Bibliographie.

Szőkefalvi Nagy Gyula. A **geometriai szerkesztések elmélete** (Universitas Francisco—Josephina, Acta Sctientiarum Mathematicarum et Naturalium, 18. füzet) VIII. + 87 oldal, Kolozsvár, 1943.

This book is based on the lectures given by the author at the Universities of Szeged and Kolozsvár as well as at a course for public school teachers. It is not the main purpose of the book to give special construction methods; it aims rather to give a concise outline of the general theory of geometrical constructions as complete, as possibile, in a form suitable to be used successfully by students as well as by teachers of mathematics. However, a plenty of concrete constructions are given everywhere it is needed. The author succeeded to reach his aim, besides the lucky choise of the matter dealt with, by means of its good arranging and, in several places, by means of essential simplifications of the known proofs.

The book is divided into seven chapters. In the first ond second one, the algebraic criteria of constructibility are discussed and applied to the classical problem of trisection, to the Delian problem, and to the theory of constructibility of regular polygons, including effective constructions.

After these foundations, the third chapter gives a concise exposition of the theory of constructions by restricted means, especially the theorem of MOHR—MASCHERONI and that of PONCELET—STEINER. The next chapter deals with the extended use of the ruler and the compass. Here comes turn of the theory of construction by paper-folding, based on a new definition, different from that used hitherto, but more natural. Using this definitions, all constructions by means of the ruler and compass can be performed by means of paper-folding too. A special chapter is devoted to the theorem of KORTUM—SMITH; here a much simpler and shorter proof than the known ones is given.

After a chapter giving a short account on geometrography, the book concludes by a chapter on the problem of squaring the circle, reproducing Schottky's proof of the LINDEMANN theorem.

I. S. Gál.

**Solomon, Jacques: Protons, Neutrons, Neutrinos, XII +
225 pages, Paris, Gauthier—Villars, 1939.**

C'est un excellent ouvrage rendant complete de la marche générale de
nos connaissances sur la structure et les propriétés fondamentales de ces
éléments constitutifs de la matière que sont les protons et les neutrons
ainsi que d'un élément nouveau hypothétique, nommé: le neutrino. Rappe-
lons que le *neutron* (découvert en 1932 par CHADVICK) est une parti-
cule élémentaire neutre de masse à peu près égale à celle du *proton* (noyau
de l'atome *H)*. Tandis que l'existence de ces deux particules est un fait
expérimental, ainsi que, l'existence des électrons et des positrons, le
par W. PAULI afin de permettre que les lois de conservation (de l'énergie,
de la quantité de mouvement, du moment angulaire) soient respectées
même dans les intéractions nucléaires. Cette hypothèse s'est montrée très
féconde. Elle a permis — entre autres — de rendre compte des traits essen-
tieles de la désintégration β et de l'allure des forces entre un proton et un
neutron.

Béla de Sz. Nagy.