THE TWO-LINED SALAMANDER, SPELERPES BILINE-ATUS (Green).

By WALTER S. ODELL, Ottawa.

This active amphibian is, according to Prof. Wilder, widely distributed over the United States, and presumably over Canada, but on account of its habits may not be readily found. The adult newt is from seven to nine c.m. in length, resembling the general form of lizards. The head is long and flat, the body graceful and slender, having a flattened tapering tail-fin about half its length. Spelerpes in colour is dark brown with a dorsal stripe light brown or tawn colour, lighter at its outer edges and bordered by a dark brown stripe—hence its name "bilineatus." It is marbled along the sides; the ventral side is a light lemon colour, without pigment spots. Its heart, like that of frogs, has but one auricle, while the heart of lizards has two. But unlike the frogs it has no lungs, but depends upon the surface of its integument and the walls of the pharynx for respiration. As it is nocturnal in its habits, the adult is not frequently seen.

LOCALITY AND HABITAT.—The adults are found in and about running brooks plentifully supplied with small stones, and underneath bits of fallen logs that lie in the immediate vicinity of the edges of brooks. The larvæ are sought for in water at the bottoms of gravelly pools or underneath flat stones in springs or small mountain brooks. They much resemble small minnows at this stage, and when disturbed dart away with as great swiftness. It was this fact which first brought them to my attention. Finding several so-called minnows in a tiny spring in the gravel pits at Britannia, where it was unlikely minnows would be found, I was led to examine them closer, and to my surprise found a strange animal, between an eel and a minnow, with a head like the latter, having gills projecting like horns from each side; with four feet having toes not webbed, and with a long tail like an eel's.

Specimens were sent to Prof. L. Stejneger of the Smithsonian Institution at Washington. He very kindly identified them for me, and also referred me to Prof. Wilder, Northampton, Mass.,