ON SOME RESEMBLANCES OF CROWN-GALL TO HUMAN CANCER

The disease on which I shall speak today is known in this country as crown-gall, because it has been observed most frequently on the crowns of trees and shrubs, but it is not peculiar to this situation. It occurs also on roots and shoots. This disease has been known to cultivators and to plant pathologists for many years and has caused more or less injury to a variety of plants both in this country and in Europe. Of plants subject to serious injury may be mentioned: Roses, almonds, peaches, raspberries, grapes. Sometimes the plants are only dwarfed or crippled, at other times killed. Recovery, especially in certain species, is frequent. In Italy the attacked grape vines are said to live about four years.

It has been ascribed to a variety of causes, e. g., frosts, wounds made in cultivating, insect injuries, fungous injuries, physiological disturbances, etc. The actual cause was not known until discovered by the writer and his associates. Team work on this disease has been carried on in the U.S. Department of Agriculture for the last eight years, i. e., since February, 1904. The first successful pure culture inoculations were obtained in 1906. The organism was described and named by us in 1907.²

² Address as retiring president of the Botanical Society of America, Washington, D. C., December 28, 1911. By invitation members of the following organizations were also present: Section G, of the American Association for the Advancement of Science; Society of American Bacteriologists, and the American Phytopathological Society.

¹ SCIENCE, N. S., Vol. XXV., No. 643, pp. 671–673, 1907; see also Centralb. f. Bakt., 2 Abt., XX. Bd.