

stem to the base of the plant where they feed upon the sap of the plant. By winter they have entered the pupal stage, and become what is commonly known as "flaxseeds".

In May the mature fly emerges from these "flaxseeds" and lays eggs, on the blades of the wheat plant, for another brood. When the grubs hatch they work their way down the stalks and embed themselves in one of the lower joints. The joint becomes weakened and the straw crinkles down, consequently the kernels do not fill properly. The grubs enter the pupal stage, and frequently remain in the stubble until in August when the fly emerges and proceeds to lay eggs on the young wheat plants.

The remedies are founded chiefly on the time the eggs are laid. Delaying sowing fall wheat so that the egg-laying flies will have disappeared before the young plants have made sufficient growth to be in a proper condition for the flies to lay eggs upon them is recommended. This means not sowing until after the middle of September. Weather conditions are believed to influence the time the fly emerges. Some years seeding could safely be done earlier than others, but there is little danger of attacks of the fly after September 15, and if the soil is in good tilth wheat will then get sufficient growth before winter. Sowing a strip along side of the main field quite early will attract a large number of flies and the grubs which hatch can later be destroyed. It is advisable to follow a rotation of crops. Wheat after wheat usually suffers most. In well prepared soil the crop makes rapid growth and vigorous plants are produced which have a better chance of recovering from an attack than a spindly stand. Refuse from a threshing machine often contains many "flaxseeds" or pupae and should be destroyed. Plowing the wheat stubble immediately after harvest will also prevent many flies from emerging to infest new sown fields. Every precaution should be taken to avoid loss of the wheat crop.

### A Corn Tillage Contrast.

The season of 1916 on the farm has been about the most baffling in the memory of the oldest inhabitant. A protracted deluge of cold rain at sowing and planting time was soon followed by a like period of drought ending with extreme heat in July and early August. Water-logged places in field and garden were left bare, with one good result that miles of tile drains were hurried in as an insurance against similar setbacks in the future. In one case under observation by "The Farmer's Advocate" two modes of dealing with soil under such conditions were contrasted with a sweet corn crop. Both plots of clay loam, only a few rods apart, had been equally well manured and then plowed down the previous fall, the orthodox recommendation for garden crops. Both were very lightly top-dressed with some spare stable manure in the spring. One plot was surface-worked with a disc harrow and planted with sweet corn on May 24. The seed germinated and grew rather slowly and developed fair ears fit for table use by August 15. But the stalks and ears were not equal to those of a good corn season. The other plot intended for a later succession suffered more from the wet and became so sodden and stiff that it could not be worked up with the disc harrow. As a result, it was plowed to about the same depth that it had been the fall before and then harrowed into a tilth fit for planting the sweet corn, which was done on June 13, some twenty days after the other plot. This mode brought to the surface the manure buried and mellowed down during the long winter and spring, and the better growth of the plants was so remarkable as to

attract the notice of the casual observer. Though apparently not in as fine condition for planting as the other plot, the fertility was at the surface just where required by the rootlets of the corn, the stalks and leaves of which became of a more luxuriant color and about a foot higher by the middle of August than the earlier plot with also every promise of a heavier ear yield, though, of course, not as far advanced to maturity. In case of the second plot the weather was not so much more favorable, so that the greater growth was mainly attributed to the difference in tillage, emphasizing a point that has frequently been emphasized in regard to crops that draw their nutriment from near the surface.

### No Complaints.

EDITOR "THE FARMER'S ADVOCATE":

The ither nicht as I wis sittin' out on the back porch takin' my smoke as usual aifter my day's wark wis done, wha comes along but auld Dan McGregor, a neebor o' mine, an' a friend o' forty year's standing o' mair. "Weel Sandy," says he, "ye're lookin' unco' sober the nicht. What's the auld wumman been haulin' ye over the coals for the noo? Or maybe yer liver is troublin' ye again?" "The auld wumman is no tae blame this time," I said, an' ma liver is a'richt sae far as I ken, but ma hired mon has quit, an' I hae been tryin' tae feenish up the hayin' by masel', an' it's no' a job that is calculated tae bring ye tae the close o' the day in a peaceful frame o' mind, I can tell ye that. Did ye ever try tae pitch a load o' dry rakin's on a windy day wi' a short-handled fork an' wi' nobody on the wagon?" "No," says Dan, "but I can imagine ye'd hae some picnic. How cam' ye wi' the short-handled fork?" "I didna' notice it till I got tae the field an' I hadna' time tae gae back for anither one," I replied. "I couldna' pit on mair nor twa or three forkfuls when I wad hae tae climb up an' tramp it, or the wind wad tak' it an' spread it a' ower the field again. I had a mind tae gang tae the hoose an' get the auld wumman, but I thocht she'd maybe fall aff the load, an' na tellin' but she'd break her neck or somethin', an' I'd be as bad aff as ever. Sae I stuck tae it, an' finally I got the last o' it on tae the wagon an' intae the barn, but I'm no' sorry that the hayin' is feenished up for this year, believe me. This independent farmin' is gettin' tae be a wee bit too much like wark for an' auld chap like me," says I.

"Weel Sandy," says Dan, takin' oot his pipe an' lightin' it for company's sake, "I ken ye're up against it in a way, but ye're no' the first wha had tae watch the hired mon tak' his way tae 'some far country' juist at the busiest time o' the year. It's a way they have, an' besides, this is war-time, so ye're no' supposed tae dae ony kickin' about the shortage o' men. Juist keep yer head cool an' yer feet warm, as they used tae say, an' dae what ye can to-day an' what's left forget it till to-morrow, an' ye'll come oot a'richt in the end."

"Na doot," says I, "but what about certain things that one man alane canna' manage. Lifting milk cans o' a couple o' hundred pounds weight intae a wagon, for instance. I mind o' one chap that used tae dae this. He's dead the noo." "Hoot mon," says Dan, "there's reason in a' things. Pit yer cans in the wagon first an' then pit the milk in them, or hae a milk-stand on a level wi' the floor o' yer rig. Ye can save yersel' a lot o' hard wark by a wee bit o' guid management. At the same time it's surprisin' what a mon can accomplish, all by himsel', in the shape o' plain hard wark, when he keeps at it, cool an' steady, frae mornin' till nicht."

I've done my share in ma day, even gin I say it masel'. Talk about yer makin' hay wi'oot help. Mony's the load I've pitched on an' then aff again wi'oot help or encouragement, except when the auld wumman wad come tae the field wi' a smack o' bread an' cheese-tae keep me gaein' till dark. I mind one year I forked ilka load o' hay I had over the top beam in the barn. When it wad get full in front I wad get up an' fork it back. There was no word o' hay-loaders an' horse-forks in those days. Na doot I could hae got help gin I had looked around for it, but I was in for savin' money at that time, an' I had a pretty guid conceit o' masel' as weel. I cam' pretty near gettin' it taken oot o' me one time though. Through a bit o' ma ain carelessness I pit ma little finger oot o' joint. I managed tae pit it back again, but wi' ma hand a' swelled up, "hoo in warld," says I, "am I gaein' tae dae the milkin' the noo?" I had twelve coos tae milk at the time, an' no one on the place that kenned onything aboot milkin' but masel'. There wis naething tae dae but milk them the best I could, so I went at it. For the next couple o' weeks I spent the best pairt o' ma time on the milking stool, but I finally got tae where I could use ma two hands again an' ma troubles were over. I heard ma auld feyther say once that one mon could dae maist onything that twa men could dae, gin he was in a pinch. An' there seems tae be somethin' in it. Ye mind that big stone dyke alongside the road on auld Peter Stewart's place? Weel, Peter built that fence himsel' an' ye ken there's some pretty guid-sized stanes in it. When he got a stane he couldna' lift he wad tak' a piece o' plank he had an' lean it up against the wall an' roll the stane up on that. He must hae built aboot half a mile o' fence in that way. An' in the winter-time I hae seen him cuttin' down trees an' sawin' them up intae logs wi' the cross-cut saw an' then loadin' them on tae the sleigh a' by himsel'. He got at last so he could cut the trees doon wi' his cross-cut, but it wisna sae quick as the axe."

"Sae ye see Sandy," says Dan, knockin' the ashes oot o' his pipe an' puttin' it awa', "Ye're not the only chap in the warld that has had tae earn the right tae live on a farm wi'oot help frae outsiders."

"That's richt Dan," I replied, "ye'll no' hear me kickin' again aboot pittin' in a few loads o' hay alane. It reminds me o' what I heard a mon sayin' wha had been tae the Klondike in the year o' ninety-eight. He said that when they were crossin' the White Pass it didn't matter what kind o' a scrape ye got intae wi' yer sleighs or yer dogs or yer horses, gin ye wad juist look around ye'd see someone in a far worse fix than yersel'. So it seems it's the same wi' farmin'. There's plenty ither ken as muckle as yersel' aboot hardship, an' maybe a wee bit mair."

"Aye," says Dan, "ye're richt. There's no' mony farmers but get their turn on the short end o' the whiffle-tree; but gin they're the backbone o' the country, as they tell them around election time that they are, I believe it's because o' this one thing mair than onything else, that they've learned tae expect hardship an' tae mak' the best o' it when it came. An' I'm gaein' tae say this, that ony a bledied mon that sells his farm an' gae oot o' business these times because o' the scarcity o' hired help has no' got the richt stuff in him an' is no friend o' his country. Let him dae his share, either here or in France gin he wants tae pass for a mon." "Weel," I said as Dan wis startin' for hame, "that's a pretty hard crack for some chaps I ken; but they say that all is fair in war-time, sae I guess we'll let them tak' it," says I.

SANDY FRASER.

## Canada's Young Farmers and Future Leaders.

### A Little Bird's Wit.

EDITOR "THE FARMER'S ADVOCATE":

I have been reading with pleasure some of the letters in the new "Young Farmer's" department of our "Advocate." There is no place quite so interesting to live as on the farm when one has his eyes and ears open. It's like a big picture book before us. Every day and every season also, there is plenty of music too if the ear is trained to hear. The teacher in our section school has given us a good many hints about being on the lookout for new plants and insects, and especially to study the ways of birds and small wild animals. So the other day when near the big water tank behind the barn where the cattle drink morning and evening I noticed a hen trying to reach down for a drink but the water was too low for her. So she gave it up, but a more risky pullet, perhaps more thirsty, toppled in and got a ducking. In the same way one was drowned the day before. The little grey birds fluttering about seemed to have more sense than the bigger barnyard fowls. The water was running into the drinking tank through a small iron pipe from a higher tank supplied by the windmill. The pipe empties about a foot above the top of surface of the tank and extends over the side eight or ten inches. What did the wee bird do? Instead of jumping in like the pullet it flew on to the small pipe and hopped out to the end and bending its head over sipped at

leisure from the stream as it trickled through the opening at the end. Shrewd little bird, I thought.

JAMIE.

### Competitions Create Interest.

Experiences! Well I'm sure any boy who has lived on the farm all his life has seen many different experiences. I have at any rate. Most of my experiences have been lessons learned not money. propositions, although I have always earned my own spending money and more, I must say that the experiences I made the least out of were what I call my most paying experiences, because it was by them I learned my most important lessons. Ever since I can remember I have helped my father and brothers and have always taken a deep interest, but not as much as when something was allotted to me for my special care. When my brother showed apples at the fair he used to get me to help him and I presume he thought I would make a lawyer by the number of questions I put to him, such as "Why don't you pick out the largest ones?" and "What are you rubbing them for when they are not dirty?" I soon found out the whys and wherefores, and ever since I have been sending in exhibits got up

There was one competition which I especially want to tell you about. It was confined to sons and daughters of members of the agricultural society. The competitors had to be under eighteen years of age. Each

exhibit consisted of a sheaf composed of a sufficient number of plants to make a compact bundle of approximately eight inches in diameter. The plants were to be selected by hand from standing crop on our own farms and were to show full length of straw (roots not included.) In placing the awards the judges considered the following points, (a) type, uniformity, compactness and productiveness of head; (b) character of straw; (c) quality of grain in head. We also had to tell the name of the variety of grain exhibited and the sheaves were to become the property of the society. There were four prizes given for five kinds of grain, spring wheat, fall wheat, oats, white, any variety, barley and rye. The prizes were \$2.00, \$1.50, \$1.00 and 50 cents. This competition caused great excitement among the young farmers, but it was no easy task to get what the competition called for, especially the first year it was announced, as most of the grain was cut before the prize lists were sent out. As soon as I saw the announcement I searched all the bays in the barn for the best grain I could get. Of course I could not get the full length of straw, but still I got the longest straw I could find and sorted it out into a sheaf regardless of the other points except the size. I proudly took my sheaves down to the fair. There was a very good showing of sheaves, and as I watched the boys bringing in their sheaves I thought sure I had them all beaten because mine were the longest. The next day when the doors were opened, in I rushed, expecting to see red tickets on most of my sheaves. But no, on the sheaves I didn't expect to see a prize