in 1894, 1895 and 1896 Canadian Thorpe, a selected form of the Duck-bill. In 1896 the Canadian Thorpe was sown 2nd May, came up 10th May and was harvested 10th August, requiring from the date of sowing to maturity a period of 100 days.

In 1896 the yield of all the barley plots was considerably higher than the average of past seasons. The plot fertilized with rotted barn-yard manure has given a better yield than the plot where the manure was used fresh; not enough, however, to offset the previous gains of the fresh manure plot, which still averages 1 bush. 7 lbs. higher than that of the rotted manure for the eight years these tests have been continued.

EXPERIMENTS with Fertilizers on Plots of Barley, $\frac{1}{20}$th acre.

No. of Plot.	Fertilizers applied each Year.	Average Yield for Seven Years.		8th Season, 1896, Variety Canadian Thorpe.		Average Yield for Eight Years.	
		Yield of Grain.	Yield of Straw.	Yield of Grain.	Yield of Straw.	Yield of Grain.	Yield of Straw.
		Per acre.	Per acre	Per acre.	Per acre	Per acre.	Per acre
		Bush. lbs.	Lbs.	Bush. lbs.	Lbs.	Bush. lbs.	Lbs.
1	Barn-yard manure, well rotted, 15 tons per acre	30 39 4/7	2,909	46 12	3,270	32 36 1/8	2,954
2	Barn-yard manure, fresh, 15 tons per acre	32 17 4/7	3,212	44 28	4,130	33 43	3,252
3	Unmanured	13 36 5/7	1,548	17 4	1,900	14 8 5/8	1,592
4	Mineral phosphate, untreated, finely ground, 500 lbs. per acre	13 37 2/7	1,447	18 6	1,440	14 15 7/8	1,446
5	Mineral phosphate, untreated, finely ground, 500 lbs.; nitrate of soda, 200 lbs. per acre	18 47	2,254	21 32	1,750	19 15 1/8	2,191
6	Barn-yard manure, partly rotted, and actively fermenting, 6 tons per acre; mineral phosphate, untreated, finely ground, 500 lbs. per acre, composted together, intimately mixed and allowed to heat for several days before using	24 47 1/7	2,402	37 44	2,930	26 29 1/8	2,468
7	Mineral phosphate, untreated, finely ground, 500 lbs.; nitrate of soda, 200 lbs.; wood ashes, unleached, 1,000 lbs. per acre	20 44 6/7	2,462	30 20	2,540	22 5 5/8	2,472
8	Mineral phosphate, untreated, finely ground, 500 lbs.; wood ashes, unleached, 1,500 lbs. per acre	16 42 5/7	1,699	30 ..	1,910	18 25 3/8	1,725
9	Mineral superphosphate No. 1, 500 lbs. per acre	19 36 1/7	2,043	30 40	1,880	21 7	2,023
10	Mineral superphosphate No. 1, 350 lbs.; nitrate of soda, 200 lbs. per acre	24 1 1/7	2,443	35 20	2,320	25 21 7/8	2,428
11	Mineral superphosphate No. 1, 350 lbs.; nitrate of soda, 200 lbs.; wood ashes, unleached, 1,500 lbs. per acre	22 27 1/7	2,495	36 2	2,700	24 12 3/8	2,521
12	Unmanured	12 17 1/7	1,258	20 40	1,060	13 20 3/8	1,233
13	Bone, finely ground, 500 lbs. per acre	13 27 3/7	1,324	18 16	1,450	14 8	1,340
14	Bone, finely ground, 500 lbs.; wood ashes, unleached, 1,500 lbs. per acre	19 30 1/7	1,980	33 16	2,240	21 16 3/8	2,012
15	Nitrate of soda, 200 lbs. per acre	21 16 3/7	2,638	25 20	1,600	21 40 3/8	2,508
16	Muriate of potash, 150 lbs. per acre	21 17 1/7	2,042	27 4	1,660	22 4	1,994
17	Sulphate of ammonia, 300 lbs. per acre	17 31 2/7	2,215	20 ..	1,650	17 45 7/8	2,144
18	Sulphate of iron, 60 lbs. per acre	17 46 1/7	1,897	21 32	1,440	18 20 3/8	1,842
19	Common salt (Sodium chloride) 300 lbs. per acre	26 12	2,073	34 38	2,060	27 15 3/8	2,071
20	Land plaster or gypsum (Calcium sulphate), 300 lbs. per acre	20 17 2/7	1,842	20 20	1,390	20 18 1/8	1,786
21	Mineral superphosphate No. 2, 500 lbs. per acre	20 15 4/7	1,761	22 44	1,360	20 31 3/8	1,711

OAT PLOTS.

The quantity of seed sown per acre on the oat plots was 2 bushels in 1889 and 1890; 1½ bushels in 1891, 1892 and 1893, and 2 bushels in 1894, 1895 and 1896. The varieties used were as follows: In 1889, Early English; 1890, 1891, 1892, 1893, Prize