notus inflatus and the *Myrmecocysti*. The transition from the semireplete to the perfect replete is represented by *Plagiolepis trimeni* and *Leptomyrmex rufipes*. In conclusion I have added a few remarks on a small group of Indomalayan *Cremastogaster* species, which have been regarded as honey ants.

1. **Prenolepis (Nylanderia) imparis** (*Say*).

This ant, which is the largest of the North American species of the genus, though it measures only 3–4 mm., is also the most widely distributed, ranging across the continent from the Atlantic to the Pacific in the transition zone. The typical form, which is dark brown or black, prefers to nest in clayey soil in shady places, but the smaller and paler variety *testacea* Emery occurs in pure sand. I have found both forms most abundant in the immediate vicinity of oak-trees, *testacea* in the pine barrens of New Jersey and the typical *imparis* in the rich woods of that state, Illinois and New York. The colonies rarely comprise more than 300 or 400 workers. The nests are never under stones, but always in the form of small craters, consisting of rather large, irregular earth or sand pellets, which at first sight resemble the pellets excavated by the smaller Attiine ants of the subgenus *Trachymyrmex*. *N. imparis* is a very timid, mild-mannered ant and lives very largely on the exudations of plants and the honey dew of aphids and coccids. The workers visit their pastures in files and return with their gasters greatly distended. Fig. 26 shows the difference between a depleted worker (*a*) leaving the nest and one returning with its gaster distended to its utmost capacity (*b*). In the latter the more heavily chitinized, brownish sclerites of the gaster are widely separated by the tense intersegmental membranes, through which shine, like an amber bead, the liquid contents of the crop. The gait of the depleted insect is very free and elegant, but when its crop is full it lumbers or waddles along in a very awkward fashion.

My attention was first called to the repletes of *Nylanderia* by my friend Prof. Harold Heath, who sent me a lot of specimens which he had been observing in California. With these he sent the following notes which I transcribe from his letter of April 15, 1901: "In our yard here in Palo Alto is a remarkably large nest of the *Prenolepis* among the roots of a live oak. This latter habitat is also shared by several colonies within a mile or so of the university, and there are numerous others living under the eucalyptus, cypress and other trees. In similar positions they occur widely through the Santa Clara Valley, especially about San José, where they also tunnel by the road sides and in bridle paths far up on the sides of the foot hills.

"Many of the colonies during the heat of the day remain comparatively