political position it rightfully should occupy. That public eulogists of scientific achievement have rarely undertaken to dwell upon anything beyond the "practical" result argues that there is in them either a want of vision, or a lack of courage to force the consideration of a viewpoint devoid of popular appeal; perhaps both.

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## LEAF BURN OF THE POTATO AND ITS RELATION TO THE POTATO LEAFHOPPER

Throughout the northern section of the United States, from Montana to New York and south at least to Iowa and Ohio, there has been a remarkable epidemic of leaf burn on potatoes. The margins of the leaves of early varieties turned brown, the dead areas gradually widening until the leaves dried up and the whole field took on a burned appearance. In severe cases the stalks also withered and died.

Every potato section of Wisconsin was affected and a careful study by the writer showed that in every case the injury was directly proportioned to the number of potato leafhoppers (*Empoasca mali* LeB.) present. The nymphs of this species feed on the undersides of the leaves and first produce a wrinkling of the whole surface, with a slight upward rolling of the margin, and then the marginal burning appears. Long after the leafhoppers have acquired wings and flown away it is possible to determine the cause of the damage by observing the cast skins adhering to the under surfaces and the egg scars in the mid rib or veins of the burned leaves.

In cage experiments, using large numbers of leafhoppers, typical leaf burn was produced in four days. The relation of this injury to what has been previously diagnosed as "tip burn" is an interesting subject for future determination. The characteristic marginal burn is frequently so definite that it is possible that there may be something injected that produces more definite and widespread results than the mere mechanical extraction of the sap. There does not, however, seem to be the same specific relation that exists between the beet-leafhopper and the curly-leaf disease of beets.

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## "FATS AND FATTY DEGENERATION": A RESPONSE TO BOOK REVIEWS BY BANCROFT AND CLOWES

Wilder D. Bancroft[1] has recently reviewed in the pages of the *Journal of Industrial and Engineering Chemistry* a book entitled "Fats and Fatty Degeneration,"[2] by Marian O. Hooker and myself. He has also published in his *Journal of Physical Chemistry* a review by G. H. A. Clowes,[3] which in spirit is identical with his own. My attempt to answer both of these reviews in the pages of Bancroft's *Journal* has met with the editor's refusal.

Bancroft and Clowes's adverse criticisms are of two kinds: (1) those contradicting my observations and their interpretation, and (2) those implying unacknowledged borrowings from the works of others, more specifically their own writings. As to the first, it is the privilege of any critic to correct errors and to disprove arguments when truth and logic are on his side; as to the second, no reputable investigator would, even if moved by nothing better than the low ideal of his material future, jeopardize truth by taking it ready-made from another without noting that fact, or would pose as the discoverer of laws already set forth by authorities working in the same field. Those who know either me or the history of emulsion chemistry will easily find their way here. Yet, deferring to another article my answer to the scientific objections of Bancroft and Clowes—an answer that should be apparent to any careful reader of my book—I purpose in this note to comment upon their purely personal criticism.

Bancroft says:

> It is also interesting to note that the author does not cite Pickering's first paper, though he must be familiar with it. . . . It is certainly being overcharitable to say that the author has the unhappy

[1] Wilder D. Bancroft, *Jour. Ind. and Eng. Chem.*, 9, 1156, 1917.

[2] Martin H. Fischer and Marian O. Hooker, "Fats and Fatty Degeneration," New York, 1917.

[3] G. H. A. Clowes, *Amer. Jour. Phys. Chem.*, 23, 73, 1918.