## ON THE HESSIAN FLY IN ITALY.

## BY H. A. HAGEN, CAMBRIDGE, MASS.

As I have stated (p. 90, May, 1885), I had made inquiry of Dr. Anton Dohrn about the existence of the Hessian Fly around Naples, Italy. His kind answer, together with interesting notes by Dr. Paul Mayer, gives the following information.

From the two old books quoted by Sir J. Banks (p. 88), Corti is not represented in the library at Naples. Ginnani (Dr. Giuseppe Fatta writes Giannini), Part ii., cap. lx., p. 127-209, gives : "Osservazioni ed esperienze particolari intorno all'infestamente degli insetti." He speaks in this chapter on several flies which attack the grain, among them one which attacks the roots, but his statements do not allow us to decide with certainty whether some of the flies belong to Cecidomyia. Dr. P. Mayer draws my attention to another work which was entirely unknown to me; the copies published are all lithographed : "A. Costa.—Lezioni di Entomologia agraria precedute da un quadro generale della classi del regno animale raccolte ed autografate degli alumni M. Pilato e M. Montanari. Portici R. Scuola Superiore d' Agricoltura 1880, 4to., pg. 528, pl. 9."

" Cecidomyia tritici, p. 514, sp.

"Body black, sooty; wings blackish, a little paler towards the base; legs brownish. The females deposit the eggs near the joints of the plant and between the stem and the respective leaf. The larvæ, which are hatched, live gregarious near the lower joints of the plant between the leaves and the stem, in which they sometimes excavate niches by shaving the wall of the stem. The plants for this cause sooner or later grow sickly and never straighten themselves. When the larvæ have completed their development, while some give place to an agamous reproduction, others in the very place in which they find themselves are transformed into pupæ, from which after a few days are hatched perfect insects, which lay new eggs."

It follows a short description of the larva. Tearing out the plants and burning them is quoted as a remedy.

"In our province (Naples) the Cecidomyia is not frequent. According to facts which are reported to us, they are abundant in the neighborhood of Brindisi, as Signor Montagna has also assured us, who has sent us specimens."