enough to make a good meadow but growth not heavy enough to be ploughed under to advantage. Many plants in bloom. The orchard grass was from 2 to 3 inches high with fairly even growth, a fine catch for meadow.

Another series of tests was made with clover by sowing it with different varieties of grain, each plot having a check plot of a similar size alongside of it. As Mammoth Red Clover has given at the Central Farm better results than any other variety, this was selected for these trial plots, and 10 lbs. per acre have been used in each case, this quantity having proved sufficient to give good results in the several tests in which it has been used in the past. The trial plots in this group were 20 in number, measuring one quarter of an acre each, and were planned for the purpose of ascertaining the results on clover growth when the seed is sown with different classes of grain, and to gain some information as to how far the quantity of the clover crop and its usefulness as a fertilizer is affected by the kind of grain with which it is grown, also to further test the question whether the sowing of clover with the grain affects the yield of the latter.

The soil in this case was a heavy sandy loam of fair quality which received a dressing of barn-yard manure about 12 tons per acre in the spring of 1896, which was ploughed under about 6 inches deep immediately after spreading. The land was then harrowed twice with the smoothing harrow before sowing. The previous crop was sunflowers and corn. All the plots were sown on the same day, 1st May, the Red Fife and Preston wheats at 1½ bushels per acre, the Odessa and Trooper barley at 1¾ bushels, the Sidney and Bolton barley at 2 bushels, the Banner and Abundance oats at 2¼ bushels and the Daniel O'Rourke and Prussian blue pease at 2½ bushels per acre. The results were as follows :—

	Per Acre.	
	Bushels.	Lbs.
Red Fife wheat, with 10 lbs. Mamm. Red clover per acre....	25	5
do without clover.....	23	1
Preston wheat, with 10 lbs. Mamm. Red clover per acre.....	19	17
do without clover.....	22	55
Odessa barley, with 10 lbs. Mamm. Red clover per acre.....	50	42
do without clover.....	56	32
Trooper Barley, with 10 lbs. Mamm. Red clover per acre....	38	36
do without clover.....	38	12
Sidney Barley, with 10 lbs Mamm. Red clover per acre.....	39	40
do without clover.....	38	12
Bolton Barley, with 10 lbs. Mamm. Red clover per acre.....	37	8
do without clover.....	35	8
Banner Oats, with 10 lbs. Mamm. Red clover per acre.....	60	33
do without clover.....	72	..
Abundance Oats, with 10 lbs. Mamm. Red clover per acre...	68	32
do without clover.....	65	4
Daniel O'Rourke pease, with 10 lbs. Mamm. Red clover per acre	38	4
do without clover.....	35	..
Prussian Blue pease, with 10 lbs. Mamm. Red clover per acre	39	52
do without clover.....	35	..

It will be seen that seven of the plots sown with clover have given the largest yield of grain and three of those sown without clover. The total number of bushels of excess in the three plots is a little larger than the total number in the other seven plots, but the difference is small and it does not appear from this test that the sowing of clover with grain has any material influence on that crop.

The Red Fife and the Preston wheat were both ripe 6th August, the Odessa and Trooper barley 25th July. Sidney barley 1st August, Bolton 29th July, Banner oats 6th August, Abundance 7th August, Daniel O'Rourke pease 5th August, and Prussian Blue 7th August. The growth of the clover on all the plots of wheat and barley was practically the same. On 5th October it was from 10 to 12 inches high, the growth was strong and even and had made a good mat of foliage suitable for ploughing under. That sown with the oats was not so uniform or heavy, although the height was about the