

amination and discussion of the subject which then took place has greatly tended to remove from the minds of the English authorities the strong impression they had formerly entertained as to the existence of contagious Pleuro-pneumonia among cattle in the western portion of the United States, and impressed upon them the facts well known by the authorities of this country, that this disease at this time only exists among a small per centage of the cattle kept within a narrow strip of country extending along the eastern sea-board from the vicinity of New York City southward. A full and extended report of his action while in Great Britain will soon be published.

Last season the Department of Agriculture sent out a few samples of Nepene or Beardless Barley for experiment in its cultivation in different sections of the country. From Dakota Territory they report that it is the best barley they ever saw. From Nebraska they say it is the best barley raised, stiff straw and rich berry. From New Hampshire the report is: "It promises to excel anything known in this country in quality and quantity." From Washington Territory comes the report: "Weighs 50 pounds to the bushel; the finest variety of barley we ever saw." The only disparaging account is from Sheyboogan Co., Wisconsin, where they say it blighted badly. All these, it will be observed, are from about the same latitude as Ontario.

There are also a few reports on experiments with a new cabbage called "The Carolina Buncombe." This variety originated in Buncombe County, North Carolina, and was thought to be the best variety known for a warm climate; but recent experiments in Michigan, Minnesota and Nebraska show that it does quite as well in a northern latitude. From Minnesota they say that the heads are one and a half times larger than other varieties under the same conditions, and solid, crisp and sweet.

In digging among the musty records of our Dept. of Agriculture one often finds curious and instructive reports from practical agriculturists and farmers of this and other countries, many of which are highly instructive and very useful, but have never been utilized by the farmers of this country. Here is one from France:

"In France beet leaves are very largely used as food for cattle. A difficulty has hitherto existed in reference to this application on account of the readiness with which the leaves become decomposed and the impossibility of keeping them fresh for any considerable length of time. This has now been overcome by M. Mehay, who subjects the leaves to the action of diluted hydrochloric acid, by means of which, after undergoing a special treatment, they can be stacked away in large quantities and kept indefinitely for future use. The application of the acid employed, so far from injuring these leaves as food, seems to impart to them special alimentary peculiarities, visible in the production of an improved quality of butter. Several veterinary surgeons have certified, as the result of a critical examination of the experiments, that the food gave rise to no disturbance of the digestive system, and that in every respect the new preparation was to be considered a success."

Hon. Geo. B. Loring, the new Commissioner of Agriculture for the United States, has engagements to deliver addresses this autumn before seventeen State and County Fairs, and is at present absent on that mission. These addresses, when collected and printed, will doubtless furnish interesting and instructive reading to the farmer and planter.

LOTUS.

We took both the American Agriculturist and Country Gentleman, but gave them up as the Advocate was better, besides being Canadian.
G. F. P., Fergus, Ont.

I could not think of giving up your book, for it gives the best of information on every subject, and as I am a woman farmer, it is of intrinsic value.
MARY HALL.

Comparisons of the Exhibitions.

To arrive at the comparative merits of the Toronto and London Exhibitions, on the last day we took a walk among the exhibitors of implements and asked representatives of each firm we met the two following questions:

1. Where have you found most farmers examining your implements, in Toronto or in London?
2. Where have you made most sales?

The following are the replies and names of firms:

MASSON, of Oshawa—More in London and many more sales.
COCKSHUTT, Brantford—More farmers in London.
MANN & Co., Brockville—A great many more in London.

BELL & SON, St. George—Much rather exhibit in London; a better lot of interested examiners.

FLEURY, Aurora—More examined his goods in Toronto, and made more sales there.

MAXWELL, Paris—I exhibited more implements in Toronto, but have made three times as many sales in London.

THOMPSON & WILLIAMS, Stratford—London is the place; I have sold clean out.

THE GLOBE WORKS, London—I have had about double the number of farmers examining my implements here, and taken more orders.

MASSEY Mfg Co., Toronto—Could have done much more business in London, if he had as much help as they had in Toronto.

WATSON, Ayr—Many more farmers in London, and many more sales are made.

GURNEY, RUSSELL & Co., Dundas—London is the best place to exhibit.

NOXON BROS. Mfg Co., Ingersoll—There have been many more farmers examining implements here than in Toronto.

PATTERSON BROS., Richmond Hill—More farmers examined my goods in Toronto.

GOWDY, Guelph—This is a better place to exhibit than Toronto.

HARRIS, Brantford—The two places are about equal.

WISNER, Brantford—London is the best place both for attendance and sales.

HAGGERT, Brantford—London is the best spot.

LEONARD & SONS, London—London.

MCPHERSON, Glasgow & Co., Fingal and Clinton—Sales have been about even, but London is the best place to exhibit.

WATEROUS, Brantford—I sold more in Toronto, but it cost me three times as much to exhibit there.

STEVENS, TURNER & BURNS, London—A better crowd here and many more sales.

JOHN ELLIOTT & SONS, London—London is the best place; I made a contract for \$120,000 worth of implements here.

JOHN ABEL, Woodbridge—The attendance is good here, but I made more sales in Toronto.

We took these replies in a short time, and did not select parties who to ask, but some parties were too busy and we could not see them, or they were not there. Many manufacturers exhibited at London who did not exhibit at Toronto; of course we did not record their opinions. We only asked three of the stockmen, all of whom said that London was the best place to exhibit and for sales.

Wheat Moth.

In several Canadian papers we have noticed articles calling the attention of farmers to the fact that an insect known as the wheat moth is doing serious damage in the United States, especially in the Southern States. Some fear that it may be introduced into this country, and the advice is given to farmers where the insect is found to remove all your grain, and have it ground up or otherwise disposed of; then thoroughly fumigate the granary with sulphur, or sprinkle with carbolic acid diluted with water. Do not put any grain in the bins this season, but store it elsewhere, because every moth must either be destroyed by poisons or starved out before the same building will be a safe depository for any kind of grain again. Furthermore, your neighbors must do the same, or the moths will come from their barns to yours. Until vigorous measures are adopted, the spread and ravages of such pests cannot be prevented.

At the annual meeting of the Entomological Society held in this city, Sept. 27, Mr. William Saunders, the President, in his address, said:

While Entomology may be said to deal with small things, the abundance or scarcity of the tiny creatures called insects involves great issues. The truth of this statement has been illustrated forcibly in several directions this year, notably in the case of the Angoumois wheat moth which has played sad havoc among the stores of corn and wheat in granaries in the South-western States. It is said to have destroyed many thousand bushels of grain, and so widespread has the evil become that it is the opinion of the New York Sun that if the Government or the farmers of America could at this time arrest the progress of this insect by expending five millions of dollars it would be the best investment ever made by the people.

The Angoumois grain moth, *Butalis cerealella* Oliv., is a small moth the larva of which is every destructive to all sorts of grain. The female lays her eggs on the grain sometimes in the field before it is fully ripened, but more frequently in the bins of the granary. The eggs are of a bright orange red color, and in a few days there issue from them very minute whitish colored worms scarcely thicker than a hair, which bore into the grain and occupy it, one larva in each kernel. Each kernel contains sufficient food to support one occupant until it reaches maturity, when it changes to a chrysalis within the grain, which, although hollowed and almost entirely consumed within, appears outwardly sound and plump. On pressing between the fingers the grain is found to be soft and yielding, and when dropped into water it floats on the surface.

When the larva is full grown it spins a white silken cocoon, which occupies one end of the cavity within the grain, the other end being filled with the castings of the worm. The moth makes its escape through a small round hole in the side of the grain, which the larva cuts with its jaws before spinning its cocoon. When preparing this orifice for the escape of the future moth the larva is careful not to cut entirely through, but leaves a thin tissue-like skin unbroken, which the moth finally ruptures when it makes its escape. The body of the moth is about one-third of an inch long, and its wings when spread measure about two-thirds of an inch across, the fore wings are of a plain brownish buff color, with a satin like lustre. The hind wings above and below, as also the under side of the fore wings, are blackish grey.

This insect is a native of the warmer parts of Europe, and has long been very destructive in France. It was introduced into the southern portion of the United States more than 100 years ago, where it has become fully naturalized. It is often brought into New York in cargoes of grain, but the climate of the Northern United States and Canada appears to be too cold to permit it to thrive amongst us, or to permanently establish itself. It has never yet, to my knowledge, been found within the limits of our Province.

Cattle Farming on the River Plate, South America.

"Few can form an idea of the great increase in cattle breeding on the River Plate during the last two years," says the Buenos Ayres Standard. "Estancias are silently spreading out on all sides, especially in the South. The prices at present paid for cattle are unprecedented, and many wonder at their acceptance, leaving out of account that cattle are cheap at \$300 or even \$400 m/c, when they can stock camps at \$75,000 m/c per league. As late as 1878 breeding was in its infancy, and only in the hands of a few who could risk and afford to lose several thousand head of cattle by Indian depredations and epidemics arising from overstocked camps. At that period, nevertheless, the business yielded great profits, but it was mainly in the hands of wealthy capitalists. The final disappearance of the Indian allowed small capitalists to enter the field, and we witness the first great stride towards development and improvement. The increase in the business during 1880 has been still more important. The following figures will easily corroborate our remarks on the value of prize stock sold during the last five years: 1876, \$1,253,920 m/c; 1877, \$3,668,903 m/c; 1878, \$8,267,334 m/c; 1879, \$10,517,580 m/c; 1880 \$18,605,857 m/c. The increase of 1880 is superior to that of every other previous year, in spite of revolution and consequences. We may look to still more important improvement at the end of 1881."