

bug off; but it is so prolific that it would take a large number of these enemies for a long time to have any appreciable effect in reducing the number. We believe their extermination will only be affected by an united effort on the part of our farmers from one end of the country to the other, and to this end we propose to have a "Bug Day," similar to the "Planting Day" of our American cousins, in which let every man, woman and child turn out *en masse* and carry on a determined slaughter on these pests. If this is unanimously carried out we venture to say the bugs will have a short stay. Next to the wheat crop, potatoes may be considered the next in importance, as a staple crop, and as forming one of the first necessities of our table, and as of national importance potatoes are being looked upon as one of our greatest sources of wealth; so the bug question is a vital one, and we hope that the coming season, for the sake of *pro-bono publico*, our farmers will use their utmost endeavors and have a "Bug Day."

The stages of life of the potato bug are three. The perfect insect hibernates during winter, sometimes under rubbish, but generally only a few inches under the ground. They have been found two or three feet below on some occasions. In spring, even before the tender potato tops appear, the bug may be seen flying about in search of food. As soon as the potato leaves appear, the female commences laying her eggs in clusters, and continues for three or four weeks, during which time she may deposit over 500 eggs, so the destruction of one of the beetles is equivalent to killing of 500 bugs four or five weeks later. In warm weather the eggs are hatched in about a week, and then comes the ravenous brood of slugs that look so greasy. In Ontario this larval condition continues for about three weeks, at the end of which time the grub descends into the ground and changes into the pupal form. In from seven to ten days, according to the temperature, it comes forth a full-fledged potato bug or beetle (*coleoptera*) ready to commence the work of egg-laying again. Whether there are two or three broods in a season, depends upon the temperature and the earliness or lateness of the season. In the Southern States there are three broods annually, the last brood of beetles going into the ground to hibernate. Further north the pupae (not being far enough advanced) pass the winter in the pupal state and do not emerge until the following spring. It should be a matter of greater importance how many broods of this pest our farmers have to contend with. We think with an early spring there might be three broods here in Ontario, but observations so far only indicate two in the season—at least we think this year is safe enough for only two.

The potato bug is an "older inhabitant" than many are aware of. The first appearance of them in Canada was in 1872, and Ontario was the first to receive an instalment—they crossed the St. Clair into Essex Co. from the west. Although known as early as 1824 as a distinct species of *coleoptera* by scientists, it was not until 35 years later that they were heard of as a mobilised army of invaders. Riley, an authority on entomology, says in their wild state they originally fed on the sand-burr, a species of wild potato having burrs. These were easily carried by animals in their furs further east, until 1859, thirty-five years after its discovery, the potato bug passed plains and prairies to the cultivated potato fields 100 miles west of the Missouri. With rich fields of food, instead of the straggling sand-burrs of its native home, the insect increased enormously—and this shows what good feed does towards propagation. From 1859 it rapidly spread towards the east, and after invading the several States to the west of

this, by 1866 it occupied most of the land west of the line between Chicago and St. Louis. In 1874 they reached the Atlantic. In 1877 they were reported in New Brunswick, and only in 1880 were they found in Nova Scotia. However, from the Rocky Mountains to the Atlantic, the potato bug can boast of a victorious march against the combined forces of man, nature and fellow insects.

A Chatty Stock Letter from the States.

[From our Chicago Correspondent.]

It begins to look a little as if there might be a revival of old-time prices for Shorthorn cattle. For a few years past there has been no especial fuss made about this breed, and people who judge persons and things by the noise they create, rather than by the work they do, have come to think that the Shorthorns are declining in popular favor. The noble old breed, however, is so numerous and so well known that everybody is familiar with its good qualities, and there is no need of creating a fictitious newspaper boom for the breed.

The Shorthorn Breeders' Association is making preparations for a fine display of the breed, and a liberal offer of premiums, at the next Chicago Fat Stock Show.

On Thursday, May 16, there occurred at the stock yards, Chicago, a sale of Clydesdale horses, owned by McKay Bros., of Arlington Heights, Ill. Ten stallions and three mares was the number given in the catalogue as the horses that were to be offered for sale. The horses and mares were in good condition and appeared to be full of life. There were some superior animals in the lot. The sale began at one o'clock, and the prices bid were considered so low that after three mares and three stallions had been sold the sale was closed. Three stallions sold as follows: Young Wallace, seven years old, \$1,500; Lothir, three years old, \$2,000; Baldy, three years old, \$850. Mares—Kate, five years old, \$975; Darnall, five years old, \$800; Darling and bay mare colt, \$850. The market for this kind of stock does not appear to be very strong. There are not many buyers to pay the prices which importers call fair.

Geo. F. Morgan, a well-known champion and breeder of Hereford cattle, reached Chicago, May 19, with a large importation of fine cattle. In the lot were 170 bulls, cows and heifers, and 27 calves. With the exception of 8 or 10 Polled Angus, the cattle are all Herefords, and of excellent quality. The bull Rudolph, age 2 years and 8 months, is one of the finest I have ever seen. He is almost a perfect model. It is not generally known, but his cost price was \$3,500. The cattle are just from quarantine at Baltimore. They will be pretty well scattered over the country when finally distributed among the respective owners. The bull Rudolph is owned jointly by Mr. Morgan and a stockman of Wyoming Territory.

Mr. W. H. Sotham has just returned from Canada, where he purchased for Geo. Hunton, Abilene, Kan., ten Hereford bulls, two heifers and one young calf. They are thorough-bred Herefords, descended from some of the best strains that are known. Mr. Sotham expects to sell four of the animals here; the others will be shipped to Mr. Hunton at Abilene as soon as they are rested.

Col. Robert Holloway, of Alexis, Ill., and the Glasgow Exporting Company, have made a peaceful settlement and played quits. It will be remembered that last November the latter attempted to forcibly take possession of a large lot of Clydesdale horses in the hands of the former, their agent, who was charged by them with trying to defraud them.

At Chicago, May 16th, Col. Muir sold for Mr. Stillwell, of Ohio, a herd of Holstein cattle. A large share of the animals sold were imported, and

all were thoroughbred. The cattle were rather thin in flesh but were not in poor condition. The attendance of buyers was good, and it was the largest sale of Holstein cattle that has occurred in the West. There were 83 bulls, including several calves, sold at an average of \$100, and about 65 cows and heifers, including some calves, sold at an average of \$26 per head. A few of the choicest milkers sold at \$300 to \$500.

The indications are that an increasing interest is being taken in dairy stock. At the same time, however, the manufacture of imitation butter of fatty substances is on the increase also.

One of the queer things on the plains of Texas, where millions of cattle are growing, is the scarcity of beef, butter and milk. Last March I was one of a party which went to Mexico, and stopped in Texas to attend an annual stock raisers' meeting. We found but little milk and only scanty allowances of the palest grass butter, while the beef and mutton at the banquet were from the northern markets. They do but little feeding, and seldom milk the cows.

There has of late been a great deal said about the growing unpopularity of Devon cattle, but from various sources I find that these compact, small boned animals are held in high esteem by many cattle raisers of the plains, where there is ever a tendency in stock to develop large bone and scrawny frames. In this respect the Polled Angus and the Devons are both superior to the Shorthorns and Herefords.

Melons.

Mr. Gibb, of Abbotsford, P. Q., in his excellent pamphlet on Russian fruits, suggests that as the present varieties of melons are so difficult to grow in Canada, that we might successfully grow the Russian varieties. He says:

"Russia has long been celebrated for its melons. The best we saw belong to types we have not."

"MUSK MELON.—In the markets we used to find a melon about fourteen inches long, netted, the flesh very deep, and a creamy white in color, and of the highest quality. I call it a musk melon merely because I do not know what else to call it. Those who abstain from musk melons are not likely to object to these. Like the Khiva melons, which one of the Emperors of China always enquired about on the arrival of the caravans, this is a keeping melon, and may readily be kept till Christmas. It may be a little late in ripening. However, on September 2nd we found fine specimens in the Simbirsk market, said to be grown on the lower Volga, probably at Tsaritsain, Sarepta or Astrachan. In the Kursk and Voronezh markets we also find them sent from the south. These melons are grown in Russia, where the summer is longer than ours, yet not with such hotbed care as we can give them, and they seem to be picked early. They cannot, therefore, be so very late. Next autumn will test their value in this climate."

"WATER MELON.—Nearly every barge that is being towed up the Volga has somewhere a small deck load of water melons. In all the markets we find them in great quantity. They are a great staple article of food. They are all alike, round, about 10 inches in diameter, a creamy white in color, with red flesh, and of fine flavor. Those who have grown the Russian netted cucumber alongside of the finer English frame varieties, may have noticed the hardy, take-care-of-itself character of the Russian plant. Just such a hardy nature I expect to find in this Russian water melon. It grows without care in vast quantity, apparently as readily as pumpkins do with us, that is at Saratof and southwards. At Kursk and Voronezh it is not quite so large. It is a melon of fine quality, likely to do well in the hands of not very careful cultivators."

The next meeting of the American Pomological Society will be held in the city of Philadelphia, on the 12th, 13th and 14th September. All horticultural, pomological, agricultural and other kindred associations in the United States and British Provinces are invited to send delegations as large as they may deem expedient, and all persons interested in the cultivation of fruit are invited to be present and take seats in the convention. It is expected that there will be a full attendance of delegates from all quarters of our country, and that this will be the largest and most useful meeting ever held by the society.