have seen was about May 5. There are two generations a year. The nymph is yellow, with black longitudinal stripes, and lacks the bad odor for three instars; its coloring is protective. As adult form is approached, the adult color and odor are assumed. The last nymphal instar has black wing-pads.

Zonocerus is a garden pest and also on sugar cane. The natives (Zulus) call it "intotoviyana": the commonest names among Europeans are "Totoviana" and "Soldier Grasshopper."

No control seems to be known: I have detected red hymenopterous eggs and larvae under the wings in a few specimens.

## Ants Caught on a Trip to California (Hym.).

By Hazel Andrews, University of Colorado, Boulder, Colorado.
During the summer of 1915 , in company with Professor and Mrs. T. D. A. Cockerell, of the University of Colorado, I went to the California Exposition. Interesting as the trip itself was it took on an added interest because it gave me an opportunity to add to my collection of ants. Of all insects, ants are the most easily collected on a railway journey, because they are usually to be found around the stations and along the tracks. The collecting facilities are simple, all that is necessary being small bottles of alcohol and a note-book for data concerning locality and habitat. Many an otherwise tiresome delay may be made interesting by hunting near the tracks for ants.

Such a collection may not add anything new to science but it certainly adds to one's knowledge of the general distribution of various genera, as in this case of Pogonomyrmer. With the new forms it is possible to make more comparisons and to realize better the relationship between species and genera. This trip was not primarily a myrmecological expedition but the following list shows what a good collection can be acquired with only a little effort.

Dr. W. M. Wheeler has kindly examined the list and confirmed the identification of a number of the specimens.

Myrmecinae.
Monomorium minutum ergatogyna Wheeler. Coronado Island, Mexico (T. D. A. Cockerell) ; Berkeley, California (Hazel Andrews.)
Solenopsis geminata maniosa Whecler. La Jolla, California. (H. A.)

Pheidole grallipes Wheeler (longipes Pergande). Coronado Island, Mex. (T. D. A. C.) ; La Jolla, Calif. (H. A.)
——hyatti Emery. Avalon, St. Catalina, California. (H. A.)
Crematogaster lineolata Say. var. La Jolla, Calif. (H. A.)
Messor andrei Mayr. Coronado Island, Mex. (T. D. A. C.) ; La Jolla, Calif. (H. A.) ; Long Beach, California (H. A.)
Pogonomyrmex barbatus fuscatus Emery. Lamy, New Mexico. (T. D. A. C.)
——barbatus marfensis Wheeler. Los Cerillos, New Mexico (T. D. A. C.)
——barbatus rugosus Emery. Goffs, California (T. D. A. C.)
——occidentale Cresson. Las Vegas, New Mexico (H. A.); Wells, Nevada (H. A.); Raton, New Mexico (H. A.); Seligman, Arizona (H. A.)
———subdentatus Mayr. Long Beach, Calif. (H. A.)
——californicus Buckley. Long Beach, Calif. (H. A.): Needles, California (H. A.) ; Glendale, California (T. D. A. C.); Pasadena, California (H. A.)

Dolichoderinae.
Liometopum apiculatum occidentale Emery. Orange County Park, California (H. A.)
——apiculatum luctuosum Wheeler. Lamy, New Mexico (H. A.)
Dorymyrmex pyramicus Roger. Lookout Mountain near Los Angeles, California (T. D. A. C.); Glendale, California (T. D. A. C.) ; Albuquerque, New Mexico (H. A.)

Dorymyrmex pyramicus bicolor Wheeler. Kingman, Arizona (H. A.)

Tapinoma sessile Say. Lookout Mt., California (T. D. A. C.) : La Jolla, California (H. A.)
Iridomyrmex humilis Mayr. (Argentine ant). Long Beach, California (H. A.) : Avalon, Sta. Catalina (H. A.) ; La Jolla, California (Dr. F. B. Sumner); San Diego, California (H. A.); Berkeley, California (H. A.): Pasadena, California (H. A.)

Camponotinae.
Formica rufa aggerans Wheeler. Kaw, Nevada (W. P. Cockerell).
—_rufibarbis occidua Wheeler. Nigger Slough, Los Angeles County, California (T. D. A. C.) : Palo Alto, California (H. A.) ; Berkeley, California (H. A.).
——rufibarbis guava Buckley. Albuquerque. New Mexico (H. A.)
——subpolita camponoticeps Wheeler. Mt. Tamalpais, California (T. D. A. C.)
——cinerea pilicornis Emery. Glendale, California (T. D. A. C.). (Proformica) neogagates Emery. Wells, Nevada (H. A.). Myrmecocystus melliger lomaensis Wheeler. La Jolla; California (H. A.).

Camponotus maculatus plorabilis Whecler. Between Valley Pass and Moor, Nevada (H. A.).

## New Lepidoptera from South America.

By Levi IW. Mengel, Reading, Pennsylvania.

Catagramma horstii 11 . sp.
Expanse 43 mm . Primaries black with bluish reflection toward the apex. Base of wing, through discoidal cell, red. From the costa, a red band extends across the wing, almost to the inner angle. There is a thin orange band in the apex. The exterior margin has a broken white edging.

The secondaries are black, along the anterior portion, shifting to dark blue toward the exterior margin. A red bar projects from the base through the discoidal cell. The entire wing has a broad white unbroken margin. Antennae and upper part of body, dark brown.

Under side in general as in the other of the sorana forms. The solid white margin of the inferior wing is as pronounced as on the upper side.

Described from two specimens from Cavinas, Bolivia.
Type.-Academy of Natural Sciences of Philadelphia.
Paratype.-Collection Mengel.

## Perisama inconspicua 11 . sp.

Expanse 42 mm . Upper sides in general as in the species of the humboldtii group. The marginal blue band of the inferior wings is much nearer the margin of the wing than in humboldtii, and is more inclined to gray in color. Under side of primary wing shows no red whatever. The base is buff and covers the discal cell. Along the costa a narrow blue band extends from the cell to the white diagonal spot, which appears midway in the wing, and points to the angle. This white spot terminates in a blue edging. Apex broadly yellow, with a few isolated white marks on the edge. Balance of wing black.

Secondary wings solidly buff. A black bar extends from the middle of the anterior margin almost to the angle. Another black bar passes from the anterior surface, parallel with the external margin, to the

