

ing an average fleece in well managed flocks of eight or nine pounds. The wool is strong, of a good colour, rather coarse, but of mellow quality, and commands a good price, as compared with other long wools. In point of form these sheep can scarcely be said, as yet, to have arrived at the same perfection as the improved Leicesters, and, like the coarse Kentish sheep, and other similar breeds occupying rich alluvial grounds, they have a propensity to accumulate fat on the rump, amounting almost to deformity. This deficit, however, has been in great measure corrected of late by careful and judicious breeders, so that the modern Cotswolds may fairly vie in point of symmetry and proper proportion of parts with other advanced breeds. In constitution they are exceedingly hardy and will survive for themselves in the more exposed situations. The ewes are prolific and good nurses, and the lambs are early covered with a close fleece. The mutton of this breed is described by Mr. Ellman, the celebrated Southdown breeder, more than a quarter of a century ago, as "fine-grained and full-sized, but capable of great improvement by proper crossing. The Cotswolds differ from the Southdowns in several particulars; the skin of the former is much thicker than that of the latter; the head long and thin; ears wide, and not too thin, having no wool but a tuft on the poll; wool below the lock considered objectionable. On the Cotswold hills they never allow two rams to run together." Since Ellman's time the improvement of this steadily-extending breed has been slow, perhaps, but surely progressing.

The Cotswold breed was introduced into the United States upwards of thirty years ago, but it does not appear to have made much progress in that country till within the last few years. In Canada this breed has already obtained a firm footing, and is every year making sure progress, whether we estimate by quality or number. Mr. Geo. Miller, of Markham, Mr. Stone, of Guelph, and Mr. Snell, of Peel, have done much in importing and breeding Cotswolds; many of their animals being quite equal to the best flocks of the mother country. At the late Provincial Exhibition there were ninety-nine entries of this breed of sheep; the quality of the class, as a whole, was decidedly good, clearly indicating the adaptation of the Cotswolds to the climate, pastures and markets of this country.

In Dr. Randall's recent and excellent work, "The Practical Shepherd," will be found two good illustrations of a Cotswold ram and ewe, bred by Mr. Stone, of Guelph, and sold by him to Mr. H. G. White, of South Framingham, Massachusetts. The ram, "Pilgrim," it is stated, when just off his winter feed, weighed 250 lbs., and yielded 18 lbs. of wool in 1862. The ewe, "Lady Gay," weighed 200 lbs., whilst suckling a lamb, and yielded 16 lbs. of wool. These are certainly great weights, and must not be taken as an average of large numbers, even in our choicest flocks. Other Canadian breeders, whose names we have not mentioned above, have many animals of an analogous character. The advantages of such sheep, with the present high rates for wool, will be appreciated by the practical and improving farmer.

The manure of sheep is much more valuable than that of cattle; thirty-six pounds of the former being equal in value to one hundred pounds of the latter.

INCREASE OF WOOL TRADE.—In 1857, only 55 bales of wool were shipped from the Port of San Francisco. The number of bales of wool received at our wharves here from January to June, five months, was 17,750, being nearly 400,000 pounds, and this was an increase of about 5,600 over last year. The amount of wool sent abroad, this year, during the same time, was 1,500,000 pounds, about 200,000 pounds more than last year. Thus from the small amount of 55 bales, California increased to 17,500 bales, and this in only five months of the year. What will the whole year be?—*California Farmer.*

OIL OF WOOL.—Professor Joy stated at the last meeting of the Polytechnic Association of New York, that "there is a great waste in our woollen manufactories of a valuable substance, that is, the oil of the wool. When wool has been thoroughly cleansed, it is found to have lost thirty, forty, or, in some cases, as high as sixty per cent. of its weight, and the most of this is oil—an excellent oil for some purposes, and especially for soap. There is an establishment in England that takes wool to cleanse for the oil, making no other charge for the work. The oil can be extracted by means of the bisulphide of carbon, which is a cheap article. It is used for extracting the oil from rape seed instead of pressing, and is also used for extracting the alkaloids and the essential oils of plants. It has been stated that it leaves no odour."



The Breeder and Crazier.

Poor Stock-Farming and How to Improve it.

To the Editor of THE CANADA FARMER :

SIR,—The want of better seed grain than is generally sown by the farmers down here, will be most severely experienced this winter. The bulk of our oat and pea crops are still unharvested. For several weeks they have lain rotting on the ground, or mouldering in stooks. It has been beyond the power of the farmer to house them, for this month has been one of almost constant rain; indeed, quite so with the exception of now and then a fine night or a casual day. The little patches of flax, which seldom, on any farm, exceed a quarter of an acre, is the only crop that has profited by the moisture. The straw of the oat crop will be worthless as fodder; the grain sprouted and musty. The pea-straw will be useless; the peas nearly so. As to wheat so little of it is grown here that its loss will not generally be felt. Most of the hay was harvested before the rainy weather set in, and it is upon this crop the cattle of most of our farmers will have to depend for their winter sustenance. Individually speaking, the farmer has not hay enough to feed his stock through the severe months of winter. And if any one farmer has any at all to spare, it is not to his brother farmer he can sell, though his cattle may be starving to death, but to the richer townsmen or merchant. The means of most of our farmers are too circumscribed to allow of their buying hay to feed. There is but one alternative of cruelly starving them, that is to sell or kill.

In less than a month from this date, the cattle will all be housed for the winter. The musty straw, let the poor beasts be ever so pinched with hunger, will not be sufficiently nourishing to keep them in that condition, which will prevent the necessity of "lifting them by the tail," before its usual period. When the cattle are once housed here, they are duly installed prisoners for the winter. Taken from the fields as soon as the snow comes, they are tied by the head in a narrow stall in the stable, nearly or quite dark; and are fed upon straw, and watered from a pail. They have no litter to lie upon—unless a few blades accidentally scattered, can be so construed. Their dung is never taken away; and they receive neither exercise nor airing. To keep them clean would cost a little trouble, and the stall would not be so warm. With such impoverishing food, and the want of wholesome air and proper exercise, the poor creatures' health and strength gradually fails; till at last it cannot rise. It is then daily lifted and a little hay given it, but very sparingly indeed. A farmer who has not to lift his cattle in the spring, though they may be terribly weak, is considered to have passed through a very easy winter. By such management as the above, the farmer here winters his stock over. But when the day comes in the spring that the poor beast is driven or carried from his prison-stall, he is a wretched and pitiable object. Hardly able to move, for he has become cramped from his long confinement, he is turned out to get his living again in the fields. The warmth of the sun, in a few days, loosens the roots of his hair, or coat, to which is attached from half an inch to an inch all over him, a coating of his own filth. As the coat is shed, this all peels off, leaving the creature bare. The young coat soon grows again, but this does not lessen the cruelty. The great depth of snow which falls in this part of the country keeps the grass very fresh during the winter, and immediately the snow has melted away, there is tolerably good feeding. Thus the poor beast, if he does not die at once from the great change,

is enabled as soon as he is turned out to get his living. This is a common but faithful picture of how cattle are here treated during the winter. And if it is so in ordinary years, what must it be this year, when a large proportion of feed is deteriorated in nourishment, from the effects of a wet harvest? Now could this have been prevented? Could the oats and peas this year have been harvested in time to have saved them? Can anything be done to secure our farmers the harvesting of their crops ten days or a fortnight earlier? There could, if our farmers would procure seed oats and peas of the earliest kind. As it is they sow the latest and foulest; and consequently the most unprofitable. They never think of changing their seed. The same kind that their great grandfather sowed, and on the same ground too, are they still sowing. With the same ancient, triangular shaped wooden harrows, with wooden teeth, do they still make an attempt to cover their seed. With wooden ploughs, with a few pieces of iron on the face of the mould board, and a wheel at one side of the beam, do they still plough—if ploughing it can be called. True enough, the soil is very poor, the season very short; but the poorer the soil, and the shorter the season, the greater the necessity for proper tillage and better seed.

Our meadows too are a disgrace. We have first a crop of dandelions, then a crop of devils' daisies, or what in Canadian lingo is called "margarite," followed by a crop of Canadian thistles. We hardly know of the existence of such implements as mowing and reaping machines. We are content as we are. To see our fields clothed with weeds, in a bloom of yellow, white, and purple, in one season must, as it has already done, first impoverish the land, and then of necessity our habitant farmer. FRANCO. Quebec, Sept. 27, 1861.

Feeding of Horses in Norway.

The horses in Norway have a very sensible manner of taking their food. Instead of swilling themselves like ours with a painful of water at a draught—no doubt from the fear of not getting it soon again—and then over-gorging themselves with dry food, for the same reason, they have a bucket of water put down by their allowance of hay. It is amusing to see with what relish they take a sip of the one and a mouthful of the other alternately, sometimes only moistening their mouths as a rational being would do while eating a dinner of such dry food. A broken-winded horse is scarcely ever seen in Norway, nor have I met with one in the slightest degree so effected. The animal is not compelled to overload its stomach, and distend the vessels with unnecessary quantities of water or hay at one time. Broken-wind is understood to be a rupture of the vessels connected with the lungs, and to be brought on by over-feeding, or over-exertion with a full stomach. In a field, when left to himself, the horse is perpetually eating. He does not fill himself at once like a cow, and remain then for three or four hours without food; yet we treat him like a cow, giving two or three feeds only in the day, and he consequently fills himself too rapidly, and without sufficient mastication. Probably many of the diseases of our horses arise from this unnatural custom. The horse probably knows better than the groom when he should eat and drink, and would be more free from diseases if left to his own discretion.—*Laing's Tour in Norway.*

Live Hogs.

To the Editor of THE CANADA FARMER :

SIR,—I get a great number of letters from farmers inquiring what weight and description of live hogs we are buying at Hamilton. Allow me, Sir, to answer those inquiries in one letter through the medium of your widely-circulated paper. At present the Hamilton packers are paying 4½ cents per 100 lbs., alive, for prime fat grain-fed hogs, weighing 180 to 250 lbs., averaging say 220 to 230 lbs., as even in size as possible. A reduction in price, according to quality, is made on sows that have had pigs. A few prime hogs of 300 lbs. weight would be taken at half-a-cent per lb. under the price for the medium-sized one.

Should the price rise above or fall below 4½ cents, I will communicate such fact to THE CANADA FARMER, and any other item of information I may think would be useful for our farmers to know.

In conclusion, let me again recommend improvement in the breed of hogs, and also some attention to summer-feeding. Keep over a few bushels of peas for that purpose. SAMUEL NASH, Pork Packer. Hamilton, 4th Nov. 1864.