

ally and not in all the districts at once. The report also points out that public policy in the United States requires that some advancement be made along this line, and that the United States should follow the lead of the more densely populated countries and establish a delivery service all over the settled portions of the country.

Such an admission on the part of the United States postal department will give new life to the movement, and now that the system has been proven satisfactory the farmers of the United States will have strong grounds for demanding that a free rural delivery be established in every well-settled district. As pointed out in a former article on this subject the scheme will not be very expensive, and in addition, the increased revenue to be derived from a free delivery in the country districts will go a long way towards meeting the extra expenditure such a system would entail.

The advantages to be derived from such a system are many, and are not altogether on the side of the farmer. The city trader, dealing largely with the farmer, would find the system of distinct advantage to his business. The daily newspaper would have a new constituency in which to enlarge its circulation, as there would be nothing to prevent the farmer from receiving a daily paper as regularly as those living in the city. The greatest advantage however would undoubtedly be on the side of the farmer. A free postal delivery would go a long way towards counteracting the present tendency to migrate from the country to the city. By making the conditions of living on the farm more like those which prevail in the cities, there would be greater inducement for the young man to remain on the farm.

A New Corn Product.

A new industry has sprung up in some of the corn-growing States. The product obtained is known as "cellulose," and is the properly purified pith of the stalk. It is claimed to be the best form of cellulose known, and can be recovered from the corn stalks at a cost of \$100 per ton less than from sources formerly used. There are many ways in which this cellulose may be used. It is used as packing for war vessels, and is one of the best known non-conductors of heat and cold, thus making it desirable for use in refrigerators, cold storage rooms, etc., and packing steam pipes, car journals, etc. It is also valuable for the manufacture of paper, smokeless gunpowder, celluloid, water-proof compound, linoleum, patent leather enamel and a number of other uses.

By the present process of manufacture about fifteen pounds of cellulose can be recovered from 100 pounds of kiln dry corn fodder. The balance of the stalk product is used for feed. In the process of manufacture, the stalks are cleansed from all blades and foreign substances, and then cut in an ordinary feed cutter and afterwards ground to the condition of coarse bran. By an air-blast the heavier particles of the stalk are separated from the pith. The stalk particles are found to be a very desirable food for stock, and are in splendid condition for combining with cornmeal or other concentrated grain products. The cellulose has a ready market value of 17½ cents per pound, or \$2.62 for each hundred weight of stalks.

The first factory for the manufacture of cellulose from corn stalks was built at Owensburg, Ky., a couple of years ago. Since then several factories have been established in other States, and the business has reached more than an experimental stage. Several smaller factories are now projected for next season. These will be smaller than the original factories, and will cost about \$40,000 each, with a capacity for working up 75,000 tons of corn stalks per year. It is the intention of the operators to locate these factories within easy hauling distance of the farms.

That the business is a profitable one for the corn grower is evidenced by the fact that the industry has grown so rapidly since it was started. The hundreds of ways in which the cellulose may be used indicates that a large quantity can be disposed of.

More on the Wheat Situation.

Mr. Broomhall, statistician of the English grain trade, has just issued his annual statement of the world's resources. According to his statement, Europe is to have a bread famine before the next wheat crop is available. Mr. Broomhall states that the European crops this year amount to 140 million quarters as compared with 185 million quarters last year. The year 1891 has been referred to as the famine year, and Mr. Broomhall states that the deficiency, as compared with that year, is 10,000,000 quarters. He reckons that North and South America produced 93,000,000 quarters, of which the United States raised 74,000,000, as compared with 59,000,000 last year. The production of the Americas in 1891 was 101,000,000 quarters. Asia, Africa, and Australia are reckoned somewhat in excess of last year, but fully 11,000,000 quarters less than in 1891. The world's production this year is 278,000,000 quarters, as compared with 298,000,000 quarters in 1896, and 368,000,000 quarters in 1891. The reverse visible in Europe, the United States, and Canada amounts to 10,000,000 quarters, as compared with 15,000,000 quarters in 1896. The aggregate production and reserves, therefore, fall 25,000,000 quarters short of the estimated requirements of the current season—316,000,000 or 28,000,000 quarters in excess of the total production and reserves. The conclusion which is drawn from this is that unless there is a plentiful yield in Argentina in the coming harvest, an absolute dearth of breadstuffs in Europe will be the result.

If the statements of Mr. Broomhall are to be relied upon, and his official position warrants us in giving them some credence, the wheat situation is more serious for the European consumer than the most careful estimates have made it up to the present time. We are of the opinion, however, that it would be just as well for holders of wheat not to place too much reliance upon them until they have been left to simmer a while. The statements are so contrary to what growers have been accustomed to hearing as to savor a little of manipulation. However, a few weeks will show the correctness of Mr. Broomhall's figures. And if they prove to be reliable, there are much better things in store for the wheat holder than was anticipated a few weeks ago.

A New Way to Tell a Good Cow.

We quote the following from the *Mark Lane Express*, which will be of interest to dairymen generally:

"North Somerset" writes: As science advances, more and more attention is given to details, and it is found that often what are popularly considered to be very minor points often turn out to be something of the greatest importance. As is well known in farming, to produce a good milker is considered to be somewhat of a lottery, and many a calf is reared for dairy purposes that would have been far more profitably converted into beef. Now, how are we to pick out these? I glean from a Swedish dairy newspaper—*Mejeriernas Annonsblad*—that a discovery has recently been made, the truth of which has been proved by a first-class veterinarian, that makes it possible at the birth of a calf to judge if it will become a good milk cow or not. It has been observed that the palps, that are on the inner side of the cheeks near the corner of the mouth, have different forms, according to whether the animal is a good, a middle class, or very indifferent milker. The palps being large, broad, and flat, denote that the animal gives a large quantity of milk. If they are only round the milk qualities are of the most ordinary description. While if they are pointed the milk yield is of a most wretched description. Here is a chance for some English farmer, who keeps a record of the milk production of each cow, to put this statement to the test.

This is really a novel method of telling a good cow. If our breeders, by following a plan of this kind, can tell at birth whether a heifer calf is going to be a good milker or not, it will work a revolution in the standard of the dairy breeds of this country. Will not some of our careful breeders make a note of this in raising future stock for the dairy, and give the readers of *FARMING* the benefit of their experience in the matter?

Murdoch McKenzie, Oungah, Ont., writes: "Please find enclosed \$1, being my subscription for *FARMING* in advance for one year. I am well pleased with the way you report the market, and hope you will continue to give the market correctly."

NOTES AND IDEAS.

Mr. W. L. Carlyle has been appointed professor of Animal Husbandry at the Wisconsin experiment station to succeed Professor J. A. Craig, who resigned to engage in sheep farming. Mr. Carlyle is a graduate of the Ontario Agricultural College, taking his degree of B.S.A. from Toronto University in 1892. His home is in Chesterville, Ont., and he is well known in many parts, having had charge of one of the travelling dairies for a season or two. After this he was engaged on the Institute staff in Minnesota. At this work he has been very successful, and now goes to fill a more important position. The farmers of Ontario should feel proud of the fact that two of the graduates of the Agricultural College should be chosen, one after the other, to fill so important an office in the State of Wisconsin. *FARMING* wishes him every success in his new work.

CANADA'S FARMERS.

In addition to the sketch given last week of Mr. John Bell, of Amber, we would like to say that Mr. Bell farms two hundred acres and has two hundred and sixty acres rented. He has made four importations of Clydesdale horses, and now has five stallions besides a number of mares and young stock. He has made two importations of Tamworth swine, and stock from his herd have been sent to every province in Canada, to nearly all of the Experiment Stations in America, and to nearly every State in the Union.

Mr. Bell has never entered public life, but had he consented to do so he would soon have been occupying highly responsible positions.

CANADA'S DAIRYMEN.

II. C. C. Macdonald, Winnipeg, Man.

Among Canada's young dairymen, who are coming to the front as teachers of advanced dairy methods, none have had a larger experience nor a wider training for the work than Mr. C. C. Macdonald, Dairy Superintendent for Manitoba. Mr. Macdonald was born in the county of Northumberland, Ontario, in 1863. He received his early education in the public school, and at an early age took a deep interest in agricultural matters. When a boy of fifteen he began a study of some of the sciences pertaining to higher agriculture, which has been of great benefit to him in his later work. At eighteen years of age he was managing a cheese factory for the Allan Grove combination in Eastern Ontario, and was in the service of that company for seven years. In 1890 he was appointed chief dairy instructor for the Quebec Dairy Association. In 1891 he entered the service of the Dominion Dairy Commissioner and spent two years in Quebec, as dairy superintendent, under Prof. Robertson's directions. While in the service of the Dairy Commissioner he spent one season in Manitoba and the Territories, and had charge of the Government winter creamery at London during the winters of 1892, 1893 and 1894. In 1894 he retired from Professor Robertson's staff and engaged for a season in the cheese and butter trade in the Province of Quebec.

Mr. Macdonald was appointed to his present position, as Dairy Superintendent for the Province of Manitoba, in 1895, and has filled that position with credit to himself ever since. Shortly after entering upon his duties there he made an extended trip through the mining districts of British Columbia for the purpose of studying the requirements of the markets there for dairy produce. Much valuable information was gained, which has been of great advantage to the Manitoba dairymen. The dairy industry of Manitoba has made rapid advancement since Mr. Macdonald began his work. In 1894 the estimated value of Manitoba's dairy products was \$34,000. In 1895 the actual output was valued at \$198,000. In 1896 it was valued at \$245,000, and the prospects are that 1897 will show a very large increase over any other year.

In 1896 the Manitoba Government established a dairy school at Winnipeg, with Mr. Macdonald in charge. This school has been attended by as many as 110 students at one time, and under Mr. Macdonald's management has been of great benefit to the dairymen of Manitoba, the majority of the cheese and butter-makers in the province having taken the dairy school course.

Mr. Macdonald's work comes under the general supervision of the Hon. Thomas Greenway, Premier of Manitoba and Minister of Agriculture. Under his direction Mr. Macdonald has published a number of useful bulletins on dairy subjects, which have been very useful in educating the Manitoba dairymen to more advanced and better methods of dairying. As a further proof of the good work Mr. Macdonald is doing in developing the dairy industry of that province, it may be mentioned that in 1894 there were only three creameries and thirteen cheese factories in operation in Manitoba, while during the present season there were twenty-nine creameries and forty-nine cheese factories in active operation.