nor were there any symptoms of rhizoctonosis in either the treated or untreated lots. Table XIII, which shows the results for the three plots conducted in 1928, indicates that significant injury resulted in the early planted plots from both Bayer special 181, and dipdust, and that the latter and semesan bel likewise caused slight injury in the Hastings plot which was planted later. Very slight and insignificant increases are noticed for all of the other treatments in the 3 plots.

THE EXPERIMENTS IN 1929

The treated and untreated lots were planted according to the plan shown in Fig. 5. This scheme provides for excellent distri-

1	2	3	4	5	6	7
2	4	1	6	3	7	5
3	1	5	2	7	4	6
4	6	2	7	1	5	3
5	3	7	1	6	2	4
6	7	4	5	2	3	1
7	5	6	3	4	1	2

Fig. 5.—The planting plan for the seed-potato treatment plots in Hastings and La Crosse, Florida, in 1929.

bution of the different lots, eliminates the necessity of having as many untreated controls as were used before, and provides for satisfactory biometrical measurements with fewer plants per replication. The seed stock was carefully selected and sorted, after being wetted to make the sclerotia more distinct, into two lots where the tubers were either all sclerotia-free, or all with sclerotia, and treated according to the usual procedure and as indicated in Table XIV. Two separate experiments were planted, one in the Hastings area and the other at La Crosse, 45 miles west, in a field where 75 percent of the plants manifested severe rhizoctonosis injury in 1928. The highest percentage of stem lesions were found in the diseased controls, followed by the dipdust and formaldehyde treated lots at La Crosse, and in the diseased untreated, diseased corrosive sublimate treated, and the clean untreated lots in the Hastings trials. The only appreciable amounts of seed-piece decay in both experiments occurred where dipdust was used.

The material, K-I-X, a DuBay product, used only in a very preliminary way, was applied directly to the soil at the rate of 50