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THE FIRST LARVAL OR POST-EMBRYONIC STAGE OF THE PEA AND BEAN WEEVILS

BY C. V. RILEY, WASHINGTON, D. C.

In No. 9-10, Vol. IV., of "Insect Life," an account was given of the post-embryonic larva of the Bean Weevil, attention being called to some most interesting characteristics of this larva, which is possessed of temporary thoracic legs and some other structures which admirably serve its locomotive needs until it has entered the bean, when, with a cast of the skin, they are lost and the larva assumes the ordinary apodous form of weevil larvæ. The Bean Weevil (*Bruchus fabae*, Fitch [Riley].) goes on breeding in stored beans, in which respect it differs from the Pea Weevil, as also in the fact that a number of individuals, owing to their smaller size, will develop in the same bean, as many as twenty-eight having been found in a single bean. The eggs are primarily laid upon the bean-pod in the field but chiefly, if not entirely on those which are already mature and ripening, and the larvæ enter the same very much as does the Pea Weevil. But whether laid upon the pods in the field or laid upon the stored beans, the newly hatched larva has to eat its way into the bean and it is able to move about quite briskly by the aid of these temporary legs. Four rather stout but short spines or spurs on the prothoracic shield and four smaller spurs on the anal plate facilitate the penetration of the smooth and rather thin skin of our ordinary beans. The temporary legs are curious in appearance, consisting of three joints, the second long and slender and doubtless corresponding to the fused femur and tibia. The third, which corresponds to the tarsus, is slender and broadened at the tip into a flat pulvillus bearing at the heel a single delicate spur.

Having recently ascertained these facts upon more careful study of the habits of the Bean Weevil, I was curious to learn whether or not the Pea Weevil (*Bruchus pisi*, Linn.) had similar structures in its newly-hatched larval condition. It has long been known that the egg of the Pea Weevil is laid on the outside of the pod, being fastened thereto, and the