

Récréations Mathématiques et Problèmes des Temps Anciens et Modernes par W. Rouse Ball. Deuxième édition française traduite d'après la quatrième édition anglaise. Troisième partie avec additions de MM. Margossian, Reinhart, Fitz Patrick, et Aubry. Paris, Hermann, 1927. 2+363 pp. Paper, 21 fr.

The first edition of Ball's *Mathematical Recreations and Problems of Past and Present Times* appeared in 1892, the fourth edition in 1905, and the tenth edition in 1922 with the title *Mathematical Recreations and Essays*. Since the English publisher has nothing to hide, the latest edition always contained the dates of all previous editions. This is in marked contrast to the method of the French publisher who in this case as in the cases of other works recently reprinted seems to attempt to give the impression that the works were first published in 1927. As a matter of fact the three volumes of the second French edition of the *Recreations* were published in 1907, 1908, and 1909 respectively. The volume under review is a facsimile of the one issued in 1909 with the exception that on the title page and front cover "1909" has been changed to "1927," and on the last page, before the back cover, "Saint-Armand, Cher.—Imprimerie Bussière" has been changed to: "Reproduit par les procédés Dorel, 45 Rue de Tocqueville—Paris XVII^e." The defects of such a reproduction are noticeable. No further review of this work is called for. It may be remarked, however, that the three volumes of the original second French edition contained so much new material, they are well worth having in a library along with the English editions. The first French edition, in one volume, appeared in 1898 and was a translation of the third English edition (1896).

There was also an Italian translation by Gambioli, from the fourth English edition, which appeared in 1910.

R. C. ARCHIBALD

A Treatise on the Mathematical Theory of Elasticity. By A. E. H. Love. Fourth edition. Cambridge University Press, 1927. xviii+643 pp.

Love's *Elasticity* first appeared 35 years ago in two volumes. The second edition in 1906 was entirely rewritten and put into a single volume. This edition was reviewed in this Bulletin by F. R. Sharpe (vol. 16, p. 90). The third edition appeared in 1920, when, owing to the disturbance in the distribution of scientific literature during the war, a considerable amount of material which had been published was not available for incorporation in that edition. We now have the fourth edition, which like the third, is not really a major change from the second, but does bring the bibliography up to date and includes a considerable amount of new material and some revisions of the old. There is more about problems of the plate (thick and thin), a note on the deduction of the stress-strain relations from molecular theory (lattices), a revision and simplification of the theory of the equilibrium of a sphere (geophysics).

Those of us who are interested in mechanics have cause to be very thankful that Love's *Elasticity* and Lamb's *Hydromechanics* are kept in print and kept up to date. There is not the equivalent of either in any