CORRESPONDENCE

IMPREGNATION OF ROCKS FOR SECTIONING

SIR,—A procedure for impregnating rocks with resin in preparation for sectioning, which gives good results without the need for evacuation, is described below.

The resin used is of the polyester type and has the advantages of low viscosity (100 centistokes at 25° C.) and good wetting power in the initial liquid condition. It is manufactured by Bakelite Limited, of 12–18 Grosvenor Gardens, London, S.W. 1, under the designation DSR 19098. For rock impregnation the catalyst and accelerating agent usually employed to bring about polymerization are dispensed with, hardening being secured by prolonged heating carried out in two stages. The rock samples are first stood or submerged in the resin and heated to about 75° C. This initially lowers the viscosity, enabling the resin to penetrate by capillary action, but after some twelve hours the resin will be found to have become treacly or have gelled, and the temperature is then raised to about 125° C. for a further 12–24 hours. The resin should then have aquired a tough, rubbery consistency, and on cooling to room temperature, should be quite hard and slightly brittle. The samples are then ready for sectioning in the usual way. Times and temperatures quoted are only approximate and are best determined by experience, as the curing time at any temperature depends partly on the age of the resin and the degree to which it has been exposed to light and air.

The treatment is carried out in small metal trays (e.g., tobacco tins) and it is an advantage to cover or close them loosely to cut down evaporation. The polymerised resin does not adhere strongly to metals, so that the impregnated samples can be removed by gentle tapping and chipping. An ordinary laboratory oven is suitable for the hardening process, or if necessary

a hot-plate may be used, with slightly inferior results.

Using this resin as described, good thin sections have been obtained from a loess, a chalky solifluction sludge, and a variety of unconsolidated Recent sands, silts, and clays, and exceptionally good sections from sub-greywackes and other rocks which, though on the whole well-cemented or compacted, often contain locally soft material liable to be plucked out during grinding.

The writer is indebted to Bakelite, Ltd., for samples and information, and

to Mr. E. J. Hill, who cut the sections.

J. C. M. TAYLOR.

GEOLOGY DEPARTMENT, IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY, LONDON, S.W. 7. 13th April, 1960.

FESTOON BEDDING AND "MUD-WITH-LENTICLES" LITHOLOGY

SIR,—Like Professor J. Sutton and Dr. J. V. Watson (Geol. Mag., 1960, xcvii, 106–122), we have been struck by the beautifully preserved sedimentary structures in the Torridonian. On the mainland around Loch Torridon, the Diabaig and Applecross groups abound in exposures displaying small and large scale features quite as well preserved as any in the Weald. Particularly striking are the shore sections at Diabaig and the new exposures by the Alligin–Diabaig road.

Festoon bedding.—Sutton and Watson may be right in attributing, in general terms, their medium-scale festoon bedding (cf. Potter and Glass, 1958, Illinois State Geol. Surv. Rep. 204, pl. 1A) partly to deposition by "shallow, braided rivers" (p. 113). We infer that the bulk of the erosion and filling processes they envisage might have been carried out by underwater currents