anything of good quality. H. F. Jennings made the top price and average of the sale. His champion ram sold for 45 gs., and eleven averaged £23 11s. 6d. In all 293 rams were sold, at an average of £7 19s. 3d. Ram lambs were in uneven request; 222 were sold at an average of £5 15s. 9d. The top average was for three from Dermot McCalmont's flock—£16 19s. 4d. An unusual feature of the sale was the inclusion of four entire flocks for dispersion.

EIGHTY HOLSTEINS SOLD.

The sale of 80 head of Holsteins from the herd of H. P. Ratcliff, Bexhill, brought out a large company, and good prices prevailed. Considering the many youngsters in the offering, £17 10s. was a good average to attain. The total was £1,418 17s. All the animals are eligible for the new British Holstein Herdbook.

SHROPSHIRE SALE.

Good prices were realized at Sir Walter Corbet's annual sale of Shropshires at Acton Reynold. The highest price was 40 gs. for a shearling ram, sold to Mr. Simon, Market Drayton. Shearling ewes brought higher prices than for many years. Frank Bibby paid as much as 14 gs. each for ewes.

Under conditions prevailing in the first week of September, harvesting proceeded under poor conditions—wet weather materially affecting the work. The quantity of beaten-down grain caused an unusually heavy demand for hand labor. Fortunately, such labor is fairly abundant, but the cost of harvesting will be heavy. The grain is very wet, and advice on how to deal with such grain is being freely offered in the agricultural press. A little new wheat has been marketed in rather poor condition, at prices ranging from 38s. to 41s. per quarter. The average price of old wheat is 41s. 6d. per quarter. F. DEWHIRST.

Feeding New Corn.

Many farmers in the corn belt instinctively associate the thought of new corn with "hog cholera," and the belief is common in some localities that the use of new corn will cause the disease. This may indirectly be somewhat true, as the sudden change to new corn is not unlikely to produce a feverish condition which would encourage the thriving of any latent disease germs. It is undeniable that swine appear to be more generally afflicted with disease about the time new corn is made use of, but an examination might show that such a condition is rather to be expected. When the new corn is given they greatly relish the soft, succulent, fresh food, and, if permitted to do so, will eat enough to change their probable constipation to acute diarrhea, and put them in a condition which invites other ailments.

Much of the so-called cholera which comes in the autumn is but the diseased condition brought about by a sudden change from a limited, dry diet to a plethora of the appetizing new corn. The temptation to rush hogs off to market before cold weather approaches should not encourage the farmer to make too sudden a change in his methods of feeding. When the earliest corn is in full roasting-ear stage it may be given, stalk and all, in moderate quantity, without any change at first in the usual feeding. As the corn hardens it may be given more liberally, but by a gradual increase. By the time the corn is fully matured the hogs will have become well accustomed to it. The judicious use of new corn is purely an application of the judgment which should prevail in feeding at all times.

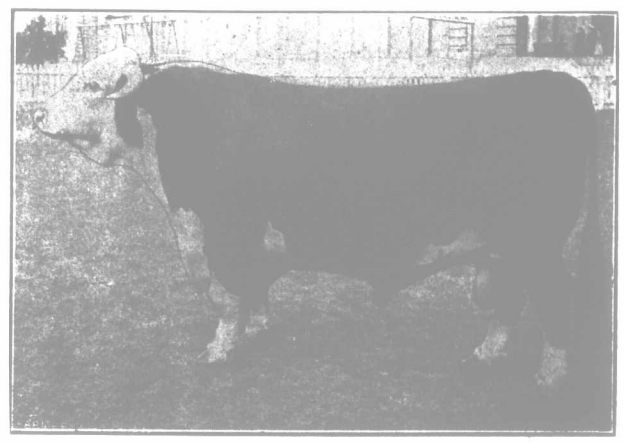
Hogs that have had access to plenty of green pasture are less liable to be disturbed by green or new corn than those previously kept in dry lots. Where they have been pastured on rape or green succulent food of that character, the risk is greatly diminished. Pumpkins are excellent feed for hogs about to be put on green corn. They supply succulence, and their seeds serve well as a vermifuge.—[From Coburn's "Swine in America."

Many a man, starting with a few grade ewes and mating them to a pure-bred ram, has in a short span of years found himself possessed of a uniform and profitable flock. The American quarantine regulations, by hampering the southern market for our registered sheep, afford the Canadian farmer his opportunity to stock up with a few grade or pure-bred ewes quite cheaply, and to procure a sire at moderate expense to breed them. Get into the golden-hoofs.

The estimated total annual consumption of meat in the United Kingdom in 1907-08 was: Beef, 22,844,000 cwts.; mutton, 10,000,000 cwts.; hog-meat, 13,453,000 cwts. The United Kingdom supplied 60.8 per cent. of the beef, 55.9 per cent. of the mutton, and 43.1 per cent. of the pork, the remainder being imported.

Most Economical Meat-producer.

Labor and feed considered, the sheep is undoubtedly our most economical meat-producing animal, especially where kept in small flocks. The manure probably pays for the labor, while the fleece constitutes a tidy margin of profit. Add to this the well-known ovine propensity for weed destruction, and you have a set of economic advantages which cannot be gainsaid. The dog nuisance is not insurmountable by any means, for it is easy to teach a flock to come up to the barn at night, if a dry sleeping-place and a bait of salt or oats be provided. One or two bells still further reduce the risk of canine depredations. Pea straw and legume hay, the fodders on which sheep thrive best, are both easy on the land, while at pasture the flock distributes its droppings admirably, favoring the high spots, which most need



Bourton Ingleside —2410—.

Hereford bull. Winner of second prize in class at the Canadian National Exhibition, Toronto, 1909. Owned and exhibited by L. O. Clifford, Oshawa, Ontario.

enrichment. The old complaint that extra-close fencing was required, is losing its force with the extensive erection of woven-wire, while the other objection, that sheep require small fields, entailing too many dividing fences, may be met in part by the use of temporary fencing and paddock hurdles. Withal, the sheep is a delightful, picturesque and gentle animal to have about. Except at lambing, the labor of attendance is slight, and the little that is required may be performed with a duster over a suit of Sunday clothes, in which respect it presents a welcome difference to the milking of cows, or even the care of horses and steers.

THE FARM

Cheap Protection from Lightning.

As from 700 to 800 people are killed, twice as many injured, and an immense amount of property destroyed by lightning every year, Prof. Henry, of the United States Weather Bureau, thinks more attention should be given to protection from lightning. The Professor has recently prepared a paper on this subject, and it has been published as Farmer's Bulletin, No. 367, of the United States Department of Agriculture. In explaining what lightning is, and how to prevent buildings from being struck, he gives an instructive elementary discussion of electricity, conductors and non-conductors, positive and negative electrification, and electricity in thunder storms.

It is the practical part of this paper, however, which will appeal most strongly to the farmers of the country. Professor Henry shows how lightning-rods that are "inexpensive, yet effective," may be put up by anybody. The following is his list of the necessary materials: Enough galvanized-iron telegraph wire to serve for the rod; a pound of galvanized-iron staples to hold the wire in place; a few connecting tees, and a pound of aluminum paint. He says: "While iron is not so good a conductor as copper, it is less likely to cause dangerous side flashes, and it also dissipates the energy of the lightning flash more effectively than does the copper."

We agree with Professor Henry that more attention should be given to protection from lightning. The annual loss from lightning fires, almost wholly preventable, is enormous. In an electric storm that passed over Middlesex County, Ont., August 28th, last, eight barns, with contents, were totally destroyed.

Professor Henry advises the use of a single No. 3 or No. 4 galvanized wire for lightning-rod. A number of smaller wires twisted together make a more efficient rod, and one that any farmer can make, but the other would certainly be cheap, and easily constructed, also.

We heartily recommend our readers to send for this bulletin, which may be had by American citizens for the asking, and probably on the same terms by Canadians also. Address the Division of Publications, United States Department of Agriculture, Washington, D. C.

Alfalfa Successfully Seeded on Fall Wheat.

Editor "The Farmer's Advocate":

In your issue of August 26th I notice a question asked by W. C. H. about sowing alfalfa with fall wheat, and thought I would give him my experience for what it is worth.

In the fall of 1906 I plowed about four acres of sod, and top-dressed it with well-rotted manure, right away after it was sown with wheat. In the spring I seeded with alfalfa, 20 lbs. per acre, and harrowed well before and after sowing. The balance of the field, six acres, I had in roots and corn, was seeded the next spring with alfalfa, at the rate of 18 lbs. per acre, and about one bushel barley per acre. I have a good field now of 10 acres of the best of feed. The only difference I can see between the part of the field sown with the wheat and what was sown with the barley, is that which was seeded with the spring grain is ready to cut four or five days earlier than what was sown with the wheat. I have harvested two crops this year, and think I have as many tons per acre off one piece as the other.

Dufferin Co., Ont. JOHN W. McCULLOCH.

[Note.—The harrowing doubtless contributed much to the success of the seeding with wheat. Let us hear from others who have seeded alfalfa with autumn-sown crops.—Editor.]

The Steam Plow in the West.

By Frank Mantle.

Steam plowing is a term which is dying out of use in the West already, when it is only a decade or so old. Traction cultivation is the broader term which is taking its place. A twofold expansion will be noted in the latter term. "Traction" includes more forms of power than merely the steam engine; gasoline is already becoming an important factor, for reasons that will be dealt with later. "Cultivation" is a broader and more inclusive term than plowing, involving the whole gamut of operations necessary in preparing the soil for the seed. Thus, the Western farmer of to-day, when looking for the best motive power for his farm, is not necessarily satisfied with a steam engine, nor with one that is only useful for plowing and threshing. It is noteworthy that, in the recent farm-motor contest, held in connection with the Winnipeg Exhibition, three classes were filled with gasoline tractors, and only one with steam traction engines, there being sixteen of the former and four of the latter engines competing. The past decade has been the era of the great steam plow, moving mightily and majestically over the prairie sod; signs are not lacking that the next decade will witness the distribution over the prairies of a less-imposing machine—the gasoline tractor of smaller power, less weight, but greater general utility.

It is scarcely more than five years since the idea of hauling breaking plows with traction engines began to make any great headway in the West, though all through the last twenty years isolated attempts at plowing by steam have been made. Now there are over 600 outfits operating in the West, representing a capital outlay of about $2,000,000, a daily turnover during the working season of some 10,000 acres, employment for about 2,500 men, and an annual acreage of virgin prairie brought under cultivation by this means of some 400,000 acres. Thus, about half of the increase in acreage in the West each year is the work of engine-plows. A good percentage of this acreage is disked down, harrowed, and even seeded, at the same time, and by the same power. In this way, a large area, amounting to many thousands of acres, in the Province of Saskatchewan particularly, is seeded to flax within a few days of being broken, which would, under other circumstances, remain unproductive until the following year. It is a matter for debate whether the sowing of flax on breaking is a wise procedure, but the fact remains that the crop area of the West is each year increased by that amount, due to the presence and work of this form of farm motive power.

Engine plowing and traction cultivation are fairly general all over the West, but find their greatest development, and the conditions of soil and environment best suited to their operation, in southern Alberta, southern and central Saskatchewan and portions of south-eastern Manitoba. Few are the districts in Saskatchewan or Alberta in which the steam or gasoline traction engine, with its load of from four to twelve plows, is not a familiar sight; but in the longer-settled districts of central and western Manitoba, traction plowing has made little headway. It is the farmers of these settled districts, however, where the land is largely under cultivation, and the area to be broken is small, who are watching closely the development of the light, medium-powered, handy, less expensive gasoline tractors, and it was to assist these men, in their search for a suitable machine, that the motor contests of the Winnipeg and Brandon Exhibitions were inaugurated.

The restless energy of the West, and the tough,