

portant that the walls be perfectly insulated. A good floor is made by using twelve inches of cobble stones, covered with coarse gravel or sand. The top of that should be covered with not less than six inches of dry sawdust, which becomes a fairly good insulating layer.]

Can a Breeder Do a Successful Business Without Exhibiting.

W. S., York Co., Ont.:—"Is it possible to carry on a thoroughly successful business in the raising of choice dairy cattle, sheep, swine and poultry without exhibiting?"

[Yes, by keeping strictly first-class, up-to-date stock and advertising liberally in such a journal as the FARMER'S ADVOCATE, which circulates largely among the class of people who need such stock in all the Provinces of the Dominion and most of the States. Many of the most successful breeders in all these lines do not exhibit and yet find ready sale for all they have to dispose of at the best prices. Exhibiting is a good aid in advertising if you are among the largest winners, but it is expensive even if you win and more so if you don't, while to exhibit and not win is not a good advertisement, rather the reverse. Success in exhibiting depends largely on skill in preparing the animals for show. The best do not always win, owing, it may be, to lack of skill in preparation, but that fact need not and does not impair their usefulness for breeding purposes. We would not discourage exhibiting. We would gladly see many more in the field even if they showed only one or two "toppers," but if all the breeders of pure-bred stock brought out an average of five animals each no show ground in the Dominion could contain them.]

Saving Corn Fodder—Wheat for Light Soil.

WM. WATSON, Nipissing District, Ont.:—"1. Will you please inform me through your valuable paper the best way to save corn for fodder without a silo? I was thinking of cutting it up with straw, but am doubtful of it keeping. 2. What is the best variety of fall wheat for light sandy loam?"

[1. A number of successful men who grow considerable areas of corn for fodder, and have not yet built a silo, succeed well in saving the fodder in good condition by allowing it to dry well in shocks in the field, and then storing it in small round stacks or standing it upright on a mow or scaffold. Another method is to mow it uncut with alternate layers of dry straw. Stacking, however, is our preference, and is done by planting a 15-foot pole in the ground, and building the sheaves round and round, butts out, and allowing the tops to extend past the pole 18 inches or more, according to the length of the corn. This is continued, going round and round, until the stack is 10, 12 or more feet high, when the last four or five bunches are placed with their tops up the pole and firmly tied, when the stack is finished. Care should be taken to fit in the bundles snugly when building, and if well finished the stack will keep the corn moist without mold, and with little waste from mice. It is well to start the stack on a foundation of old rails. 2. See C. A. Zavitz's article on winter wheat growing, page 378, August 15th, 1898, issue. Pride of Genesee and Imperial Amber are claimed by Mr. Zavitz to produce the longest straw of the best producing varieties of fall wheat grown over Ontario by members of the Agricultural and Experimental Union. Dawson's Golden Chaff stands ahead in point of yield in all soils, and is quite suitable for either heavy or light soils.]

Winter Feed for Sheep.

SUSCRIBER, Montreal, Que.:—"Would you kindly let me know the best winter food for ewes, and in what quantities? Would good Alsike clover be sufficient in itself, and what quantity will each ewe eat in six months?"

[Well saved, early cut red clover hay is considered the best single fodder for wintering sheep, and they will do well on it if given access to pure water and salt at will. In the case of breeding ewes that are to produce lambs early in the spring, a light feed of oats, say one pint each per day, will be useful in preparing the milk supply, but is not really necessary. Pea straw, if well saved and flail-threshed, makes very good sheep feed for one or two of the three meals in the day, or for one of the two meals. Many flocks of ewes are wintered entirely on pea straw, but a little grain should be added towards spring. A light feed of roots, turnips or mangels once a day helps to keep the sheep in good health and condition. First crop Alsike clover, early cut and well saved, will be sufficient if no other fodder is convenient, but a little variety is better, and if you have pea straw it makes an agreeable change. Six pounds of clover hay per day for each sheep is considered liberal feeding, and if confined to that fodder alone would probably be eaten without waste.]

Veterinary.

Epizootic Catarrh.

WATERSTON & McEACHERN, Wetaskiwin, Alta.:—"1. Last spring most of the horses in this part were troubled with a disease resembling distemper, but in very few cases was there any swelling at the throat, but in all cases there was severe coughing and a yellowish discharge from the nose. Frequently when coughing wind was discharged from the bowels. In some cases the cough still clings to them. What is the disease, and the remedy? 2. Our young pigs when about a month old swelled at

point of sheath about as large as a hen's egg, and are still in the same condition at four months. What is the trouble, preventive, and cure?"

[1. Treatment in the acute stage: Place the animal or animals in a clean, comfortable and well-ventilated stable. If the weather is cold or chilly, cover the body with a blanket, and, in some cases, much benefit may be derived from bandaging the legs. Give morning and night until the symptoms disappear: nitrate of potassium, two drams; chlorate of potassium, one dram; powdered liquorice, four drams; digitalis, ten grains. The above may be given in a small warm bran mash, or, if refused in that way, place far back on the tongue with a tablespoon. If there are signs of sore throat, apply mustard externally. If cough remains after acute symptoms have disappeared, give the following: Barbadoes aloes, two drams; camphor, one dram; powdered opium and digitalis, of each fifteen grains; powdered liquorice and treacle, sufficient to form a ball. Give one every day for three or four days, and then one every alternate day for two weeks. 2. If your pigs are otherwise in good health, I would advise you to inject the sheath once daily with sulphate of zinc, two drams; fluid extract of belladonna, six drams; water, one quart. Paint the swelling externally twice a week with tincture of iodine. Keep pen clean.]

W. A. DUNBAR, V. S.]

SHOWS AND SHOWING.

Exhibitions for 1898.

Trans-Mississippi, Omaha.....	June 1 to Nov. 1.
Toronto Industrial.....	Aug. 29 to Sept. 10.
Minnesota, Hamline.....	Sept. 5 to 10.
Eastern, Sherbrooke.....	Sept. 5 to 10.
Metairie.....	Sept. 6 and 7.
Morrisburg.....	Sept. 6 to 8.
London Western.....	Sept. 8 to 17.
Indiana, Indianapolis.....	Sept. 12 to 17.
Quebec.....	Sept. 12 to 21.
Prescott, Vankleek Hill.....	Sept. 13 to 15.
Richmond.....	Sept. 13 to 15.
New Brunswick, St. John.....	Sept. 13 to 23.
Bay of Quinte, Belleville.....	Sept. 14 and 15.
Northern, Walkerton.....	Sept. 14 and 15.
Renfrew.....	Sept. 15 and 16.
Bowmanville.....	Sept. 15 and 16.
Woodville.....	Sept. 15 and 16.
Ottawa Central.....	Sept. 16 to 24.
Brantford.....	Sept. 17 to 22.
Wisconsin, Milwaukee.....	Sept. 19 to 23.
Napanee.....	Sept. 20 to 21.
Northern, Collingwood.....	Sept. 20 to 23.
Peninsular, Chatham.....	Sept. 20 to 22.
Prescott, Prescott.....	Sept. 20 to 22.
St. Thomas.....	Sept. 20 to 22.
Stratford.....	Sept. 21.
North Bay, Ont.....	Sept. 21 and 22.
Lanark, South Perth.....	Sept. 21 to 23.
Stratford.....	Sept. 22 and 23.
Lindsay.....	Sept. 22 to 24.
Halifax.....	Sept. 22 to 29.
West Williams and Parkhill, Parkhill.....	Sept. 26 and 27.
Illinois, Springfield.....	Sept. 26 to Oct. 1.
Shedden.....	Sept. 27.
Cayuga.....	Sept. 27 and 28.
Beaverton.....	Sept. 27 and 28.
Lanark, Almonte.....	Sept. 27 to 29.
Centre Bruce, Paisley.....	Sept. 27 and 28.
Northwestern, Goderich.....	Sept. 27 to 29.
Peel, Brampton.....	Sept. 28 and 29.
Prince Edward, Picton.....	Sept. 28 and 29.
Barrie.....	Sept. 28 to 30.
Dalhousie, Ontario.....	Sept. 29 and 30.
Oxford, Kempville.....	Sept. 29 and 30.
Elgin West, Wallacetown.....	Sept. 29 and 30.
Galt.....	Sept. 29 and 30.
Ontario and Durham, Whitby.....	Sept. 29 to Oct. 1.
Peterboro, West Peterboro.....	Sept. 29 to Oct. 1.
St. Louis, St. Louis, Mo.....	Oct. 3 to 8.
Woodstock.....	Oct. 3 to 5.
Norfolk, Tilsonburg.....	Oct. 4 and 5.
Tara.....	Oct. 4 and 5.
Markham.....	Oct. 5 to 7.
New Westminster, B. C.....	Oct. 5 to 13.
Caledonia.....	Oct. 6 and 7.
Norwood.....	Oct. 11 and 12.
Norfolk, Simcoe.....	Oct. 11 to 13.
Highgate.....	Oct. 14 and 15.
Woodbridge.....	Oct. 18 and 19.
Ontario Fat Stock Show, Brantford.....	Nov. 30 to Dec. 2.

[NOTE.—If Secretaries of Fair Boards will send us dates of their shows we will include them in the lists of succeeding issues of the FARMER'S ADVOCATE.—EDITOR.]

Toronto's Great Exhibition.

ADMITTEDLY THE MOST VARIED, ATTRACTIVE AND COMPREHENSIVE ANNUAL FAIR IN THE WORLD.

On Monday, the 29th ult., Canada's Great Exposition and Industrial Fair opened at Toronto. It is no idle boast to say that the arrangements made for this year guaranteed before that the Exhibition would be easily the best ever held. Owing to the war, amusement matters have been very quiet in the United States. As a consequence the management have been able to secure special features that otherwise could not have been obtained. The exhibits are of a great deal better quality and more varied than usual. For the first time manufacturing establishments of both France and Great Britain have sent over collections of goods especially made for this purpose, included in them being several recent scientific inventions of a revolutionary nature. In addition to the varied attractions, an exhibit of horseless carriages is a feature of interest, while the bands of music number a score, including three or four from the United States. The usual dog show will be held next week, the entries for which are well up to the average.

The Ottawa Exposition.

The Capital City is always an interesting place to visit, but at no time can a trip there be more profitable and interesting than during the Exhibition, which is always conducted with the one object of giving the greatest possible satisfaction to its patrons. The management are aware that the highest sort of success does not end with securing the greatest financial gains, but in making every branch of the Exhibition as complete as possible. Another study of the Secretary and Board of Directors is to accommodate every exhibitor in such a way as to call forth the highest commendation and goodwill, which not only militates in favor of the present show by reason of their hearty co-operation, but it also insures a liberal future patronage. The show coming as it does after Toronto and London will have a large proportion of the best animals exhibited at those two events as well as a grand show of eastern stock, so that no one need fear disappointment in the character of either horses, cattle, sheep or swine, that will exhibit there from Sept. 19th to 24th. The industrial departments promise to be full in every line and strictly modern, as do also the agricultural, horticultural, dairy, apiary, and numerous other lines. The exhibit of economic minerals will be especially representative and interesting. These alone are worthy of several days' perusal, but as heretofore pointed out in these columns, the entertainment side of the exhibition will be well supported, and carried out during the afternoons and evenings when judging of exhibits is not in progress.

Among the many special attractions, none will be more interesting than the exhibit of Irish cattle to be made by Hon. Senator G. A. Drummond. The cattle are in a class never exhibited before in Canada. The bull, "Bantam," was bred by his Royal Highness the Prince of Wales. The herd will be given a special building, which will be placarded in such a way as to attract attention. Senator Drummond will also show a number of imported Southdown sheep. The celebrated "Sherman's Band," of Burlington, Vt., is expected along with a big crowd of excursionists. The band had a tempting offer to accompany an Oddfellows' excursion to Boston for four days, but preferred Ottawa. The R. H. Buchanan Co., of Montreal, are going to exhibit hot air pumping engines this year. A special position will be assigned the firm to give every advantage for showing the capacity of the pumps. Work on the new building is being pushed rapidly and it will be completed in ample time for the exhibition. The number of entries to date far exceeds that of any previous year.

The Success of the Winnipeg Industrial.

From the manager's statement of the finances of the Exhibition Association, as reported to a recent board meeting, 18,000 people visited Winnipeg during exhibition week, against 10,000 in '97, about 7,000 having come in on the excursions from Minnesota and Dakota, against 4,000 a year ago. The total receipts from all sources was about \$46,000. After all estimated disbursements up to October 31st have been met there will be a surplus of over \$1,500 to the good. The increase in receipts has been 300 per cent. in three years, 100 per cent. per annum.

MARKETS.

FARM GOSSIP.

Growth of Canadian Dairying.

Returns prepared by Mr. Geo. Johnston, Dominion Statistician, Ottawa, show that there are in Canada 559 creameries, 2,556 cheese factories, and 203 factories producing both butter and cheese. The census of 1871 showed that there were in the Dominion then 353 cheese factories. The census of 1881 gave 709 cheese factories, that of 1891 gave 1,565, and the returns of 1897-98 show that, including the 203, there are 2,759 factories producing cheese. Comparing 1897 with 1871, the return of the number of factories does not show all the development there has been. The average output of 1891 was valued at \$6,250 per factory, and in 1871 it was \$4,570. The average value per factory for 1897-98 Mr. Johnston estimates at \$5,570, or about \$1,000 more than in 1871, but \$680 less than in 1891, giving an output in 1897 of about \$15,800,000, against an output in 1891 of \$9,780,000; in 1881, of \$5,460,000, and in 1871, of \$1,602,000. In 1871 the Dominion had no creameries for the manufacture of butter. It was all homemade. By 1881 there were 46 creameries in the Dominion, all but one in Ontario and Quebec. By 1891 these had increased to 170, and by 1898 there were 559 creameries. In 1891 the output per factory was \$5,400. At the same rate the output in 1897-98 would be about \$3,018,600, an increase of over \$2,000,000. Since 1891 Nova Scotia has increased the number of its creameries and cheese factories from 10 to 56; Ontario, from 638 to 1,317; Prince Edward Island, from 4 to 35; Manitoba, from 31 to 66; the Northwest Territories, from 7 to 32, and British Columbia, from 1 to 4.

Oxford County, Ont.

We had a very remarkable oat and pea harvest; so much rain some of the oats in our neighborhood were two weeks in the stook, and much of them were taken in in very poor condition. The straw is not very heavy, but is remarkably well loaded with grain. Where the sheaves were made small and slacked they seemed to dry out in about half the time that larger, tight-tied sheaves took to dry. So we made a resolve that if spared to another harvest we would make smaller oat sheaves to provide for the contingency of wet weather. Peas are apparently a very variable crop; the straw was short, just about 1½ loads per acre, but beautifully loaded and a fine sample of grain. Threshing is going on apace, but much of the grain is damp and some wet; most of it is turning out well. Barley, in many instances, is said to be a splendid crop and fine sample. Wheat, in many cases, is a little shrunken, but grain generally will be considerably above the average. Corn is doing remarkably well and is at least two weeks earlier than usual and will be far above the average. Potatoes are also doing well, and in most instances are still quite green. Roots are looking first-class; by looking at a field of turnips it is often not easy to say which way the drills run. Pastures, on account of the frequent rains, are keeping green and fresh, and the milk is not falling off as much as usual at this season of the year, although very few farmers have yet commenced to feed their cows. Some pieces of rape sowed after fall wheat are doing very well and will in due course be a nice bite for lambs, pigs and young cattle; but you know it is strictly forbidden to factory cows. The flax has proved a very good crop, although the acreage has not been as large as usual. Already considerable quantities have been threshed and spread out in the fields and "retted" and hauled into the barn; this has been made possible thus early by the very frequent rains and warm weather. The warm weather has