

of clover gives the best crop with us here on the experimental farm. Many farmers in Western Ontario, sow less timothy than 12 lbs. and do not care to grow clover as much as we do here. In some places they seed down with as small a quantity as 4 lbs. of timothy and get a good crop. If we were to sow only 4 lbs. timothy here, it would not give us any crop worth cutting. We have tried at the experimental farm a large number of mixtures, starting with 4 lbs. of each and running as high as 16 lbs. of each, and we found, as I say, that the mixture which gave us the best hay and the largest quantity of it was 12 lbs. of timothy and 8 lbs. of clover. The proportion of clover which should be allowed in hay of first quality is to a large measure a matter of taste. Some people won't buy hay if there is any clover at all in it.

By Mr. Featherston :

Q. That is for horses only?

A. Yes, I know; but I am speaking of the market, and the requirements of the market seem to vary. A few years ago in the market here in Ottawa, buyers would have no clover in hay. If there was any clover among hay, they would decline to buy it and say: "We do not want any clover in hay." Last year, however, opinion had changed and mixed hay sold well here. The only answer I can give to the chairman's question then is that with us here a mixture of 12 lbs. of timothy and 8 lbs. of clover has given the heaviest crop of what we consider first class hay for all stock.

By Mr. Cochrane :

Q. Has the experimental farm any knowledge of the proportion of clover and timothy which was shipped to South Africa?

A. Yes. I do not myself know exactly what the proportion was; but I think about $\frac{1}{2}$ or $\frac{1}{3}$ of the hay was clover, it was examined by some of our officers and no doubt they had a fixed standard.

By Mr. Broder :

Q. When you want to feed hay to cows, the mixture of clover with timothy is right, but for horses you want clear timothy.

A. This hay was for horses, mules and oxen.

E. Mr. Featherston :

Q. I find that hay which is made up of half timothy and half clover, sells better in the English market than hay which is all timothy.

A. Do they like as much clover as that?—Well, the mixture of 12 lbs. timothy and 8 lbs. clover which I have mentioned would about give half and half, but what was demanded by the government for South Africa, was, I think, a smaller proportion of clover than that.

MR. COCHRANE.—It seems to me, Mr. Chairman, that this is an important point, because if there is a market we want to know what its conditions are and what is the class of hay which sells best.

THE CHAIRMAN. That is the very reason I asked the question, because it is of great importance to know what the best quality of hay for that market would be.

DR. FLETCHER.—Well, if hay consisting of equal parts of timothy and clover is required, seeding with 12 pounds of timothy and 6 or 8 of clover will about give that proportion the first year; in the second year the timothy will preponderate; but, as every one who has grown clover knows, this crop is very much affected by the season. In the first year after seeding, clover makes the bulk of the crop and holds down the timothy, but in the second year the timothy gets the upper hand. I believe it is impossible to give the exact amount of seed which would produce hay with certainty which would be half and half.