

at infinity, envelopes, involutes, roulettes and planimeters, finish the work in the calculus. This is followed by a short course in differential equations and a short but very interesting chapter on nomography.

The book is well written and the typographical errors are few, there being more, however, in the second section than in the first.

F. M. MORGAN.

*Annuaire du Bureau des Longitudes pour l'An 1919.* Paris, Gauthier-Villars.

THERE are few changes in the *Annuaire* for 1919 which call for special notice. Every year the editors have evidently to consider the pressure of matter for which there is a demand and the chief problem appears to be in finding out what can be omitted in order to make room for new data. The tendency seems to be in the direction of making the volume more useful to the person with scientific interests, rather than to the general reader, for we notice that articles on such subjects as coinage, legal measures, and geography are either suppressed or cut down.

An interesting summary of our present knowledge of the figures of the equilibrium of a liquid is furnished by M. Appell. The account is free from mathematical developments and it is written in a style which gives the main facts; there is an excellent list of the chief memoirs on the subject attached to the end of the article. This subject has been lately revived on account of the papers continuing Darwin's work in the *Transactions of the Royal Society* by Jeans. M. Hamy, in a second appendix, discusses the possibilities of the determination of the actual dimensions of stars by interference methods. He believes that some indications of value can be obtained in this way in spite of the extremely minute angles that the diameters of even the nearest stars subtend at the earth.

E. W. BROWN.