

PLATE I.
WARBLE HIDES.

FIG. I.

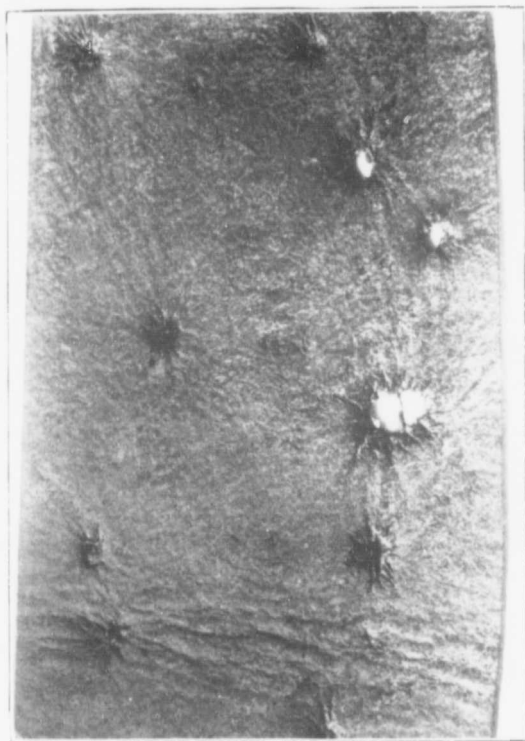
FIG. I.—Actual size of leather, $3\frac{1}{4}$ in. x $3\frac{1}{4}$ in.

FIG. II.

FIG. II.—Actual size of leather, $2\frac{3}{4}$ in. x $1\frac{1}{4}$ in.

A CONTRIBUTION ON THE BIOLOGY OF HYPODERMA BOVIS
(DE GEER.)

BY SEYMOUR HADWEN.

The species of Warble-fly which is recorded here for the first time in Canada, and probably for North America, is *Hypoderma bovis* (De Geer).

Seeing that numbers of cattle are being imported yearly from Europe, it is strange that there seem to be no records of any previous captures, and in consequence no work has been done previously in Canada on the life-history of this destructive insect. Owing to the kindness of Professor Carpenter of Dublin who sent me a specimen of *H. bovis*, I have been able to confirm the determinations I had made by descriptions alone. To show the rarity of these insects in entomological collections, I may mention the fact that none are to be found in the Departmental collection at Ottawa, and that a request for a specimen of *H. lineata* from the Bureau of Entomology at Washington, D.C., could not be granted owing to a scarcity of specimens. My thanks are due to Dr. L. O. Howard for specimens of the larvæ of *lineata*, which enabled me to still further