

neglecting to keep their mangers clean and sweet. All hay which has been picked over should be removed from the mangers, and often may be profitably used in feeding older stock. Before feeding roots, silage or grain always make it a point to clean all left-over material away. It is much better practice to feed in such quantity that the calves have plenty, but clean up all the feed given at each meal. This is rather difficult, but when this condition is reached it is an indication that the feeder knows his business. Be careful with the calves.

The Dairymen's Association of Western Ontario announce that their annual Cheese and Creamery Meeting will be held at the Dairy School, Ontario Agricultural College, Guelph, on Wednesday, December 9th, at 1.30 p.m. Single fare on all railroads. Some interesting topics are to come before the cheesemakers, buttermakers, factorymen, patrons, buyers, instructors, and others interested in dairying, at this meeting.

HORTICULTURE.

Fertilizer Experiments With Potatoes.

Editor "The Farmer's Advocate":

I was very much interested in your answers to the questions of "A. G. C." in the Nov. 12 issue. I have conducted some experiments with fertilizers this year, and the results may be of benefit to others besides the above mentioned reader who asked for information on the subject. I used both home-mixed and ready-mixed brands, and, lest I forget it, I want to say here that for the average farmer I prefer the ready mixed.

Now, in answer to the first question asked by "A. G. C." as to whether fertilizer would sufficiently enrich a rather poor piece of ground to insure a good crop of potatoes or corn. On part of my potato field, which had not been manured at all for at least five years and had been in grain crops for this length of time, I used commercial fertilizer with good results. Between five and six hundred pounds was applied per acre. The ground was ridged up, and after dropping the sets I had a man follow me and with a hoe pull an inch or so of soil over each piece of potato. Then the fertilizer was sprinkled on top of this. Applying a small handful to each hill. Then with the plow this was covered up.

On ROW 1 equal parts of sulphate of potash and sulphate of ammonia were used. This row yielded at the rate of 226 bushels per acre. ROW 2 was given 2 parts of sulphate of ammonia to 1 part of sulphate of potash with very little increase in yield. Not enough to pay for extra quantity of ammonia which was used.

ROW 3. On this row the quantities used in row 2 were reversed, using 2 parts of potash to 1 part of ammonia. This gave a yield of 278 bushels per acre. A gain of 52 bushels over the second row.

ROW 4. On this row a ready-mixed brand was used. It was a special potato mixture with plenty of potash, testing out in the ratio of 3-9-12. This row yielded 312 bushels per acre. This is 34 bushels more than previous row.

ROW 5. This was manured with 20 loads of mixed manure per acre, and was given the same quantity of ready-mixed fertilizer as row 4. From this row I got 408 bushels per acre. This is 96 bushels more than where only fertilizer was used.

ROW 6 was given the same quantity of manure but no fertilizer. This yielded 290 bushels per acre. This leaves 118 bushels to credit to the fertilizer.

From these figures you can easily figure out what increase in value of crop is where different mixtures were used. The cost of fertilizer ran from five to eleven dollars per acre. The gain is quite noticeable, and I found that it paid and paid well to use the commercial mixtures, and, as I said before, and as these results prove, the ready-mixed brand is the best, provided you buy a kind with a good high analysis.

Now, in regard to question 2. This was answered in the affirmative, as it should be. But the value of the second year depends on weather conditions the first year. Take this year for example. It was very dry through the first half of the growing season, so the potatoes did not get the benefit they should from chemicals, especially the potash. This is still in the soil, and will next year help in producing a bumper crop of grain. Question 3 is one that is often asked and I have heard the same thing as "A. G. C." but cannot say from my limited experience whether there is any truth in it or not. It is probable that if commercial fertilizer were used year after year, and crops grown that furnished no humus to be incorporated with the soil, that the ground might lose its productivity. But no wise farmer will grow this kind of a crop year after year. The value of rotation is generally understood, and is practiced by all good farmers. As before stated, I used from five to eleven

dollars per acre. The ready-mixed brand used on row 5 and 6 cost the last named amount. If conditions are favorable fertilizer will pay for itself, and leave a margin of profit. You must know what both the soil and the crop requires, and use a brand that suits your needs. To get the full value out of the chemicals in a fertilizer you need plenty of moisture, so it will be seen that best results will not be obtained on a dry year, such as we had this season. Buy a brand with as high an analysis as possible. The best is the cheapest. Potash is scarce this year owing to the war, and will not be used as much as usual in making up the different brands of ready-mixed fertilizer.

York Co., Ont.

C. H. R.



Three Ayrshires of the Tena Family.

The center cow has given 12,000 lbs. milk in one year, another 10,000 lbs., and the heifer 42 lbs. a day. To be sold at Bowley's Sale, Kerwood, Ont., Dec. 16.

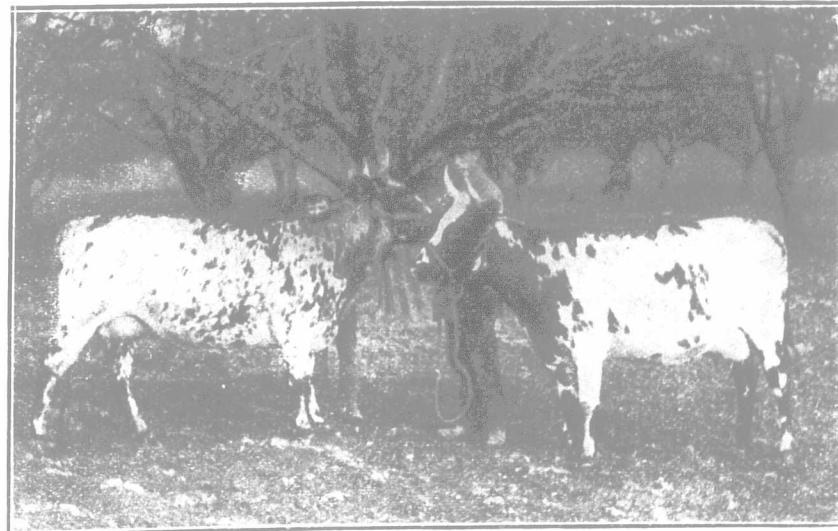
[Note.—We wonder how far apart the rows in question were. If these rows were side by side it was not a fair test, as adjoining rows must get some benefit from the nearest rows on either side. We prefer experiments conducted in plots not in rows. We would also like to know the length of the rows tried. To be a fair test little strips are not enough. We have no doubt but fertilizer is beneficial, but to prove that one kind is better than another requires more thorough work than a few rods or a row, and besides, what is best on one soil may not do at all on another.—Editor.]

FARM BULLETIN.

The Situation.

By Peter McArthur.

The war is proving to be a war of exhaustion in more ways than one. Not only are the belligerent nations in danger of running short of



Ayrshire Heifers of the Blossom Family.

To be sold at Bowley's sale, Kerwood, Ont., Dec. 16. These heifers are making 41 and 49 lbs. per day, first and second calving.

men, provisions, and ammunition, before it is over, but great editors are in danger of running short of adjectives in describing it. During the first days of the war there was a burst of magnificent writing throughout the country, but the pace proved too wearing. The writers couldn't keep it up, and they began to cast about for other subjects to talk about until some thing definite happened at the seat of war. But nothing definite comes from the seat of war except that the inexplicable, insane, human butchery

continues day after day, and is likely to continue for months and perhaps years. I know there are people who can tell you off-hand just what caused the war, how it should be conducted, how it must end and what the terms of peace must be, but I am not gifted with any such insight or prevision. All I know is that the most horrible deeds ever enacted on earth are being enacted just now, and that Canada is caught in this infernal maelstrom that seems to have opened from the pit itself. No matter how we look at the matter, whether from the point of view of loyalty to the Empire or as a means of self-protection we must do our part in the war. Although we did nothing to provoke it and can gain nothing from it but loss of men and treasure, we must go on

as we have begun. This is a grim and horrible necessity, but there is no other way out, either in honor or self-interest. But while we are bowing to this realization it would be a relief if the people who are shouting about "glory" would be quiet. There is no glory for anyone in this war. It is just a senseless slaughter that must be carried through, now that it has begun. Europe has been piling up armaments, and now her punishment is that she must use them.

One evidence of the brutalizing effect of the war is the tone of the papers when they refer in any way to ques-

tions of politics. Both parties are at present making a bluff that there is a political moratorium and that they are not discussing politics, but never since I have been reading the papers have I seen such political ferocity as we get glimpses of in our editorial pages. Whenever they venture to mention anything political they display a rancour as disgusting as the stories of atrocity that come from the battle fields. I have read comments—short, furtive paragraphs—in the papers of both parties that were poisonous with malice. Nothing that has been written by the representatives of the belligerent nations has been so bitter as some things I have seen written by editors representing our contemptible, belligerent political parties. And in spite of all talk of a political truce, the machine men of both parties are at this moment making all preparations for an election. And when it finally comes the orators and editors of both parties will try to convince us that they alone are "truly loyal." Both will claim to be the keepers of all the virtues, and they will curse one another with all the savagery of war time.

Like the war, this prospect gives me a feeling of nausea. I am not interested in either party. Since the declaration of war I have even stopped being interested in their rotten records—and the records of both are a disgrace to the country. All I want at the present time is to see the work of the country go on quietly as it has been going since the war broke out. We have a great duty to perform, and it is being performed grimly, and the credit is not due to any political party or set of men. The Canadian people have been roused to a sense of unity by the common danger, and that sense has been the compelling motive of all that has been done and of all that

will be done. If the sense of the people had been against the war no government or political party would have dared to go forward with it, and as it has been in favor of the war no power dare oppose it. And I hope that this new-found sense of unity in the Canadian people will presently find expression in another way. I hope that when the crisis is past and the problem of reconstruction confronts us there will be a spontaneous movement throughout the country that will give us new conceptions of political duty.