

Calif. (5000 ft.) belong to this variety, which at first sight may be confounded with forms of *C. herculeanus* colored like the European type or like the American *C. whympersi*.

3. *C. maculatus vicinus* var. *luteangulus* var. nov.

Very similar to the typical *vicinus*, but the thorax of the major and minor workers is paler, of a more yellowish red color and all of the worker forms have a bright yellow spot on each of the posterior corners of the head. The gaster of the largest workers is more or less yellowish red at the base. The surface of the body is a little more shining than in *vicinus* but less so than in the var. *nitidiventris*. Males without varietal characters.

Described from several workers and males taken by C. R. Biederman in Carr Canyon, Huachuca Mts., Arizona, one worker from the Yakima River, Washington, taken by Samuel Henshaw, four workers taken by W. M. Mann on Moscow Mt., Idaho, and three workers from Wawawai, Washington, taken by the same collector.

4. *C. maculatus vicinus* var. *semitestaceus* Emery

EMERY, Zool. Jahrb. Abth. f. Syst., VII, p. 672, ♂, 1893.

Described by Emery from a couple of workers from Plummer County, Calif., 5000 ft. (Theo. Pergande), which had the thorax and legs reddish yellow, the head dark ferruginous red, the vertex, mandibles and antennal scapes piceous brown, the gaster clay yellow. Other specimens from Fuller's Mill, San Jacinto, Calif., were still paler, being entirely clay-yellow, with the head partly pale dirty brown. The cheeks bore a few very short bristles, the erect pilosity was more abundant than usual, especially on the gula.

There are in my collection a worker media and a minor from the San Jacinto Mts., Calif. (F. Grinnell, Jr.), referable to this variety. In the media, however, the head and antennal scapes are entirely black and opaque. The worker minor is red throughout, with the top of the head slightly darker.

5. *C. maculatus vicinus* var. *nitidiventris* Emery

EMERY, Zool. Jahrb. Abth. f. Syst., VII, p. 672, ♂, 1893.

Differing from the typical *vicinus* in the sculpture of the worker forms, the shagreening of the gaster and often also of the head and thorax being finer and more superficial, so that these parts are shining. The pubescence on the body is also shorter and much less conspicuous, especially on the gaster. There are no erect hairs on the cheeks. The thorax, legs and petiole are yellowish red; in major workers of most colonies, the gaster is black throughout, but in some, it is more or less red or yellowish red at the base. In some specimens which form a transition to the var. *luteangulus*, the posterior cor-