riously under their silken web on the fresh terminal leaves of new shoots, I supposed them to be Tortricid larvae, and came near neglecting to rear them. A large proportion of the new shoots of the poplar (Populus balsamifera) in the valley were infested with these larvae.

I have not seen any record of the occurrence of this species in the United States, except that the name is given in Hy. Edwards's Catalogue of transformations of North American Lepidoptera with three references to European authors. I have been enabled to determine these moths to belong to the European species from some figures which my sister, Mrs. S. Knopf, kindly made for me at Paris, France.

I believe that there are five larval stages, but I have not observed them in sequence and I have not seen the egg.

Sarrothrips revyana S. V.

Egg. Not observed.

First larval stage. Head rounded, partly retracted under joint 2, furnished with a few hairs; width 0.4 mm. Body apparently like that of the mature larva; a few hairs. (Described from a dead discolored specimen.)

Second stage. Like the mature larva except in size; pale yellowish green, smooth; hairs whitish, curling backward. Width of head 0.6 mm.

Third stage. Only the cast head-case was observed; width 0.9 mm.

Fourth stage. Width of cast head-case, 1.2 mm.

Fifth stage. Head round, pale greenish, not shiny; ocelli black, mouth white, jaws brown; a few hairs; width 1.8 mm. Body cylindrical, folded between the segments, tapering slightly from the middle to the extremities; feet normal. Hairs few, fine and long, white, growing from the skin, there being no warts nor tubercles perceptible even with a glass, but the single hairs are arranged in the same manner as the warts of the Arctiidae; row 4 is just below the stigmatal line and the hairs each a little back of a spiracle; 5 anteriorly and 6 posteriorly on the segments in the subventral space, and 7 consists of four small hairs on the venter of the legless segments. Body velvety yellowish green, subtranslucent, the dorsal vessel darker; a very faint yellowish stigmatal line; feet tipped with brown; spiracles minute, ocherous. The larvae live gregariously or, more rarely, singly under a silken web spun on the upper side of a tender leaf some distance above the surface. They will not eat the old hard leaves.

Cocoon. Composed entirely of white opaque silk and spun between two leaves or in some other place that will furnish the necessary support for the first vertical threads against which the cocoon is built. It recalls in shape the cocoon of Nola trimorpha, but contains no bark and is larger and thicker. The base is flat, the sides nearly straight, and one end is pointed above, from which the top slightly tapers to the other end. The end below the point opens like a pair of vertical doors for the emergence of the moth.

Pupa. Cylindrical, thorax rounded, abdomen only very slightly tapering, the last segments rounded; cremaster none. Smooth, pale whitish with a brown tinge and a broad dark brown dorsal shade running the whole length. Length, 10 mm.; width, 3 mm.

Food plants. Poplar (Populus) and willow (Salix).

Larvae from Mariposa Co., California.

Note.—A study of California butterflies and especially their comparison with those of Eastern America and Europe leads S. H. Scudder in the Overland monthly for April to claim that the highest type of human civilization is to arise on the Pacific coast.
SYNONYMY OF BUTTERFLY PARASITES.—
A critical study of the American Apanteles parasitic upon butterflies convinces me that there are but four species instead of the sixteen described by Prof. Riley in Mr. Scudder's Butterflies of the eastern U. S. These are A. megathymi (ovipositor long, stigma white), A. carpatus (ovipositor long, stigma dark), A. cassianus (ovipositor concealed, two deep diverging grooves forming a triangle on disk of second segment), and A. glomeratus (ovipositor concealed, no triangle on disk of second segment).

A. Edwardsii, emarginatus (ensisiger Say) are synonyms of A. carpatus Say; the others are synonyms of A. glomeratus; A. theclae is a well marked variety of A. glomeratus Linn.

ENTOMOLOGICAL NOTES.—It is stated in Science that the friends of the late Henry Edwards have subscribed $10,000 and the American Museum of Natural History $5,000 for the purchase of his entomological collection, consisting of more than 350,000 specimens, and this scientific treasure goes to the American Museum. This enterprise has been carried through by Mr. A. M. Palmer, and other theatrical friends of Mr. Edwards.

More than half of the "Supplementary appendix" Mr. Whymper has recently published to his travels amongst the Great Andes is given up to Coleoptera, and almost the whole of it to insects with numerous excellent woodcuts engraved by Whymper himself. The introduction by the late H. W. Bates gives a coup d'oeil of the whole collection mostly made over 9000 and even over 11000 feet above the sea, and shows that there is no trace of "any distinct element of a north temperate or south temperate coleopterous fauna on the Ecuadorian Andes..." A few genera belonging to temperate latitudes, though not found in the tropical lowlands, do indeed occur, but they are forms of almost world-wide distribution in similar climates, and there is no representative of the numerous characteristic and common genera of the north or south. Even the northern genera more or less abundantly found on the Mexican highlands are absent." So, too, among the butterflies, "the genera Erebia, Chiono- bas, Parnassius, Argynnis, Epinephele, and many others, so highly characteristic of the faunas of the north temperate zone or Chili, or both, and of high vertical ranges, are quite absent." It seems to Bates a fair deduction that "no distinct traces of a migration during the lifetime of existing species from north to south, or vice versa, along the Andes, have as yet been discovered or are now likely to be discovered."

The March number of the Entomologists' monthly magazine contains an interesting account by W. W. Smith of the formation of new colonies and nests by two species of New Zealand ants of the genus Tetramorium. According to him they originate by the union of several individuals of both sexes on sites beneath stones among the roots of plants already instinctively selected and inhabited by Aphides and Coccids, which serve as an economic basis while founding their nests.

PROCEEDINGS OF SOCIETIES.

CAMBRIDGE ENTOMOLOGICAL CLUB.

8 Jan., 1892. The 167th regular meeting and 16th annual meeting (since incorporation) was held at 156 Brattle Street. Mr. J. H. Emerton was elected chairman.

The annual report of the retiring Secretary, Mr. R. Hayward, was read and accepted. Mr. S. Henshaw, the retiring Treasurer, presented his annual report which was accepted subject to the approval of the auditors. The retiring librarian, Mr. S. H. Scudder, presented a verbal report of the condition of the Club library which was accepted.

The election of officers for 1892 being next in order the Club proceeded to ballot, and the following officers were declared elected: