normal blood appeared to have amounts of vitamin B_{12} too low to permit direct assay in the presence of free methionine, and for such materials the *Euglena* assay is recommended. It was found necessary to release bound vitamin B_{12} from tissues, blood serum, etc., by heat or enzyme treatments prior to performing the assays (*4, 10*). In situations where methionine interference can be avoided, as in the determination of potency of vitamin concentrates, etc., this bacterial method may have considerable value because of its simplicity and the short time required for making the determinations.

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The Reversible Depolymerization of Fibrin

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In a previous article the author has shown that a gel formed by the action of thrombin upon purified fibrinogen can be dissolved in 6 *M* urea or 3 *M* guanidine hydrochloride to give a product of the same molecular weight as native fibrinogen under the same circumstances (*1*). A similar result has been obtained by Ferry and Shulman and by Mihalyi (*2, 3*).

Upon dialyzing off the urea against buffer, a gel is regained. It was thought desirable to ascertain whether the fine structure of the gel so produced was equivalent to that of a native fibrin gel. Electron microscopy was employed for this purpose.

A novel technique was utilized for preparing the specimens. A drop of Formvar was spread upon a thin trough of water and the resultant thin film scooped off upon a glass microscope slide. A drop of fibrin in 6 *M* urea was spread evenly over the film, and the latter refloated upon borate buffer-KCl of pH 8.0 and ionic strength .40. The urea quickly dialyzed through the Formvar film, and the gel reformed. The film plus a thin layer of gel was deposited upon wire mesh screens in the usual manner.

The specimen was then dried, washed, and shadowed with gold. The microphotographs obtained under these conditions showed a general resemblance to the published pictures of native fibrin gels under the same conditions (*4*). A network of strands was clearly formed, as is shown in Fig. 1.

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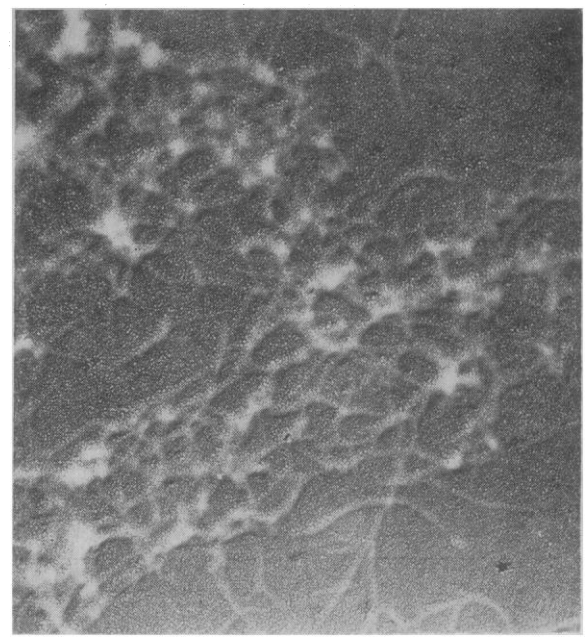

FIG. 1. Gold-shadowed regenerated fibrin clot, pH 8.0, P = .40. × 12,000.

In this manner further evidence is obtained as to the reversibility of the breakdown of fibrin in 6 *M* urea. The depolymerized material is capable of spontaneously reforming a network upon removal of the dispersing agent. It is to this depolymerized material that we may perhaps give the title "profibrin" (*5, 6*).

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The Wave-Frequency Dependence of the Duration of Radar-Type Echoes from Meteor Trails

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A brief discussion of the dependence of the duration of meteor echoes on wave frequency has been given by Lovell (*1, 2*), who concludes that the evidence shows that the duration is approximately proportional to the square of the wavelength. Data collected by the Central Radio Propagation Laboratory of the National Bureau of Standards, consisting of simultaneous measurements of duration at 27.2 Mc and 41.0 Mc, lend support to this conclusion, and in view of its fundamental importance to the theory of