age younger than the *D. bifidus* Zone, as Deunff recorded these forms from the basal Caradocian of Brittany.

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THIN SECTIONS OF FREE GRAINS USING TWO MOUNTING MEDIUMS

SIR,–The numerous techniques which have been employed to make thin sections of free grains are generally time consuming and require considerable practice. During the course of our studies of glauconite grains and phosphatic particles from unconsolidated sediments, a quick and simple technique was derived which rendered excellent results even with the very friable glauconites.

The technique utilizes two mounting mediums, one which remains hard after it has cured and a second which may be remelted after it has set. The two particular mediums used in our studies were Hysol Epoxi-Patch and Lakeside 70 (both obtainable from Ward's Natural Science Establishment, Inc., Rochester, N.Y.); however, other comparable materials could be used.

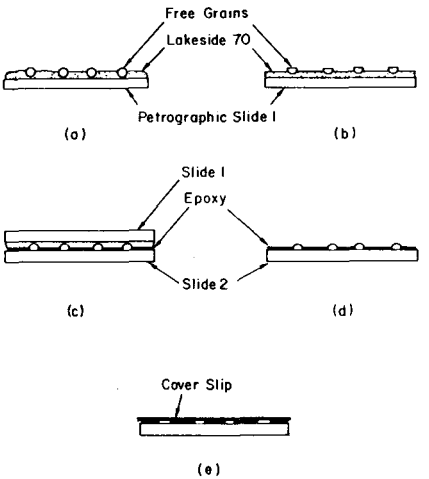

FIG. 1.–Illustration of sequential steps for making thin sections of free grains with two mounting mediums.

The grains are first mounted on a glass petrographic slide in a smear of Lakeside 70 which has been heated to approximately 120°C (Fig. 1*a*). After the sample has set, it is ground to a flat, smooth surface which transects the broadest central section of the majority of the grains (Fig. 1*b*). This flat and semi-polished surface is mounted on a second petrographic slide which has been smeared with hot epoxy and its hardening agent (Fig. 1*c*). Heating the epoxy to approximately 100°C makes the smear more liquid and hence facilitates removing bubbles. The heating also encourages the mounting medium to set in as little as 6 hours. The sample, which is sandwiched between two slides, is allowed to cure overnight. On the following day it is placed on a hot plate and heated to 120°C. At this temperature, the Lakeside will melt, but the epoxy remains set and the first glass slide can be removed (Fig. 1*d*). The exposed slide is then ground to the desired thickness and a cover slip finally adhered to the exposed surface if so desired (Fig. 1*e*).

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ARDNAMURCHAN CENTRE 1–DOES IT NEED RE-DEFINING?

SIR,–We were recently able to examine some of the main features of the Ardnamurchan ring complexes, and felt that certain field relationships seemed incompatible with portions of the established sequence, particularly in regard to Centre 1.

The purpose of this letter is to air our reservations, in hopes of drawing informed comment from persons with greater experience of the region.

Our main concern is the Ben Hiant volcano, in the eroded vents of which are exposed agglomerates and layered tuffs (sub-aerially deposited?), and pitchstone lavas. The

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