

making pork at a profit where a large amount of skim-milk is available. The farm superintendent, John M. Trueman, under whose direction the test was conducted, draws attention to the fact that in addition to the net profit of \$40.00 there was sold to the pigs at a good price 10,200 lbs. of skim-milk, that brought \$25.50, also 20 bushels of mangels for \$3.00, and \$8.92 worth of mixed grains grown on the farm. This makes a total return to the farm, outside of grain bought, from the six pigs amounting to \$82.54.

## THE FARM.

### Old Glengarry Optimistic.

EDITOR "THE FARMER'S ADVOCATE":

I've been thinkin' that maybe ye wouldna' mind gin I were tae send ye a sort o' wee report as tae hoo things are gaein' in this part o' the country this year in the matter o' crops an' weather an' so on. Auld Glengarry can generally gie a guid account o' itsel', an' judgin' by present appearances this year will be no exception tae the rule. I dinna' think we will hae to apply for Government aid for anither twelve months onyway.

Like the rest o' the province we had mair than we wanted o' wet weather frae April till near the last o' June, but we a' worried through it aifter a fashion an' the maist o' the farmers finished their seeding operations, though some o' them were what ye micht ca' a wee bit

late wi' their corn. Hooever, the present warm weather is bringing it on in guid shape an' gin' the frost doesna' come ower early this fall we may fill oor silos as usual, an' no' hae tae restrict the coos tae a hay an' strae diet as we used tae a few years back. Indeed it looks noo as though we could only afford tae gie them straw on Sundays an' ither holidays, this comin' winter, for late grain is unco' short in the maist o' cases owin' tae the dry weather at the present time. What was put in early is no' sae bad though.

But it's the hay crop we're a' braggin' about the noo. Ilka chap ye talk tae has a yarn o' his ain aboot his record-breakin' field o' clover or timothy. Mair loads hae been taken off less ground than at ony time since the year one, I guess. One mon wis tellin' me the ither day that his hay wis sae heavy that he couldna' rake it, sae he just pit the hay-loader intae it as the mower left it, an' though it wis a pretty lang job, he finally got it intae the barn. It reminds me o' some o' the stories that I used tae hear the auld folks tellin' aboot the hay they used tae raise here sixty or seventy year back. They had tae hang it on the fences tae dry it. Onyway it looks as though ony surplus frae oor farms this year wad be in shape o' hay. I heard a chap sayin' lately that he guessed the soldiers wad hae tae eat hay this year gin they were dependin' on us for their grub. Perhaps, hooever, we may be able tae spare other things as weel, later on. Present prospects for the potato crop are no' sae bad, an' I'm thinkin' the year's production o' cheese will be up tae onything in the past. The pastures hae been better than usual, an' the occasional showers we hae been getting lately are keeping them frae dryin' up entirely. I heard an auld

growler sayin' the ither day that the milk wis gettin' small an' the price o' cheese wis gettin' less, an' his face, while he wis talkin' wad mak' ye think there wis naething ahead for the farmer but starvation. But the price for cheese is still around sixteen cents, sae I dinna' think we should suffer mair than we did twenty years back when it used tae sell for six. But then I ken that guid crops an' high prices never converted a grumbler frae the error o' his ways. He's a grumbler tae the last. On the ither hand, hooever, we're glad tae say that there are those that poor crops an' hard times dinna' seem tae worry, an' they're juist as weel pleased wi' a sma' crop as a big one, when it was the best they could possibly get. In ony event we hae no need tae dae muckle kickin' in Glengarry an' hereabouts this year. There's plenty for man an' beast an' a guid market for a' we hae tae spare, sae what mair could we be askin'? Some o' us could dae wi' a wee bit mair help than we hae in harvestin' oor crops, I'll admit that. But gin the British Government is employing female labor in the factories, an' at ither jobs that used tae be done by men, maybe we can get ower oor difficulty by grantin' tae oor women the richt tae an equal share o' the outside wark on the farm. It micht be worth tryin' onyway as a sort o' war-time experiment, until 'such time as "the boys come hame." Of coorse it must be done wi' the ladies' consent. I'm a firm believer in the volunteer system. Conscription doesna' wark on the farm. Co-operation is a word that describes a better condection o' things, an' when we get that oor troubles will a' be over. At least that's what they tell us.

SANDY FRASER.

## Canada's Young Farmers and Future Leaders.

### Results from Treating Oats for Smut

EDITOR "THE FARMER'S ADVOCATE":

In Ontario and other provinces of the Dominion thousands of bushels of grain (especially oats) were destroyed by smut in 1915. This was by far the heaviest loss we ever had from this great grain destroyer, which, up until that year had never been seriously considered in many districts, but which was fast gaining a foothold in the grain fields of the Dominion.

Owing to the extremely wet summer of 1915 the smut spores on the oats increased to an alarming extent, and many people believed that the smut was caused altogether by the wet weather. Thanks, however, to the Ontario Agricultural College, which has been experimenting with the smut spores for years, a treatment for the prevention of smut became known. Our District Representative believed that smut could be controlled, and it was through him that I was convinced that it was worth a trial. However, I decided that I would leave one width of the drill across the field. I am glad I didn't leave more than one. The results of the experiment were very gratifying to me.

I used the formalin treatment, which is a 40-per cent. solution of formaldehyde, and the method which I followed is known as immersion, or, in other words, the grain is put in a large sack and allowed to soak in a barrel of the solution for twenty minutes. It is then taken out and spread on the barn floor until the oats become dry enough to run through the drill. In dipping we used a rope and pulleys to raise and lower the sack out of the solution. This made it possible to handle two-and-a-half bushels in a sack at once. After taking the sack out it was set on a slanting trough and allowed to drain for twenty minutes before being emptied on the floor.

The seed which was untreated was sown on exactly the same kind of land along side of that which was treated. Out of three hundred heads on a square yard there were one hundred and thirty-five heads of smut, but in what was treated I am safe in saying there wasn't one-hundred-and-thirty-five heads in fourteen acres. By treating the seed I saved nearly one-half of my oat crop. The oats from treated seed turned out sixty bushels to the acre, and if they had not been treated they would only have turned out about 33 bushels per acre.

Formalin for treating seed to sow 21 acres cost 60 cents, and allowing \$3.00 for a man's time treating the seed would only bring the total cost to \$3.60. The increased yield, due to treating the seed, was 567 bushels on the 21 acres. Valuing the oats at 40 cents per bushel, which is not high considering we sold all our seed oats at 70 cents per bushel, we gained \$226.80. The total cost was \$3.60, which left a total profit of \$223.20, plus good clean straw for feed, a clean threshing, and a good demand for seed oats. Treating the seed for smut paid me well, and it would have paid any one else as well. A neighbor who bought seed oats from us that spring took two bushels of the treated seed which we had left over, and you could see from the road where the treated seed was sown. When such has proven to be the case with one farmer, would it not be the same with every farmer?

Middlesex Co.

A. D. LIMON.

The man operating his farm on the mixed-farming basis always "hits it" with something. This season has amply demonstrated the truth of this statement.

### A Stanchion for Feeding Calves.

EDITOR "THE FARMER'S ADVOCATE":

Some time ago Peter McArthur told us what a fine thing a wire fence was for feeding calves through. I took his advice and tried it, and it worked fine. The calves grew into big, lusty fellows, but they still persist in feeding through wire fences, much to the detriment of both the wire fence and the crop growing on the other side of it. So this spring I put into practice a modification of an idea I got when visiting the Guelph College farm. This stanchion is made of wood instead of steel and is home-made. A few hours' work with some inch lumber will soon set it up. The accompanying illustration will explain itself. The only alterations which might be an improvement would be to put the stanchions a little farther apart, for in the one illustrated the calves can suck one another's ears, but they can soon be taught not to do that, and it is only a minor consideration compared to feeding them any other way. I think great harm is done to heifer calves by having others suck their udders when fed loose, and also by beating them to keep them away while one calf is being fed.



The Calves in the Stanchions.

This stanchion can be made for any number of calves, and can be carried around by two men. It can be set up in any convenient fence corner, and can be used as a gate into the calf paddock, or as a partition in the stable. The calves are left in the stanchions for ten or fifteen minutes before being let loose, when all desire to suck has passed away. This method saves many an exasperating moment.

The stanchion is made of inch hemlock lumber. The horizontal boards are of double thickness, one on each side of the uprights. The stationary upright boards are six inches wide, and are nailed solid top and bottom. Then a four-inch space is left between that and the narrow board, which is two inches wide, and works on a single bolt or nail driven through the bottom, and when it is closed on the calf's neck is held in place at the top by a wire loop attached from the top of the stationary board next to it. There is a nail or bolt put through the double horizontal boards, four inches from the up-

rights, to keep the movable slat from closing too tightly on the calf's neck and to hold it firm when closed. On the front side the horizontal boards are left protruding six inches past those on the other side, to allow for fastening to a post at each end. Muskoka District. R. D. RILEY.

### The Young Farmer's Duty.

EDITOR "THE FARMER'S ADVOCATE":

Agriculture is to-day the leading industry of our country. Upon it alone depends, almost entirely, Canada's future. When we think of this great war and what it is costing our country we feel that we as farmers should aim to increase production. Most of us know the financial situation of the Dominion and how badly production is needed. In 1915 it was greatly increased; this year our production must be maintained in order to meet the requirements, so we see the whole national situation depends upon the farmer's ability to produce.

But how can we produce more with so many leaving the farms? For many years farmers have been short handed, but since the war there is even a greater scarcity of farm help. Right here I think the Junior Farmers' Improvement Association is doing its share to keep young men on the farm. Only a short time ago there appeared a letter in one of our agricultural papers from a farmer whose son was going to leave the farm. Just at that time he was told that the Dept. of Agriculture was putting on a four weeks' short course in each county where there was a District Representative. The boy decided to take the course and since then has never felt like leaving the farm.

The experiments and competitions conducted by the Junior Farmer's Improvement Association give the boys an interest in the operations of the farm that they would not otherwise get. Let me give you a little of my own experience: A year ago last April I entered the Baby Beef Competition, I had two calves the same age; the one got ordinary care and feed while the one I fed for the competition got a little extra. At one year of age the difference in weight was 275 lbs. The one sold for \$8.25 per cwt., the other would easily have brought \$9.25. Hence we see that a little extra work pays in the end.

Following are the results of an experiment conducted with commercial fertilizer. The experiment was conducted on two 1/8-acre plots of roots. Previous to sowing both received the same amount of work with the exception that one plot was fertilized while the other received no fertilizer:

Yield of fertilized plot, 1/8 acre	8,460 lbs.
Yield per acre	1,128 bu.
Yield of unfertilized plot, 1/8 acre	6,592 1/2 lbs.
Yield per acre	879 bu.
Difference in yield 1,128-879=	249 bu.
Selling price: 249 bus. at 12c. per bu.	\$29.88
Fertilizer applied at the rate of 1 1/2 ton per acre costing \$30 per ton	15.00
Profit	\$14.88

The above shows what can be done if we only knew or if we were only willing to experiment. Through the Young Farmers' Improvement Association these things are encouraged and it seems to me it is a good way to get the young people interested in rural life. Too many farmers think of nothing but work, work, work; this is what makes farming tiresome. But we can make it pleasant if we want to, the opportunity is ours.