Miscellaneous.

THE SELF-HIVER AND FERTILIZING QUEENS.

F. W. RICHARDSON, Hazeldean:—"In your account of the test of the self-hiver by the Experimental Union, on page twenty-four, Mr. Holtermann mental Union, on page twenty-four, Mr. Holtermann is made to report a patent self-hiver to place between the old and new hive, the queen to pass direct from one to the other. When would impregnation take place? Most beekeepers (myself amongst the number) hold that the queen is fertilized on the wing at the time of the swarming, and only then. If such an authority as Mr. Holtermann would deny that as a fact, it would knock our theory higher than a kite."

ANSWERED BY R. F. HOLTERMANN.

In answer to the above, would say: Those having to devote a large amount of attention to other matters, yet keeping a few swarms of bees, are often at a loss to know how to prevent the loss of swarms. We know that if the first swarm is lost, as a rule the season's profits have been lost, for this is the swarm which would give us the bulk of increase. The self-hiver is an attachment by means of which the queen is prevented from issuing with the swarm, and is directed, in her attempts to escape with the swarm, to the new hive. She does not fly at all. The swarm returns, and as before explained, finds the queen in the new hive. Now, were this contrivance left between the new and old hive for any length of time, the new queen, which hatches in the old hive, would not be able to fly out and become impresented on the wing. the only out and become impregnated on the wing—the only way she will become impregnated. Other difficulties might also arise. Therefore, the lower and new hive should be examined every few days, and if the queen is found therein, the old hive above removed, as also the self-hiver. The same should be done if the swarm is seen to issue by accident, The old queen leaves the hive with the swarm; the young queen, which usually emerges from the cell about nine days after the swarm issues, generally flies out for impregnation four to ten lays after emerging from the cell. Perhaps friend Richardson knows more than he claims; in any case he is the means of drawing attention to an important point in connection with the management of self-hivers

Death of Mr. Wm. Russell.

There died at Springbrook Farm, near Richmond Hill, on Tuesday, 13th inst., one of the best known and most highly respected farmers in the County of York, in the person of William Russell, the father of the celebrated live stock breeders, Jas. and Wm. Russell.

The deceased was born in Berwickehire, Scotland, in the year 1801, and was consequently in his 93rd year at the time of his death. Both his parents died when he was quite young. He was married in the year 1835 to Elizabeth Bone, a native of Berwick-on-the-Tweed, and the following year emigrated to Canada, settling in the Township of Vaughan, on lot 8, concession 7, which was at that time in a wilderness. The sturdy Scotchman set to work and cleared the farm, where he lived for twenty-five years; then having accumulated considerable money, and wishing to extend his opera-ions, he sold the farm at Vaughan and purchased the Springbrook Farm of 400 acres, for which he paid \$100 per acre, where he launched out into the improving of stock by breeding Thore uccess with which he met in this line is not only known in Canada but to the world, as the stock from the Springbrook Farm obtained the highest honors both at the Centennial Exhibition in Philadelphia and at the World's Fair, Chicago. The cash prizes carried away from the World's Fair alone amounted to about \$2000. He was one of the first farmer in Canada to see the great possibilities in the improvement of stock, and consequently for many years imported the best animals he could obtain, and made considerable money by his foresight and pluck. He was a firm believer in the value of turnips as a stock food. He grew about fourteen acres a year, and never less that 1100 bushels to the acre, winning the county prize for many years in succession. When his sons began to grow to manhood he gave the active operations and largely left the management in their hands, and their success is world-wide. Almost a year ago his faithful life partner, who had been one of the most affectionate of mothers and had ably seconded her husband and sons in all their good works, died. Since that time Mr. Russell failed rapidly until death terminated his long, honorable and useful life.

The deceased left two daughters and five sons.

James and William, the two oldest, are living on the homestead; Andrew being a successful farmer in the third concession of Vaughan, who served eight years in the council, being warden of the county last year; Alexander is another farmer and lives in the fifth of Markham, and follows his early inclinations by dealing extensively in horses; John is a successful barrister in Winnipeg, and also the Northwest manager of the Freehold Loan and Sivings Company in that city; Mrs. John Lander, North Toronto, is the eldest daughter; Mrs. John Isaacs, of Markham, is another daughter.

Our Prize Essays.

We have received the following letter from Mr. A. Rrde, Guelph, in which he criticises the prize essays in these words: "In your issue of March lst., we have some prize essays on poultry. Now, it seems to me that an essay to be worth anything should be practical. The writer of the first prize essay declares it to be his intention to 'Draw the farmers' attention to and point out to them the farmers of the poultry industry, as a means of advantages of the poultry industry as a means of furnishing them with remunerative employment during the winter season.' Now, instead of furnishing us with any proof of this, he indulges in a few more generalities, and then gets to the round up, about which he seem to know a good deal. Then e comes to the handling of spring eggs, and no doubt your hat is the best place to put the eggs that you get from under the barn, and the market he mentions the best place to dispose of such eggs, although, if Canada had a war indemnity to pay in poultry products, we might do better with them. Then, after he has pointed out all these advantages, he tells the farmer to build the poultry house near the residence, so the wife can do the work. Although he tries to excuse this by adding, "and thieves cannot break through and steal," still it seems, after all, that it is not the farmer that he wants to provide with profitable employment but the wife. Then he informs us that the fowls like the wife. Then he informs us that the fowls like shade, advises us to go to somebody with experience, and closes by telling us that we can get hens to lay as well in January as in May, by simply providing the same conditions. If he had only added to his dont's, don't feed young potato bugs to your hens in winter, I would not have been at a loss to understand why he received the first prize.

Now, Mr. Editor, as I have said before, we want something practical, something as to first costs for fowls, for houses and for runs. Let some of those people who are telling us what a profitable business it is to keep poultry give us some of their experience, not only as to what to feed them, but how much and how many eggs they get in a year, and what they get for them; also what they receive

for their poultry. The second and third prize essayists do a little in this direction, but they do not go far enough. Let us have egg records for the different months of

the year, and some statements of the profit, such for example as Mr. Whitton gives for his cows in the March number of the ADVOCATE."

[Our object is to make the ADVOCATE."
[Our object is to make the ADVOCATE a thoroughly practical paper. With this idea in view, we offered prizes for the best essays on this subject, thinking that essays written by practical men about their daily work would supply just such information as would be needed by practical men who are in the business or are about starting. We ecognize the force of some of the remarks made by Mr. Ryde, and hope that our correspondents will answer his letter, fully explaining their methods of conducting the business, also giving the profit that can be obtained from the raising of poultry. What

Smaller Farms.

of practical experience, simply told.—ED.

we want and what our readers want are records

The Souris Plaindealer has, for some time past, been advocating farming on a smaller scale than is at present in vogue, in the south-western portion of the province, and the following editorial, in their

issue of February 1st, is worthy of consideration:
"Can a system of farming be found, which if followed, will enable a reasonably industrious and intelligent farmer in Manitoba to make both ends meet in the worst of seasons? That is the question. Probably not one farmer among those who read these lines, if he stops and considers well, but will answer "Yes," to this question. Many will reflect upon the past year, and consider it an example of what we have referred to as the worst of seasons. That we would be justified in setting down 1893 as one of the worst of seasons for Manitoba, where farmers have up to the present depended almost altogether upon wheat, no one will gainsay, While wheat may not soon again reach the price paid for it in the autumn of 1891, there are good reasons for believing that farmers, even in Manitoba, will not often be obliged to take 40 cents or less for wheat of the highest grade; nor, though the phenomenal yields of two or three seasons ago may not soon be repeated, will 9 bushels per acre be the average in South Western Manitoba. We often say that the value of the wheat crop last year was only one-fourth of what it should have been-or, at least, of what we expected it to be; and we arrive at this conclusion by estimating the yield one-half the usual yield and the price one-half the usual price. Let us, for the sake of discussing and considering the matter, put the crop of '93 at one-half the average value of our wheat crop in this part of The price during the past year was 40 Manitoba. cents, and the average yield 9 bushels; therefore the average value of an acre of wheat cut, threshed and delivered at the elevator, was \$3.60. If we allow this to be, not one-fourth but one-half of the average, the average value of the wheat from one acre would be \$7.20. One year with another under existing conditions and present system of cultivation, we may expect to realize \$7.20 or say \$7.50 from each acre of land seeded with wheat. Is this average too high or too low? Let us try it another way. In the worst of seasons the value of one acre is \$3.60. In the best of seasons it is not more than \$12.50. The average of \$3.60 and \$12.50 is \$8.05.

This is a trifle more than the last, but near enough to prove that \$7.50 is a pretty correct estimate of the average value. \$7.50 is 15 bushels per acre at 50 cents per bushel; \$8.00 is 16 bushels per acre at 50 cents. Can we reckon on anything more than this? If we can it will be safe to continue farming on a larger scale; if not, the sooner we confine ourselves to a small area and try to increase the productiveness of the soil by careful and thorough cultivation, by a rotation of crops and by manuring, the better. At the meeting of the Farmers' Institute here last Thursday, a farmer told how he made four cows produce sufficient butter to be able to sell 500-lbs. during the year. He explained that he fed them well, gave them a little meal, etc., etc. It struck us at once that here was one man upon the right track. He had not given all his attention to wheat growing, nor do we think had he ever neglected feeding and caring for these cows, even in the busiest wheat season. He had not given up wheat growing, but he had added this small herd to it, and his wheat, we feel certain, did not yield any less per acre because he kept four cows, and. no doubt, although he did not say so, raised some good calves and some profitable pigs.

We intend leaving this subject of "Small Farms" now, but for a last word let us set down what we would consider the ideal farm in Manitoba. One hundred and sixty acres of land, mostly cultivated or fit for cultivation; buildings as you please, so long as they are comfortable for man and beast; crop consisting of not more than 75 acres of wheat, 25 acres of oats, the remainder in hay, pasture, fallow, roots, etc., as found desirable. Stocked with three stout, active work horses, young horses only sufficient to replace workers when worn out; four good-sized, sleek, well-fed cows, half dozen young cattle; pigs sufficient in number to supply two or three carcasses per month; poultry ad libitum, chief disideratum in farmer—no desire for

more land."

Veitches as a Crop for Ensilage.

Mr. Esdon, of Curry Hill, Glengarry county, writes us that the brightest and sweetest ensilage which he has this year was made from veitches, and asks their feeding value as compared with

Veitches belong to the group of plants called legumes. These plants all contain a large proportion of that most important constituent of feeding stuffs, nitrogen, which they have the power of obtaining from the air through their roots by the action of certain bacilli or microbes.

If Mr. Esdon can successfully grow the veitches as an ensilage crop he has solved the problem which Prof. Robertson has been working at, viz., to obtain a plant which could be successfully grown in this country, and at the same time would supply the nitrogen which is deficient in the corn plant. As the English beans have apparently proved a failure in this province, we would be pleased to hear from Mr. Esdon again in regard to the growth of veitches as a fodder crop, and the amount per acre which they will yield.

We have always been under the impression that the bulk of feed was too small to render them a profitable fodder crop for general use, but it may be that it will pay to grow them in order to mix with the more carbonaceous corn fodder, in order to obtain an ensilage which will contain both albuminoids and carbo-hydrates combined in the right proportions for feeding, and thus form a balanced ensilage.

According to Dr. Wolfe's analysis published in Stewart's Manuel of Cattle Feeding,"the digestible nutrients in veitches, timothy, corn and clover are

GREEN,	Water.	Album- inoids.	Carbo- hydrates	Fat.	Nutri- tive ratio	Value per1001bs
Veitch, beginning of blossom Red clover, full blossom Corn fodder Grass, before bloom DRIED.	82 80 83 75	2.5 1.7 1.0 2.0	6.7 8.7 8.4 13.0	0.3 0.4 0.2 0.4	1-3 1-5.7 1-8.9 1-7.	0.18 0.17 0.13 0.22
Fodder veitch poor	16.7 14.0 16.0 15.	9.4 15.1 5.8 8.5 5.4	32.5 33.1 43.4 33.8 41.0	1.5 1.4 1.4 1.7 1.0	1-3.5 1-2.3 1-8 1-5 1-8	0.77 0.99 70 79 64

These values must not be taken as the real worth of the above fodders, but only as a comparative valuation when meadow hay is worth \$12.80 per

To ward off disease in the poultry house is a simple matter, and in consequence for some people it is very difficult. If you feed nothing but sound, wholesome food, keep the quarters clean and free from vermin, give warmth and sunlight without foul air, disease will pass by and go to your neighbor who does not take these precautions. Medicine is a thing which should never be needed about a well-regulated poultry establishment. Prevention is vastly better than cure, because a sick fowl is an exceedingly difficult thing to cure.