Appreciating the magnitude to which plat and field tests have arisen in our systems of experimenting, the importance of a careful study of such factors as influence their correct interpretation becomes at once apparent. Most important among the natural causes inducing erroneous conclusions from such tests are "irregularities in the productiveness of the soil," and "seasonal variations." In this paper, only the former cause will be discussed. I wish, here, to call attention to some work which has been done at the Cornell Experiment Station for the purpose of determining the uniformity of certain plats for field tests.

A plat of ground 112½ feet in width by 945 feet in length has been selected upon the farms of Cornell University, to be used for certain field tests by the Department of Experimental Agronomy in that institution. This particular type of soil is described as the "silty phase of Dunkirk clay loam." It is quite tenacious and difficult to work except when moisture conditions are just right. The tract under consideration is slightly rolling and fairly well drained.

One point which I wish here to emphasize is that this particular