

HELLEBORE FOR SQUASH BUGS—TO ROT HORSE MANURE—ENJOYS THE F. A.

First, I wish to say that I enjoy very much the reading of your valuable paper. I used to enjoy it years ago, and I enjoy it more now.

I notice in your last issue you ask your readers to give "successful methods of dealing with the squash bug," and in response I would say, that when my cucumber and musk-melon vines were about 3 or 4 inches high, I was a little alarmed to find them swarmed with the bug. The only thing I had at hand was some hellebore, so I put some in my spray pump and gave them a liberal spraying, and repeated it in seven days, and have not been bothered since with the bug.

Is there anything I can put with horse manure that will make it rot? Of course, I know that when I used to be home on the farm we were not bothered, because we used to mix the cow manure and horse manure together; but I do not keep a cow. I have kept it piled up neatly and have turned it twice, but still it does not seem to rot. W. E. MILLSON.

Essex Co., Ont.

Ans.—Probably the manure is too dry, or else it heats too violently and burns, fire-fangs, turns light in color, and goes to waste by volatilization. Usually, the trouble with horse manure alone is that it ferments too rapidly. We would recommend mixing a quantity of soil with the manure, then keep it well tramped down and moistened with water. It should then rot without undue waste by fire-fanging.

BLACK HEAD IN TURKEYS.

Our turkeys are dying of some disease of which we do not know. They get diarrhea and become very weak, turn dark in the head, will not eat, but are very thirsty. Color of stool yellow, sometimes green and quite watery. Will you kindly publish cure. G. N.

Ontario Co., Ont.

Ans.—The trouble with your correspondent's turkeys is no doubt black head (*Entero Hepatitis*). I have not been able to find any cure for the disease, and it is generally admitted to be incurable. The disease is due to a small organism which is taken into the bird's system along with the food that is gathered from the ground, and is chiefly spread in this way. The droppings of a sick bird contain more or less of these organisms. The disease can be avoided somewhat by feeding good, pure, wholesome foods, either from clean troughs or from the hand, but never feed from the ground, and removing the bird to new ground. If a bird is opened you will find the liver is covered more or less with creamy-white spots from the size of a pea upwards. A case came under my observation this summer, where turkeys were dying from this disease, on a farm where there had been no turkeys for ten years or more, so from this it is evident we have a very serious disease to deal with. If your correspondent would be good enough to ship a sick bird or two to F. C. Harrison, Bacteriologist at the College, Mr. Harrison will be pleased to examine the birds for him and advise the best methods of stopping the disease. W. R. GRAHAM.

Poultry Supt., O. A. C., Guelph.

SPRAYING WILD MUSTARD.

Would you kindly inform me, through the columns of your paper, how to get rid of wild mustard? Will sulphate of copper kill it? If so, please give directions. C. T. D.

Westmoreland Co., N. B.

Ans.—Both at the Guelph and Ottawa Experimental Farms, copper sulphate solution completely killed the mustard, and did very slight damage to the grain. The 2 per cent. solution of copper sulphate (2 lbs. in 10 gallons of water), sprayed on the crop just as the mustard was commencing to blossom, gave entirely satisfactory results. Prof. Shutt, who conducted experiments, concludes that about 50 gallons are necessary for an acre, and that if heavy rain comes within 24 hours after the spraying, the operation should be repeated. In other experiments where the mustard was very thick, it was found necessary to spray a second time in about two weeks after the first, to catch plants that came up after the first spraying, or that somehow escaped the full dose that was intended for them. The Spramotor Co., London, Ont., make special machinery for this purpose.

REGISTRY OF STANDARD-BREDS AND HOLSTEIN-FRIESIANS.

1. Would you please let me know, through the ADVOCATE, who the secretary of the Standard-bred Horse Association is, and his address?

2. Also, who registers Holstein cattle, and his address? J. M.

Prescott County, Ont.

Ans.—1. J. H. Steiner, Chicago, Ill., is Secretary of the American Trotting Register. There is no Standard-bred Horse Breeders' Association and no recognized registry in Canada for Standard-breds.

2. The Secretary of the Holstein-Friesian Association of America is F. L. Houghton, Brattleboro, Vermont. The Secretary of the Holstein Breeders' Association of Canada is G. W. Clemons, St. George, Ont.

QUALITY OF CEMENTS.

Could you, or some of your readers, tell me through your valuable paper if the Thorold cement is as good as Queenston cement? C. B.

Hastings Co., Ont.

Ans.—Both are what are called rock cements, and we have had equally good reports of each from readers who have used them extensively.

MARKETS.

FARM GOSSIP.

South Perth.

The harvest is past, and the results so far are not very encouraging to the grain farmer. Wheat, from which much was expected, has turned out considerably below the average, for while but little real damage was done by the Hessian fly, the hot weather during the filling period caused much shrunken grain, lessening the yield both in bulk and weight. The average will probably not be over twenty bushels of cleaned grain, testing from 56 to 60 lbs. Barley and oats are exceptionally short in the straw and thin on the ground, with a corresponding decrease in yield of grain. Peas show the same indications as regards the straw, but appears to be fairly well podded. A few are trying the grass, or bugless, variety, and in some instances under my own observation they are superior to the common kind both in yield of straw and apparently better podded, though I have not yet seen any threshed, and I have not seen any indication of the weevil, while the common variety in the same field is badly infested. Early potatoes are exceedingly scarce, the price ruling at 35c. and 40c. per peck. The same is true of early apples, which sell readily at 20c. per peck. "Few vegetables and less fruit," is the cry, though with the present showery weather field potatoes will probably "pick up," and fall and winter apples yield much better than the early varieties. Pears, plums and grapes are fair crops, though there are comparatively few of them grown here. Honey is a fair to good crop, and, with the scarcity of fruit, ought to command a good price; extracted is retailing at 9c. and 10c., with 12c. and 15c. for comb. Mangels and corn are doing well, but turnips are very "patchy," and many fields, through press of work, are abandoned, apparently, to the reign of fox-tail and other weeds. Many of our farmers have too many strings to their bow, and, we think, would do better with a more special kind of farming, which would admit of more rapid methods of handling the produce by machinery, and thus less need of hired help. The prospects for a yield of red clover seed, we think, are good. During sunny weather we have noticed many bees of the Italian strain working on the blossom, and if there is anything in the theory that bees are necessary to distribute pollen for the production of seed, the yield should at least be fair. Certainly what few heads are ripe are well supplied with seed. If, then, as scientists claim, bees are the most necessary agents in the production of fruit and clover seeds, it will surely pay farmers and Government to encourage the industry. As usual, we have this year continued using our two-foot-high flat wagon rack for taking off the harvest, and having had occasion to assist a neighbor who uses the old style, we could not help but marvel why any intelligent man would persist in dragging around a heavy, rocking, nerve-destroying receptacle, into which, higher than his head, he laboriously casts all kinds of heavy produce, throwing away time and money with every forkful. J. H. B.

Prince Edward Island.

Dry! Dry!!! Dry!!! We have had an exceedingly dry time here during the last half of July and so far in August. The pastures are pretty well burnt up, and the farmers who are not supplied with green feed for stock are learning a lesson that may do them good for some time to come. Since our dairy industry was started, we have not had such a falling off in the milk supply in August as we are now experiencing. Some of the smaller factories are closing up on account of scarcity of milk. The horn-fly is also very troublesome, which makes matters worse for stockmen. We are now pretty well through with grain-cutting, and the great bulk of the harvest is already saved in fine condition. Earlier sown grain, in all but the western part of the Island, is a fairly good crop. Up west, in Prince County, the drought was much worse, and crops are very short. Wheat has stood the dry weather best, and on most of the Island is a good crop, well filled and on most of midges. The earliest oats are pretty good in the straw, and will thresh out well. Potatoes are making a good appearance yet, but the drought is beginning to tell on them. Early-sown turnips are looking well, but the late sowings that did not get a good start before the dry spell set in did not yield much. The cattle on the pastures are not gaining flesh, as the after-grass has not made much start. Beef cattle are not very much enquired after just now, and are not in very good condition for market. The lamb trade has not begun yet, though S. H. Jones, of Quebec, the man who handles most of them, is here making arrangements for handling them later on. Podder corn has made a fine growth this season. Our exceedingly hot summer has been in its favor. Horses have not been in such demand here for over 20 years, all stable ones being picked up for export as soon as offered. This is the earliest harvest this country has had during the last half century. If we do not have rain soon, it will be very difficult to get the fall plowing done. W. S.

August 23rd.

Delta, B. C.

Mr. Thomas Cunningham, fruit inspector, on returning from a recent visit to the Delta district, reports that he took particular notice of the dairy stock, and states that he has never seen cattle in better condition. Many of the herds showed fine breeding, the scrub cow being conspicuous by her absence. The young cattle now rapidly coming forward give evidence of judicious breeding; they are mostly cross-bred from pure-bred stock on both sides. Dairy Shorthorn bulls seem to have the preference, and they certainly appear to nick well in breeding with Ayrshires and Holsteins. This, he states, is evident by the quality, shape and size of the young heifers now coming in. "The Delta farmers are good, liberal feeders, their pastures being rich in sweet, succulent grasses." Mr. Cunningham gives a glowing report of the harvest and general agricultural outlook throughout the Delta. Speaking of the dairying industry, he states that three of the chief creameries on the Delta are turning out no less than 15,000 pounds of butter per month, the Delta Co-operative Creamery making 400 pounds per day, or 12,000 pounds monthly. L. Guichon's creamery is producing 1,700 pounds per month, all from his own cows, and the Wellington Farm, owned by R. Rithet, is turning out 1,300 pounds.

Huntingdon Co., Quebec.

The harvest has all been gathered in, except some late grain, and while not a heavy crop, is a fairly good one. The grain is of very good quality. The weather has been quite showery, except last week, which was a splendid harvest week. There is grass in abundance, hence the flow of milk is good for this season. Corn promises well. W. F. S.

The Census Returns.

Census Commissioner Blue has issued his first statement of returns, showing the population of Canada to be 5,338,883, an increase of 505,644, compared with 1891. Of the seven Provinces, Quebec exhibits the largest gain in population, having 132,439 more than in 1891. Manitoba comes next, with 93,958, while British Columbia is third, with 91,827. Ontario is fourth on the list, with 53,657 to her credit. New Brunswick is considerably behind Ontario, with a gain of 9,830, while Nova Scotia closely approaches the former, with 8,720. Prince Edward Island laments a loss of population, in which unenviable position she stands alone, amounting to 5,820. The Territories are able to boast of a gain of 78,201. An analysis of the returns shows that the population has uniformly decreased in the older rural sections, and increased in cities and towns and in the new regions. Judging from the comments of the press, a greater increase was expected. As immigration has been fairly heavy, the natural increase could not have been very large in the past decade. In the last issue of the "Farmer's Advocate," Mr. David Lawrence, writing on the farm labor question, laid part of the blame for this upon the old bachelors, who are becoming numerous in nearly every township. The Toronto Globe thinks that economic changes, such as the introduction of machinery and the adoption of mixed farming, have resulted in a great decrease in the amount of labor needed on the farms of old Ontario, and have accordingly brought about a proportionate decrease of population. The singular uniformity with which in eastern, central and western Ontario the rural districts have lost population emphasizes this point. The farms of old Ontario are as carefully tilled as ever. They earn considerably more money than they did ten years or more ago. There are fewer farmers to share this increased income, and so they are better off on two counts. While the rural districts everywhere except on the Detroit frontier and in the Ottawa Valley, have receded in population, all the cities except one have made heavy gains. A portion of the population from these rural districts has drifted to the towns and cities and a part to the newer districts, such as New Ontario, British Columbia, and the Yukon.

Chilliwack, B. C.

In the Victoria Colonist we find the following statements, elicited in an interview with L. W. Paisley, a well-known resident of Chilliwack:

The crops are looking fine. Wheat, oats and barley will yield fully up to the average, while hay will give a splendid return. Mr. Paisley mentioned a field of Alsike clover which stands 5 feet 6 inches high, timothy 6 feet 10 inches, and rye grass 7 feet 8 inches. Roots and vegetables are splendid. Fruits of all kinds are also looking well. There was a phenomenal crop of berries, of excellent quality. Apples, plums and prunes give promise of a very large yield. The Eden Bank creamery, established four years ago, on the co-operative plan, is a good example of what is being and may be done in dairying. In 1900 it produced 130,000 pounds of excellent butter, which was sold at 25 cents a pound, and at the end of the season there was a surplus of \$1,400. On Monday, 1,457 pounds of butter was made; on Tuesday, 1,070 pounds, the daily average being about 1,200 pounds. More than half the farmers in the district make their own butter in the old-fashioned way, so that there is a good field for the establishment of other creameries. Last year the butter cost, to make, 1 cent per pound, while this year the cost of manufacture will be reduced to one quarter to one third cent per pound. The butter produced at Eden Bank Creamery finds a ready sale in Vancouver, New Westminster, and Victoria, the latter being the best market.

Northwest Horses for the Army.

Lieutenant-Colonel Dent, who has been in the Northwest for some weeks purchasing horses for the War Office, has completed his tour and returned to Montreal. He expresses himself as being very much pleased with the assistance given him in his work by Secretary C. W. Pearson and other members of the Territorial Horse Breeders' Association, particularly Capt. Inglis and Messrs. W. R. Stewart, J. A. Turner and G. S. Goddard. From the knowledge gained by a personal inspection of the leading horse-breeding districts of the Northwest and British Columbia, he is inclined to think that a future visit might be much more productive of results than has been. Col. Dent considers that a great deal of improvement might be made in breeding the right class of mares and using a "Thoroughbred" stallion. It would also greatly facilitate business if breeders would devote more attention to having their horses better broken in, so that they would be handier and more tractable. Col. Dent also recommends that a law be passed similar to that in force in England, compelling the railway companies to properly clean and disinfect all stock cars after each shipment. Following is a statement of the number of horses purchased in the Northwest and British Columbia by Col. Dent, with the prices paid for each class of horse, and the total amount expended:

Horses bought.	No.	Price.	Amt.
Mounted Infantry cobs	377	\$ 85	\$32,045
Cavalry	255	100	25,500
Royal Artillery	146	100	14,600
Total	778		\$72,145

Of these 778 horses, 26 were secured at Kamloops and Vernon, B. C.; the others at various points in the Northwest, as follows: Calgary, 217; High River, 98; Cochrane, 61; Lethbridge, 18; Macleod, 231; Pincher Creek, 48; Medicine Hat, 27; Maple Creek, 44; Moose Jaw, 8.

Warton Sugar Beet Industry.

The Warton (Ont.) Beet Sugar Manufacturing Company is corresponding with the farmers in that district for a supply of beets for refining in the season of 1902. The farmers are promised \$4 per ton, delivered at the factory. If the beets test 14 per cent, \$4.50 will be paid. The company states that last year it shipped nine car loads of beets to Michigan, and they averaged 14½ per cent. The company has 1,500 acres contracted for and it wants 1,000 more. Similar enterprises are under way at several other points.

Failure of Western Corn Crop.

Mr. W. J. White, Inspector of Immigration Agencies in the United States, after a tour of some of the Western States, says that the corn crop in Nebraska and Kansas is a total failure, owing to the drought. In other States the yield will be only half a crop. The drought has also affected wheat and roots to some extent. A large number of immigrants from the Western States are going into the Territories, but they are mostly men with capital, and not poor settlers.