7th. It is requested that No. v. plot be sown with 10 lbs. fresh wood ashes, used same as the other fertilizers, as no Kainit can be obtained in Canada.

We have sent by express to those experimenting, expressage prepaid, one of the following lots of grain for six plots :—18 lbs. White Russian wheat ; 18 lbs. Red Fife wheat ; $11\frac{1}{4}$ lbs. Egyptian oats ; $11\frac{1}{4}$ lbs. White Cluster oats, or $12\frac{3}{4}$ lbs common six-rowed barley. Also 10 lbs. salt for plot No. I., 10 lbs. superphosphate for plot No. II., and 10 lbs. apatite for plot. No. III. The produce from the plots becomes the property of the experimenter.

Make out reports of experimental plots and meteorological observations as full and careful as you can and forward to Mr. C. A. Zavitz, O. A. C., Guelph, not later than 1st November.

NOTE.—To those who carried on somewhat similar experiments last season, on five plots, and two years ago on four plots, we send additional grain to be sown on the same plots. The object is to test the influence of the fertilizers over two and three seasons. Report in the same manner as for the new plots.

OPTIONAL EXPERIMENTS.

If you can furnish us any accurate information as to the results obtained by any others in your neighbourhood with the same fertilizers, we shall be glad to receive it. As for your own work, the success of the experiment and your own reputation demand carefulness, accuracy, and a little sacrifice.

In addition to, or entirely independent of the above general experiments, we are looking for some individual work. We wish every experimenter to send in an accurate statement in regard to some one or more of the following experiments :—

(1) Testing some imported cereals.
(2) Testing if chess sown will mature to seed.
(3) Testing whether plowing under farmyard manure or leaving as top-dressing is the best.
(4) Testing a mixture of grass seeds for use as a permanent pasture.
(5) Any experiment you are in a position to carry out, but which is not mentioned in the above.

Reports of all satisfactory experiments will be printed in the annual report of the Union.

METEOROLOGICAL OBSERVATIONS.

Rain gauges can be obtained free on application to the College, provided the observer will fill out a report and send it monthly to the Observatory at Toronto.

Make observations as regards rain and sunshine as follows :—

(*a*) *Rainfall.*—Have gauge well exposed, away from wind currents, near buildings, etc., and mouth of gauge a foot above the ground. At close of rain pour the amount into the graduated tube, divide the number of inches by ten, and call results inches of rain.

(*b*) *Clouds.*—Mark from 1 to 10, according to the amount of cloud in the sky. In making a summary, below 4 is clear ; above 6, cloudy. Make as many observations as convenient during the day, say 7 a.m. and 2 p.m. The mean is obtained by dividing the sum of the observations by the number of observations taken.

(*c*) *Heat.*—If possible, ascertain the readings of the thermometer for that district, if observations are made within ten miles of place of experiment.

If further instructions are desired in regard to these meteorological observations please correspond with Prof. Panton, O. A. C., Guelph.

RESULTS OF GRAIN TESTS ON PLOTS FERTILIZED IN 1887.

Yield of Straw and Grain in lbs. per plot of 1/40 acre.

	Salt.		Superphosphate.		Apatite.		Farm-yard Manure.		No Manure.	
	Straw.	Grain.	Straw.	Grain.	Straw.	Grain.	Straw.	Grain.	Straw.	Grain.