help ither than her horse.

The year before she had seventy-five bushels o' potatoes which she dug by hand and carried into her cellar alone. If she wants to break up a piece o' new land, or clear the stanes off a field, she will hire a man for a few weeks, but apart frae this she seems to hae no use for the opposite sex, except maybe as customers when it comes to sellin' her produce.

Then she has her garden that nobody ever pits a hand to but hersel'. In 1916 she grew peas, beans, tomatoes, cucumbers, beets, turnips, cabbage, cauliflower, parsnips, carrots, sweet corn; besides squash, pumpkins an' citron an' a few ither things for guid measure, such as blackberries an' apples, of which last she had sixty bushels. For a side-line, that's what ye might call goin' it pretty strong. Then she made forty gallons o' cider for vinegar, while she wis restin', I suppose. Her nearest market is seventeen miles away, so it canna be at this point that she gains ony time.

Noo this will gie ye an idea o' what wark this woman does in the simmer-time, but if ye think she tak's a sort o' half-holiday durin' the winter, as they say that she maist farmers do, ye're mistaken. It seems that she graduated frae a normal school in her younger days an' noo she is turnin' her education tae guid account by teachin' in the village school, about five miles frae her hame. The term lasts for mair than half the year and she drives the five miles ilka night an' mornin', daein' her chores about the barn an' hoose before daylight an' after dark. She has been teaching for mair than twenty years. This kind o' knocks oot the idea that some o' us had that school-teachers never can mak' guid hoose-keepers. And not only has she taught school but they hae appointed her superintendent noo, which means visitin' the ither schools in the toonship an' takin' anither slice oot o' her time. Even Sunday is no a'thegither a day o' rest for her, for they hae made her superintendent o' Sunday schools. Did ye ever notice that it is the busy person that always has time to do somethin' else? That's the way it seems tae go onyway.

Anither item in connection wi' her winter's wark shouldna be overlooked, as it amounts to mair than some farmers I ken dae, frae November to April. She hires a man to cut wood for her on the sixty acres o' bush I tauld ye about and on Saturdays an' holidays she draws this tae the landing, daein' all the unloadin' an' pilin' hersel', mind ye. Year before last she drew a hundred cords wi' her one horse, an' on her last trip hame at night she wad tak' a load wi' her, in this way haulin' her years' supply for hersel'.

Noo, as the boys say, for "goin' some" what dae ye think o' that? After I had finished readin' the story an' then thought o' the way I had been worryin' about gettin' my wark done I couldna help feelin' a wee bit ashamed o' mysel'. If a woman can dae all that that woman did I guess a man can dae all that I hae to dae, thinks I. Na doot it's mair a matter o' juist thinkin' ye can dae these things an' then first thing ye ken they're done. Na question we mak' oor job harder by worryin' about it an' daein' it twa or three times in imagination before we are called on to dae it in reality. I ken there's

lots o' the farmers in this country that are up against it hard enough, what wi' the takin' o' their boys tae the war an' their hired men tae the city, but when we read o' this woman we hae been tauld about, that naething in the shape o' wark seemed tae frighten, I think we'll hae to admit that oor ain case is no worse at ony rate, an' maybe juist a wee bit better. She seemed to be the kind o' person that did what she could and what she couldn't dae she didn't waste her energy worryin' about. But I'm not goin' to be drawin' morals for ye from her story. If there's ony there ye can get it for yersel', the way I did, and I hope it may dae ye as muckle guid.

Nature's Diary.

A. B. KLUGH, M.A.

Gardeners are sometimes troubled by a couple of beetles which attack asparagus, the Common Asparagus Beetle, and the Twelve-spotted Asparagus Beetle. The Common Asparagus Beetle is a handsome insect. It is slender and graceful, blue-black with a red thorax (the middle division of the body of an insect), and lemon-yellow and dark blue wing-covers with a reddish border. It is about one-fourth of an inch in length. The larva ("grub"), is dark gray or olive in color. The pupa, or resting stage, is yellow.

This insect is injurious in both the adult and larval stages. Early in the season they sometimes render the tender shoots unfit for market and later in the season they destroy the leaves of the high-grown plants, particularly the seedlings, the roots of which become weak when their foliage is destroyed. In the case of this plant the beds cannot be cut until the third or more usually the fourth year, and during this time they are particularly exposed to the attacks of this insect.

The Common Asparagus Beetle passes the winter in the adult state under some shelter, such as in piles of rubbish, sticks or stones, or under the loose bark of trees. In May the beetles issue from their winter quarters and lay the eggs for the first brood. The egg is very large in proportion to the size of the beetle, as it is nearly one-sixteenth of an inch in length. It is elongated and of a dark brown color. The eggs are deposited endwise upon the stem or foliage, and they hatch in from three to eight days. The larva when full-grown is soft and fleshy, much wrinkled, with a shining black head. It has six legs at the anterior end, and in addition has a pair of anal prolegs, and a pair of foot-like tubercles on each segment. When mature the larva enters the earth, and transforms to a pupa. In from five to eight days the adult beetles emerge from the pupa-case.

There are fortunately a good many natural checks upon the undue increase of this species. Predacious insects of many kinds attack and devour the larvæ—lady beetles, a wasp known as *Polistes pallipes* and a small dragon-fly, being among the most efficient of these. The Asparagus Beetle is very susceptible to sudden changes in temperature, and it has been noticed that immense numbers of the hibernating beetles are killed in winter when a severe cold spell follows open weather. Intense heat also seems to dry up the eggs so that they do not hatch.

There are several means by which this pest may be combatted. A cultural method which has proved efficient is to cut down all plants, including seedlings and volunteer growth in early spring, thus forcing the beetles to deposit their eggs upon new shoots, which are then cut every few days, before the eggs have time to hatch for the first brood.

It has been found that in hot weather the larvæ may be killed by brushing or beating them from the plants during the hottest part of the day so that they drop to the bare ground. They are very delicate creatures and as they crawl very slowly, very few of them are able to regain the shelter of the plants but die thus exposed on the hot earth.

Another method which has been proved efficient is to dust the plants with fresh, air-slaked lime early in the morning when the dew is still on them. All the grubs with which the lime comes in contact are at once destroyed. The use of arsenicals on the plants at the time when they are being cut for market is, of course, out of the question, not so much on account of any danger of poisoning as because of the whitish deposit which would be left on the shoots and thus spoil their appearance. After the cutting season is over, however, the most effective method of control is spraying the plants with a solution of two pounds of dry lead arsenate to fifty gallons of water. The adhesiveness of this solution is greatly increased by the addition of two pounds of resin-fishoil soap. It is interesting to note, in view of the fact that lead arsenate is now largely superseding the older Paris green, some experimental comparisons of these two arsenicals reported by the U. S. Department of Agriculture. It was found that when Paris green was used, only fifty per cent. of these insects were killed, when lead arsenate was used ninety per cent. were killed, and when lead arsenate and resin-fishoil soap were used a hundred per cent. were killed.

The Twelve-spotted Asparagus Beetle, sometimes called the Red Asparagus Beetle, is in some localities more troublesome than the common species. It is orange-red in color, with six black dots on each wing-cover. The larvæ of this species live within the ripening berries of the asparagus. Most of the damage is done by this species in early spring, as at this time the adult beetles which have just emerged from hibernation attack the young shoots.

The methods used in controlling this species are the same as those used against the Common Asparagus Beetle.