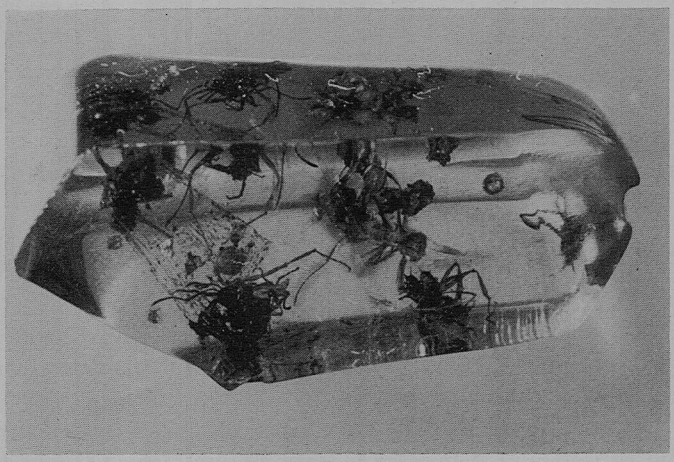

Fig. 1. Dominican amber piece containing the fossil gardening ants. It is the half of the original piece, and contains Nos. Do-377-K-5 to Do-377-K-13, and shows the dense dirty net-like structure (no spider net), in which several of the ants are involved. — This piece has subsequently been cut into 4 pieces in order to separate specimens 5+6; 7+8+9; 10; 11+12+13 for better observation and to enable the photomicrographs (figs. 4 to 13). — Magnification 5 x.

4. The age and origin of the Dominican amber

The amber is mostly found in the dark grey carbonaceous sandstone in the Cordillera Septentrional and, to a minor extent, also in the Cordillera Oriental and on the beaches around Sabana de la Mar, Dominican Republic (Isle of Hispaniola/Greater Antilles).

Since most of the fossiliferous material available in collections has been obtained through amber shops in the Dominican Republic or amber dealers in Europe, the exact provenance of the material is unknown. This is also true for the specimen studied in the present paper.

The age of the Dominican amber is reported to be Oligocene or Lower Miocene (25—35 million years), but such approximate estimations need to be confirmed.

Due to the courtesy of JOHN B. SAUNDERS (Natural History Museum, Basel) who collected and identified foraminiferal samples, I am able to add here some new indication on the age of Dominican amber:

A sample of clayey silt collected at the large amber quarry at Palo Alto near Santiago, Cordillera Septentrional, has produced a planktonic foraminiferal marker whose age range is Lower Oligocene to Middle Miocene with an absolute time span from 38 million years to 15 million years B. P. This is in agreement with earlier estimates of the general age of the amber. However, it could be somewhat older than the matrix, since the amber at the Palo Alto workings is obviously washed in to a marine environment, i. e. it represents a secondary layer.

A second sample, from a small amber working on the road South of Palo Alto, has so far produced a slightly less extended time range due to the presence