He could have saved himself and his audience at least two minutes had he referred simply to "the organism."

5. Most speakers try to squeeze too much into one slide. The print is usually too small. Large freehand printing is at least readable, if not as neat as ordinary typewriting, which can't be read anyhow. Give your audience time to read your important data. One frequently hears a speaker allude to a slide when it comes on the screen, "This slide isn't too important." So flip! . . . we go on to the next. If it isn't too important, why include it? Almost every institution, whether it be educational, governmental, or industrial, has someone who is more or less expert on visual aids. It will pay to consult him before having slides prepared. Your slides, if they are readable and clear, will help tell your story more easily.

If speakers would keep these points in mind, our meetings would certainly be a greater success. Remember that some of your listeners may have come especially to hear your paper. How often one hears the remark, "The title sounded so good, but what a waste of time!"

PAUL F. KLENS

Falls Church, Virginia

## University of Michigan Geological Field Work in Mexico

A PROGRAM of studies of sections across the Mexican geosyncline at right angles to the marginal land masses has been designed to determine lateral variations in structure, lithology, and faunal relationships of successive geologic formations. Although purely scientific, these regional studies have economic implications. Their bearing on ore deposition is threefold: (1) to provide the regional setting for detailed studies of structure in the mines and mining districts along the eastern edge of the Sierra Madre Occidental; (2) to place the age of the prelava sedimentary rocks on a sound regional and paleontologic basis; (3) to locate intrusive bodies with respect to mineralization. Petroleum exploration may be guided by the interpretation of geologic history resulting from the series of stratigraphic sections measured in mountain ranges of the Plateau Central. The sequence of faunas and faunal zones recognized in each formation provides useful markers, which should be found in wells penetrating the subsurface. Structural features mapped in the mountain ranges can be projected into the basins, where geologic conditions may be obscure.

Field work in northern Mexico in the area of the early Mesozoic "Coahuila Peninsula" was resumed during July and August 1952 by a party from the Museum of Paleontology of the University of Michigan. Lewis B. Kellum, in charge of the program, was accompanied by two graduate students, Bob F. Perkins, of Dallas, Tex., and Cecil C. Kersting, of Muskegon, Mich. The primary purpose of the investigation was to study the fauna of the Lower Cretaceous Aurora limestone and the geologic relationships of the Aurora limestone to the Cuchillo evaporites.

The area mapped is along the Durango-Coahuila

state line in the central part of the Sierra de Tlahualilo, about 250 miles south of the international border at the Big Bend of the Rio Grande. The general structure of the Sierra de Tlahualilo in Cretaceous strata is a broad, northward-trending anticline. On this major structure is superimposed a variety of welldefined local deformations. A small area of volcanie rocks encroaches on the western side of the range.

Three stratigraphic sections were measured. Small patches of fossiliferous platy limestones and yellow marls of the Indidura formation were found beneath the volcanics resting on the Aurora limestone. Fossils were collected at four horizons in the Aurora, the lowest of which occurs in a silicified zone that may mark the top of the Cuchillo formation. The limestones below this zone weather darker grav, are interbedded with gypsum, and grade downward into the highly gypsiferous beds of the Cuchillo formation. Rudistids occur at the top of the Aurora limestone but are not the dominant element in the molluscan fauna. A faunal zone about 600 ft below the top is characterized by a large assemblage of pelecypods, gastropods, brachiopods, and echinoids, of which Gryphaea marcoui Hill is the most abundant form. This zone, present throughout the area mapped, proved to be a most reliable datum plane in a thick limestone section. A few feet above this zone nautiloid cephalopods were found at several localities. The faunas from the Aurora will be studied in the Museum of Paleontology during the coming year.

LEWIS B. KELLUM

Museum of Paleontology, University of Michigan

## A New Medium for Modeling Microscopic Structures in Three Dimensions

A frequently annoying problem in research is the difficulty encountered in reconstructing a microscopical structure in a three-dimensional model large enough to allow effective study and yet not requiring too much time in preparation. This difficulty was experienced by the author while studying the embryonic development of the oriental fruit moth Grapholitha molesta Busck, the egg of which measures  $0.7\times0.4$  mm. The embryo is coiled within the egg in such a fashion that the usual methods of orienting the block for sectioning yielded cross, longitudinal, and oblique sections of the same embryo, and an understanding of its orientation within the egg was important.

After blotting paper, cardboard, balsa, and wax sheets proved unsatisfactory, self-hardening sculptor's clay was found to be excellent for modeling, in that it reduced construction time, made greater detail possible, and resulted in a nearly indestructible product.

Modeling consists of three distinct steps: preparation of the clay, cutting the clay section, and building the model. A ball of clay of appropriate size is placed between two sheets of waxed paper. This sandwich is laid on a sheet of glass, rolling guides are put into place, and the ball is rolled into a slab of proper