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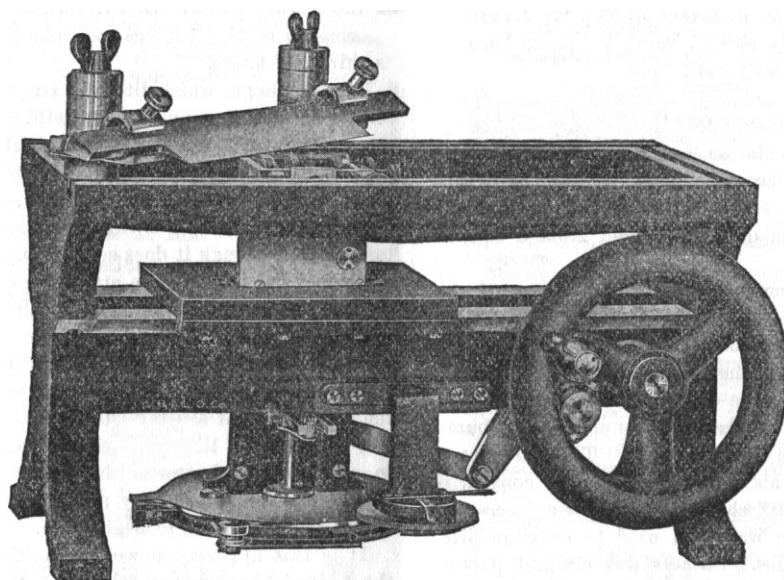
SECURING DISEASE RESISTANT PLANTS: HOW IMPORTANT IS IT? WHOSE JOB IS IT?¹

THE rapid professional development of plant pathology in the United States is a unique thing in the history of applied botany. European mycologists who visit us wonder at it and query why it has not occurred in the father lands. This is the more noteworthy when we recall that the mycological foundations of phytopathology were laid in Germany and the most stimulating early control measures came from France. To one who has followed the developments of agricultural science in the American states, especially as represented in the history of the Department of Agriculture and the state experiment stations, the answer is obvious. Almost simultaneously with the inauguration of these in the late 80's we were handed from Europe, ready for our use, new chemical compounds which, as sprays or seed disinfectants, were "specifics" against those age-old pests, the blights, mildews and smuts. Since the dawn of recorded history man had suffered almost helplessly from their toll. Now for the first time modern science had given him effective means for fighting these maladies. The public—shall we say the American public especially—is always eager to have its ills cured by "specifics," especially if it can get them in handy bottles or packets. We are even told that this mental attitude explains our many laws, among them legal restrictions concerning the sale of "patent medicines" and "dopes." These "specific" sprays and seed treatments seemed almost like the magic wand. As the inevitable result, the agricultural public, and perhaps some of us pathologists, have naturally developed an exaggerated notion as to the relative importance of spraying and disinfection in the control of crop plant diseases. Please do not misunderstand me. Never, since our agricultural experiment station movement began, has progress been more rapid in the perfection of fungicides than in recent years, and they should be, and will be, used even more in the immediate future than ever before. But at the same time the relative emphasis on control methods in plant pathology is passing more and more to disease resistance.

We may check, in part, the smut and bunt of wheat by seed treatment, but what about the seedling blight

¹ Address of retiring vice-president and chairman of Section O (Agriculture), American Association for the Advancement of Science, Kansas City, December 31, 1925.

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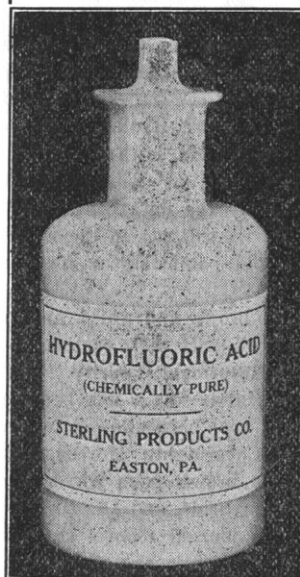
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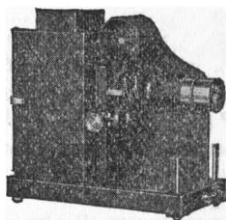
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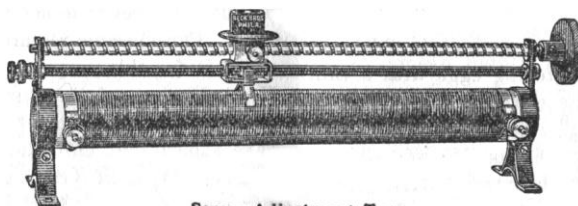
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