

The Farm.

A Straw Binder.

In response to a prize of \$10,000 offered by the Illinois State Grange for a practical machine or attachment to bind grain with straw, about forty inventors, from nearly every state in the Union, from Canada and Scotland, sent applications. Only one working model of full size was sent, to which the Committee tendered the prize. The Committee have seen this machine bind grain, and it does its work much tighter and better than binding by hand. It has an attachment for short straw or grain, which can be set in motion by the foot of the driver. The machine seemed perfectly easy to operate, and quite as simple as the twine binder, the knoter being stronger in construction, and yet is less cumbersome. The patentee proposes having his machine ready for operation in February, 1890, and will start it down in the south, working up to the north, as the grain is ready for cutting.

Farming Affairs in Great Britain.

(From our English Agricultural Correspondent.)

London, Dec. 4, 1889.

EARLY WINTER.

Winter has set in with unusual severity, and very early, as we have already had a week of sharp frost, and snow has fallen heavily in some parts of the country. The visitation has come too soon for many farmers, who had not sown all the land intended for wheat. We have had 10 degrees of frost on the ground, even as far south as London; and, of course, all ploughing, as well as sowing, is stopped for a time. Probably most of the land not sown will be planted with barley and oats in the spring, the price of wheat not being at all tempting; whereas, good samples of barley make high prices this season—as much as 5s. to even 6s. 3d. a bushel; and oats sell better than they did last year. The first three weeks of November were fine, almost without interruption, and farmers in most districts got in all the wheat not put in before, except here and there a field intended for wheat, after the turnips upon it had been fed off; but there are always "afternoon farmers" to be found, and such men had been dilatory, and are caught by the early winter. But this is not the worst of it, for there is grave reason to fear that severe frost occurring just after a great deal of wheat has been sown, will do it harm. When wheat has once got above ground, no frost that we get in this country hurts it much, except in certain light soils where the plant is liable to be upheaved, so that the roots are exposed; but when the grain is swollen with moisture, and not sprouted, severe frost will burst it and spoil it. Again, when the grain is kept below the surface long, its young sprouts are eaten off into their very hearts by grubs, and then a thin and gappy plant is the result. I fear we shall have a bad plant, as a rule, as even some of the early-sown fields do not show regular rows.

FAT STOCK SHOWS.

Quality, rather than quantity, seems to be the rule at the fat stock shows of the season. It was so at the first, held at Norwich the other day; it is so at the Birmingham show, now open; and it will be so, as far as cattle are concerned, at the Smithfield show, to be opened in London next Monday. I give the entries for the two principal shows, as compared with those of previous years:—

BIRMINGHAM.				
	1889.	1888.	1887.	1886.
Cattle	199	251	234	182
Sheep	71	69	101	71
Pigs	88	78	99	81
Roots, corn and potatoes	268	165	248	237
Poultry and pigeons	3,795	3,492	3,529	3,772
	4,421	4,055	4,290	4,396

SMITHFIELD.				
	1889.	1888.	1887.	1886.
Cattle	265	318	300	229
Sheep	205	201	183	173
Pigs	74	85	83	85
	544	604	566	487

The fact is, that too many cattle were fattened for the Christmas market last year, and there was great disappointment at the prices realized. Therefore, feeders have not got so many ready on the present occasion; and what will be missed at the show this year will be a number of beasts sent last year and on three previous occasions, not with the remotest chance of getting a prize, but in order to be sold, as show beasts often are, and can be obtained in the ordinary way. The plan does not answer, as it was last year.

There is much disappointment here at the continued bad trade for wheat, which, if the statistical position counted for anything now-a-days, ought to be 10s. a quarter (half a crown a bushel) higher than it is. The average last week was only 30s. 1d. a quarter, or 4d. more than that of barley; while the top price of English wheat is only 37s. 1d., and that of barley is 50s. New Zealand long berry wheat is quoted up to 39s. 1d., and a rare sample of English may possibly be worth as much, though no such price is quoted. In spite of the recent rise in price, more weeks of firmness, and the present cold weather, the average is only 1s. 8d. a quarter above the lowest weekly average of the year. Yet the Russian ports are now closed, and the estimate of the American crop is 30,000,000 bushels less than was at one time confidently predicted. People talked about 500,000,000 bushels; and the Statistician of the Department of Agriculture now tells the public that 470,000,000 bushels of 60 lbs. may be expected. It is true that the Australians furnish us a surplus, but that cannot be enough to make up for the diminished expectations of receipts from America. The live stock and meat trades are in a very satisfactory condition, and the prices of butter and cheese are moving upward. Cheshire cheese sells at 34s. to 82s. per so-called cwt. of 120 lbs.; Cheddar at 66s. to 74s., and Canadian at 56s. to 58s. Trade is good in the country, generally, and the prices of meat and dairy produce seem likely to keep up well.

AGRICULTURAL POLITICS.

Mr. Gladstone, speaking at Manchester on Monday, declared himself in favor of parochial, as well as district councils, in addition to the county councils recently created. He also proposed that parish authorities should be empowered to take land compulsorily, compensating the owners, in order to let it in allotments to laborers. The title question, however, is the chief agricultural one, as far as politicians are concerned. A tithe bill is expected to be one of the first measures to be introduced by the government next session; and there is no doubt that it will compel landlords to pay the impost, which they never ought to have shifted on to the backs of their tenants.

THE AGRICULTURAL RETURNS.

The complete agricultural returns for the United Kingdom have now been issued by the Board of Agriculture, and I have compiled from them the following tables:—

UNITED KINGDOM.			
	1888.	1889.	Increase or decrease.
Grain crops	9,785,697	9,637,354	148,343
Green crops	4,729,191	4,541,766	187,425
Clover and grasses under Rotation	5,979,351	6,188,502	209,151
Flax	115,795	116,192	397
Hops	58,494	57,749	745
Small fruit	36,941	42,506	5,565
Bare fallow	473,116	531,010	57,894
Total arable	21,178,585	21,115,073	63,512
Permanent pasture	26,688,329	26,816,092	127,763
Total cultivated area	47,876,914	47,931,065	54,351

CORN CROPS IN DETAIL.			
	1888.	1889.	Increase or decrease.
Wheat	2,668,236	2,544,549	123,687
Barley	2,304,448	2,316,044	11,596
Oats	4,177,121	4,140,563	36,558
Rye	81,176	85,291	4,115
Beans	344,312	335,191	9,121
Peas	242,414	225,726	16,688
Total	9,798,697	9,637,354	148,343

PURE STOCK.			
	1888.	1889.	Increase.
Horses	1,906,702	1,945,363	38,661
Cattle	10,268,600	10,272,765	4,165
Sheep	23,988,716	23,484,774	503,942
Pigs	3,815,643	3,905,865	90,222

Here, then, is an increase all round, but not sufficient to be satisfactory. Ten years ago we had 2,753,184 more sheep than we have now, and 10,008 more agricultural horses, while the cattle were fewer by 311,209, and the pigs by 727,579. Thus in the ten years we have lost more in sheep than the small increase in cattle makes good. The small decrease in horses (and only agricultural horses are enumerated) is natural, as there are fewer acres under tillage. As to the pigs, they consume grain rather than grass. Therefore, we devote more land to live stock now than we devoted ten years ago, and feed fewer animals upon it. There were this year, 2,157,784 acres of permanent and temporary grasses and clover in the United Kingdom in excess of the acreage of 1879. In Great Britain alone, the permanent pasture has increased by 1,699,139 acres in the decade, the arable land having decreased by 941,566, while 757,573 acres have been added to the total cultivated area, and absorbed also in permanent pasture.

SALES OF PURE-BRED STOCK IN SCOTLAND.

The annual return of Scotch sales, published by the Aberdeen Free Press, shows the course of prices during the past season as compared with values in previous years:—

	No. Sold.	FOLDED.		Total.			
		Average.	£ s. d.	£ s. d.	£ s. d.		
1884	773	26	12	11	25,327	8	0
1885	885	25	14	1	22,748	3	6
1886	740	25	17	6	19,147	10	0
1887	851	17	4	6	14,315	11	6
1888	939	21	4	5	19,927	14	8
1889	1,114	21	18	0	24,460	8	6

	No. Sold.	SHORTHORNS.		Total.			
		Average.	£ s. d.	£ s. d.	£ s. d.		
1884	762	27	17	9	21,249	17	6
1885	720	24	10	8	17,664	9	0
1886	773	22	19	9	17,898	14	0
1887	743	18	14	9	13,924	11	6
1888	619	22	11	6	13,975	9	0
1889	569	22	15	0	12,970	13	0

It will be noticed that there has been a rise since 1886, but that the high values of earlier years have not been recovered. The explanation is, that there are more pure-bred animals in the world than there were, and that fancy prices are not often given now. But ordinary market cattle sell remarkably well.