

### Gains with Young Pigs.

Comparatively few breeders are able to tell what a litter of pigs cost them at weaning age, nor do they know what gains the pigs make from the time they are born until weaned. This gain will depend to a large extent upon how well the sow milks and upon the extra feed and attention given the litter. Professor Sackville, of the O. A. C. is securing valuable information at the present time by keeping track of the feed and weight of different litters in the College herd. The cost per pound of gain varies a good deal with the different litters and ages of pigs, running all the way from eleven to twenty cents per pound, and it takes from three to five pounds of grain per pound of gain. One litter of seven weighed twenty-six pounds when born. At the end of one week they weighed fifty-two pounds, the second week sixty-six, the third eighty, the fourth one hundred, the fifth one hundred and forty, and the sixth one hundred and fifty-four. Another litter of eight weighed sixty-three pounds at birth, eighty-three at the end of the first week, and one hundred and sixty-eight at the end of the fourth week, while another litter of the same number only reached ninety-five pounds at the same age. There is room for a good deal of study in these figures, and it shows that the breeder should pay more attention to the selection of his breeding stock than he has in the past. It should be more profitable to select a herd sire or a breeding female from a litter where the dam is a heavy milker and raised her pigs well, than from a litter where the pigs were not nearly so well fed. A good deal of selection has been done in our dairy and beef herds, but comparatively little with the hogs. The start which the young pigs get has a good deal to do with the profits which they will return when marketed. The pig which does not get all it wants up to the weaning age is not so likely to weigh as much at six months of age as the one which has been well brought along from the time it is born. Breeders must aim at keeping the cost of production of pork at the minimum if there is to be much profit in hog raising under the present feed conditions. A good deal can be done to increase the thriftiness and lower the cost by supplementing the grain with green feed, roots, milk, whey, etc. There is far too little green feed fed to the average herd of swine. Many seem to have the idea that hogs should live solely on grain. At this time of year the sow and her litter might advisedly run in a paddock where there is plenty of grass, and it will be noticed that the young pigs as well as the sow eat a good deal of this green feed. Clover and weeds may be cut and carried to the pigs when a grass paddock is not available. The exercise which the growing pigs secure when getting their own supply of green feed helps to increase thriftiness. With the present price of feed and live hogs, the feeder has very little for labor and interest on investment, even if the pigs make good gains, and the man who is raising unthrifty pigs is undoubtedly doing so at a loss.

### New York Aberdeen-Angus Sale.

The Aberdeen-Angus breeders held their first auction sale of Dobbies in the State of New York, on May 19. In spite of many handicaps the sale was a success as a total of twenty-two animals were sold at an average of \$293, going principally to New York and Maine buyers. The majority of the purchasers were men starting in the business, and they secured well-bred cattle at fair prices. The yearling bull, Eveth, by Evenest of Bleaton, topped the sale at \$850, going to the bid of L. M. Taylor, of New York. He was consigned by C. W. Eckardt. Erileen 2nd, with a bull calf at foot was the highest priced female, and probably one of the greatest bargains of the sale. She went to the new herd of F. C. Hayden, of New York, at \$540. The night previous to the sale an informal gathering was held and talks given by officers of the American Aberdeen-Angus Association, after which there was a free discussion of Aberdeen-Angus affairs and problems.

## THE FARM.

### French Farms Need Help.

EDITOR "THE FARMER'S ADVOCATE":

"The French farmer is hard at work," says Major-General A. D. McRae, in his article in "The Farmer's Advocate," March 29th. Yes, friends of Canada, but can you imagine in what condition they work? If you had crossed the unhappy, destroyed districts after the Armistice, you'd have felt sad and afflicted. Ruined houses, dumps of rubbish, volcanic fields; there was the landscape. On all reigned the heavy silence of death. No longer did one hear the joyous and familiar noises of yore. Absent was the bell of the church, the clock of the town hall. No longer the crack of whip on the cut-up road was heard, nor the barking of a dog. Dead the song of the cock and the rings of the flock—and not a soul in the country! Saddest of all was the sight of these poor fields, untilled but by the shells.

It appeared that life could never recover. However, it has recovered and only by an admirable effort on the part of the farmer. Consoling sight! Now the fields are nearly all plowed, planted and ready to yield new crops; and this same spectacle is, so to speak, the testimony of the relentless and fruitful work of the farmer. Do you think of the pain they suffer, these peasants of France? Put yourself in their place. After five years of suffering of every kind (can I relate the suffering of the soldier on the battlefield, and of the civilian in captivity—hundreds of thousands of corpses of both

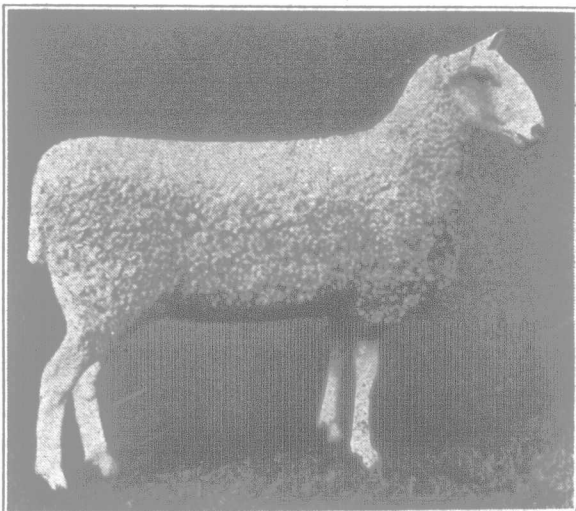
speake eloquently of this) they are back in their devastated villages, badly housed, badly lighted, badly warmed and badly nourished. At daybreak they are up to answer the call of the land they will till until night. No eight-hour day for them, but an obstinate, desperate striving which alone will permit them to gather the fruits of their labor. How many difficulties there are to surmount from the errors of a slow and formalist administration to the redoubtable fancies of nature and weather.

Yes, French farmers are hard at work, but there is work they cannot do without getting help. They cannot reconstruct their farms without materials and money. Rain and weather continue the work of the shells and the mournful ruins, the result of four years of war, will remain a menace for years. There are 3,900 villages to reconstruct in France, and their destroyers, the Germans, will only pay for that in thirty-three years, if they ever give a mark!

Dear friends of Canada, hundreds of villages have been adopted by societies or towns in every part of the world. To-day a little village of farmers of less than forty houses is calling for adoption. It is totally destroyed, but all the farmers are back and the land is plowed and planted. There is not a roof for the farmers, but only huts to shelter themselves and their cattle, with nothing at all for their crops. Will this little village call in vain for help? Will some kind hearts of yours adopt and help it? The neighbors will do that, you may say. Yes, but the neighbors say the same, and those who have most suffered will still suffer for years. You can locate this village on the Somme area. It is Hesbe'court, near Roisel, in the Teronne District. I would say "Come and see." I would be pleased to receive for a spell any visitor who would do that. He could see that speedy reconstruction is above our strength if we do not receive more help from those who are in a position to offer it.

M. DRANCOURT.

Hesbe'court, Somme, France.



Type of Leicester Ewe that Won at Glasgow.

### Making Palatable Hay.

Although growth was late in starting, there is every evidence that the grasses and clovers will be ready for the mower earlier than in most seasons. By the middle of June alfalfa and sweet clover were in fine condition for cutting in many localities, and red clover was in full bloom. The prospects throughout Ontario are for a rather light crop of hay, as the rains did not come soon enough to give a bountiful stand. The quality of hay stored will depend a good deal upon weather conditions at the time the crop was being cured. The labor-saving implements now in use facilitate the handling of the crop, but the hay is scarcely of as good quality as when handled in the old way. Curing clover in the coil prevents loss of leaves and maintains more of the freshness of the plant than when it is sun-cured in swath and windrow. However, the quality of hay made when side-delivery rake and hay-loader are used is very acceptable to the stock. If the grasses and clovers are cut at too early a stage they contain so much sap that it takes considerable time to cure, while if cutting is delayed too long the hay is more or less woody and lower in food nutrients. Timothy cut before coming into bloom is higher in ash and protein than that cut when nearly ripe, according to Henry's "Feeds and Feeding." These two constituents of the plant are valuable from the feeder's standpoint. However, timothy cutting is generally delayed until after the first blossoms have fallen, and sometimes the second. What is lost in protein and ash is made up in the increased weight. As plants mature there is generally an increase in fibre, which makes them less palatable when cured. The aim should be to cut and cure the crop so that it will be palatable and have the highest digestibility. Cutting fairly early prevents weeds from maturing and as a rule the second growth of clover will be considerably better from the earlier than from the late cutting.

Favorable weather is important for good hay-making. However, a man has no control over the weather, and must make the best use of his time when the sun shines. Rain, or even a heavy dew, on partly cured clover bleaches it and lowers the feeding value. When the plant is dried quickly in the sun the leaves become brittle before the stems are properly cured. Loss of leaves considerably decreases the feeding value of the

hay. Where a small acreage is handled it is a common practice to cut clover or alfalfa after the dew is off in the morning, then rake and coil it the same evening. Several days in the coil tends to make first-class hay. As a rule, the mower is started in the field the first thing in the morning, and as much as can be handled in a day is cut. If it is a heavy crop, the hay tedder will loosen up the swath and give the sun and air a chance to do their work. The rake can then be put on the following morning, and hauling commenced in the afternoon. On some farms the mower is not started until after the dew is off, because the grass and clover will dry off much quicker when standing than when lying in the swath. Cutting early leaves a man and team free to do the raking before noon. The side-delivery rake leaves the windrow more open than the dump rake and permits of the crop curing considerably in the windrow.

The hay loader saves a good deal of heavy pitching, and if the sliding hayrack is used in conjunction with the hay loader, one man can do the loading fully as easily as two on an ordinary rack. One has to use this type of rack before appreciating its value in handling the hay crop.

If hay is put in too fresh there is danger of heating and mow-burning. We have found that the moisture on the hay is more likely to injure it than the sap in it. The rain or dew should be completely dried off before the crop is stored. In the early part of the season there is a good deal of sap in the stems. Unless it is good drying weather considerable of this sap remains in the plant when it is stored. In this case, leaving the hay where it is dumped from hay-fork or slings is more conducive to heating than if the hay is kept levelled over the mow. In the past few years quite a few barns have been burned and the cause traced to spontaneous combustion. Dr. F. T. Shutt, of Ottawa, claims that the initial cause of many cases of spontaneous combustion is the storage of hay in a damp or moist condition. Clover appears to heat or ferment more readily than timothy. This fermentation is due to the growth and multiplication of bacteria. As the bacteria increase, due to the right amount of heat and moisture and a sufficiency of air, the temperature increases and gases are produced which may be combustible. Sprinkling salt over the mow is a preventative of fermentation and thus tends to assist in keeping hay from spoiling. Thorough ventilation of the barn so as to carry off the heat evolved from the heating of crops stored in the barn is a preventative of spontaneous combustion. Care should be taken to cut, cure and store the hay properly so as to insure high feeding quality and to minimize the risk of hay spoiling in the mow through heating. There is no set date for commencing haying, as one must depend upon the condition of the crop, which will vary according to the lateness or earliness of the season. Because haying commences on the first of July one season, is no reason why the mower should be started to work on the same date the following year. It is important that a study be made of the crop so that it may be cut and cured to give the highest feeding value for the animals to which it is to be fed.

### Potatoes for Profit.

EDITOR "THE FARMER'S ADVOCATE":

Potatoes, one year with another, pay as well as any other crop on the average Ontario farm. For one thing, they stand up well under the market test. This year the farmer that had a fair yield simply coins money when he is able to sell his tubers at the price so eagerly offered on all our city markets. Further, the crop may be harvested in such a way that it may be marketed the whole winter through. The main difficulty has been in raising a crop that is reasonably sure of a good yield when the season is dry. Here is a method that has stood the test for about twenty years.

The best field for potatoes is a clover sod. The field should be well carpeted with manure as soon as the hay is harvested. In this way the manure leaches into the soil, the moisture of the field is conserved and a fine aftergrowth and an abundant root system rich in nitrogen is encouraged. By October there is a second growth of hay that will require a chain for its thorough plowing under. Further all weed seeds in the manure and in the hay will be germinated and killed by the fall plowing. The plowing should be done as deeply as the soil will permit without turning up much of the unsunned subsoil. By the first of May the manure and the aftergrowth and the roots will be decomposed and available for plant food. As soon as the soil will allow one to do so in the spring, it should be disked to conserve the soil moisture and to encourage the germination of weeds. A good practice is to work the soil as deeply as one can, as the tubers do best in loose, deep, mellow soil that allows them to move about freely without their being forced to the top of the soil, and thus lose both in color and flavor. A week or ten days before planting, it is advantageous to drill up the patch as if one were going to plant. Leave the drills till about ready to plant and then harrow the field thoroughly. This process adds to the destruction of the weed seeds and allows the soil to be thoroughly warmed before the potatoes are placed in the ground.

The seed should be free from scab. If there is any appearance of scab whatsoever, the seed should be treated and treated thoroughly, as the scab will detract seriously from the sale.

In the case of early potatoes, the seed should be well sprouted. This is done by putting the seed one row deep in carriers. The tubers should be placed seed end up, and kept in a warm room till the sprout shows up of a deep purple color from half an inch to three-quarters of an inch in length. It is all the better when the seed