

36) has recorded 7 stages for the ♀ larva of *arge*, spring brood; we are practically certain that we have missed no stage in our brood of *michabo*, so if the number of moults is constant, it would form a further means of differentiation between the two species. Of the two *michabo* would seem to be the newer species, being a further development of the *arge* type, as the subdorsal line is present in the earlier stages only, being obsolescent or wanting in the mature larva.

Acronycta impressa Wlk.

We use this name in the ordinarily accepted sense, i.e. for the species as figured by Smith in his Monograph of the genus *Acronycta*, Pl. XIII, figs. 4 and 5, and of which *verrilli* G. & R. is regarded as a synonym. The type of *impressa* Walker in the British Museum is in such poor condition that on a recent examination we were unable to tell definitely to just what form the name should be applied; until material from the type locality is available, more or less doubt will surround the application of the name. We received ova of the species late in the fall of 1914 from New Washington, Pa.; the larvæ fed up readily on poplar and pupated within a month from the time of emergence from the egg. Two ♀'s emerged the same fall, the remainder of the pupæ hibernated and produced imagines early the following spring.

Ovum.—Rather flat, base of egg broad, irregularly circular, about 1 mm. in diameter, with a slight rim around the periphery; from this rib arise 50-60 ribs, arranged more or less in pairs, which ascend the sides of the egg about half way to the micropylar area where the two component parts of each pair join and are either continued to the micropylar area by a single rib or else end blindly; occasionally the upper ends of two pairs are joined by the single rib. Colour when first laid yellow, becoming later purple with numerous white blotches and finally almost black.

Stage I.—Head shiny black; body white with abdominal segments I, IV, V and VIII deep black-brown to below the spiracles; traces of a dark dorsal stripe especially on segments preceding and following the dark ones; on the white segments traces of a lateral brown band situated above tubercle VI on a level with the lower edge of the dark colour of the four above mentioned abdo-