In 1941, Mrs. Gregg and I collected a member of the flavens group in Brickel Hammock, Miami, Florida, and its identification has caused no small amount of difficulty. In Creighton's key of 1950, it runs out to nuculiceps, but upon comparison with the original description, with which it appears to coincide very well, there is an important discrepancy in the cephalic sculpture. Creighton has very kindly compared my specimens, side-by-side, with the above mentioned types in the American Museum, and is able to assure me that the two ants are not conspecific. states that the type of nuculiceps has a much broader postpetiole and the lateral connules are prominent. It also shows the cephalic rugae crossing the occipital lobes all the way to their rear margins, whereas in the Miami specimens the occiput is smooth and shining; the difference is stated to be very striking. This has led to the conclusion that the Brickel Hammock specimens may be, in reality, Pheidole exigua Mayr, and thus constitute an addition to the North American fauna.

The difficulty, however, does not end here. As indicated above, Smith recorded Ph. flavens sculptior from Florida, and in the interest of further clarification, I have asked Dr. Smith for permission to examine specimens of sculptior and exigua which he obtained in good series during residence on the island of Puerto Rico. Dr. Smith replied by lending me samples of sculptior from Martinique, St. Croix, and Puerto Rico in the West Indies, and from Miami, Florida, but said that he was unable to locate any exigua in the collection of the National Wheeler (1908) provided a detailed description of the worker, soldier, and female castes of exigua, based on three females, numerous soldiers, and workers collected in Puerto Rico. The Brickel Hammock specimens agree fairly well with this description, except that the flattened, scrobe-like areas on the head of the major are distinctly punctate (not indistinctly), and shining. According to Mayr (1887), the major of exigua has the antennal furrows smooth, humeral angles weak, and the mesonotum without transverse striae but finely reticulo-punctate. The first two of these characters, and particularly the first, would appear to differ from the Florida ants to hand. Emery. in 1894, from examination of a topotype of exigua, states that the antennal scrobes are smooth and very shining, and further