

(1886) experiments. They were (except one) manured in that year and not in 1887, but again this spring. The other plots, or eleven out of the twelve, were manured in 1887, but not this year. In the case of the first six plots, we have the results in produce and in profit or loss for two seasons, and in the case of the rest for one season. We give these results for the B set of experiments, which is the most to be trusted, because the first cut of grass in the field where it was carried on was not badly injured by drought last year, as the old pasture was. This set of experiments is conducted in a field laid down five years ago with a mixture usually supplied by Messrs. Sutton on such land as that at Dyson's Wood—only 2 lb. of cocksfoot per acre being included, while there was a considerable proportion of permanent rye-grass and a fair one of all the fescues and poas. In the two years which followed the sowing very heavy crops of grass were grown, consisting largely of rye-grass, but in the third year the cocksfoot gained ground, and has maintained the ascendancy since. The results of the experiments of 1886 and 1887 in this field are condensed below:—

PRODUCE OF TWO CROPS.

Plot.	Weight of Dry Hay per acre.			Increase per Acre.		Gain or Loss per Acre.	
	Tons	owts.	qrs.	Owts.	qrs.	£	s. d.
1	3	12	0	—	—	—	—
2	4	0	3	8	3	+1	1 0
3	4	5	2	13	2	+1	17 9
4	4	14	0	22	0	+2	12 3
5	4	0	2	8	2	+	14 0
6	4	11	3	19	3	+2	10 3
PRODUCE OF CROP OF 1887.							
7	2	0	2	14	1	+1	15 9
8	1	17	2	11	1	—	15 0
9	1	19	1	13	0	+	17 0
10	1	16	3	10	2	+1	0 3
11	1	6	1	—	—	—	—
12	1	14	0	7	3	+1	0 6
13	1	17	0	10	3	+1	6 6
14	1	8	2	2	1	—	6 0
15	2	4	3	18	2	+2	16 6
16	2	4	3	18	2	+2	16 0
17	1	15	1	9	0	+	18 0
18	1	19	0	12	3	+1	13 9

The increases are those over the produce of the unmanured plots, and the gains or losses are the balances resulting from comparing the values of the increases with the cost of the manures.

From the tables given above, any reader may see which dressings of manure have given the best results up to the present year. The money test is, of course, the most important and that, for the six plots from which two crops have been taken is in favour of the dressing of superphosphate and kainit, while the same two manures, with nitrate of soda added, stand in the second place, and nitrate of soda alone is third. Among the plots for which there is only one year's record at present, that manure with nitrate of soda and muriate of potash paid best, though the one which received dissolved bones gave only sixpence an acre less profit. It is not certain, however, that those plots will stand first when the results of this year are added.

We now give our representative's remarks on the appearance of the several plots on Thursday last, as noted down on the spot:

1. A light crop.
2. Much better than 1, but scarcely any clover.
3. Heavier than 2; also very little clover.
4. Better in bulk and colour than 2 or 3.

5. Better than any previous plot; a good deal more clover, and heavier grass.
6. Not equal to 5, nor much better than 4; scarcely a bit of clover.
7. Most clover of all, more rye-grass, and least cocks foot; but not so bulky as 5.
8. Best of all, but scarcely any clover, grass having smoothed it; otherwise greatest variety of herbage.
9. Light crop; more rye-grass than elsewhere.
10. Poor and light.
11. Not much worse than 10.
12. More clover than in most plots, but light crop.
13. Better than 12.
14. Most clover of all, though not very strong clover; thickish bottom, and not much tall grass.
15. One of the best, and probably second only to dung plot; a good lot of clover.
16. Fair crop of both grass and clover.
17. Nearly equal to 16.
18. Decidedly inferior to 16 or

In summing up, plot 8 (farmyard manure) was ranked first, plot 5 (sulphate of ammonia and kainit) second, plot 15 (nitrate of soda and muriate of potash) third, and plot 16 (dissolved bones) fourth. These, of course, are only hasty estimates, and it is impossible to feel certain as to estimates made with the eye alone. We shall see how the scales decide later on.

It will be seen, on comparing the observations with the table of manures, that there is least clover where nitrogenous manures have caused the coarse grasses, and cocksfoot especially, to grow strong and to smother it; and in "clover" the whole class of clovers to be found in the field are included. It will also be seen that potash, either as muriate or in kainit, has stimulated the growth of the clovers; that the residue of fertility left by farmyard manure is greater than that of any other, as it should be, to make up for the extra cost; and that cotton-cake, which has produced wonderful results on grass at Woburn, this year as well as last, has not done very well at Dyson's Wood. These are obvious conclusions. Two striking indications are those leading to the impression that basic cinder is not equal in its effects to coprolites, and that raw bones are not as good as dissolved bones.

This last indication is borne out by the appearance of the plots in the A set of experiments, next inspected. These are on old pasture, and they would be even more interesting than those in the new pasture if drought last year, and dry and cold weather this season, had not rendered the grass so very light that differences are less marked than in the other field. The superiority of the plot dressed with farmyard manure last year is even more marked in A than in B. There appears to be nearly twice as much grass on it as there is on any other plot. In this old pasture, as in the new one, plots 2 to 6 have been manured again this year, while the other plots have not been dressed since 1887. It is not desirable to go into as much detail in this case as we have given in respect of the B field, first because the differences are less marked, and secondly because rain began to fall when A was inspected, and very little time was available for examination. Some of the same indications, however, were gathered from the inspection in one case as in the other, and, if there are differences, it is not deemed desirable to dwell upon them, because, as already stated, results seem less satisfactory in the very light crop of old pasture grass than in the better one in the field first described. Still less is it desirable to attempt to base any conclusions upon results in the C and D sets of experiments, where the crops are so miserably poor that the whole field would have been broken up if it had not been for the experimental plots