

results and are less convenient than the use of logarithms. In division closer approximations might be obtained, if desired, by the use of Col. W. H. Oakes' table of reciprocals (to seven figures) published by C. & E. Layton, London.

The text of the author is preceded by very favorable reports made by members of the French Academy of Sciences, and the French Institute of Actuaries. It does not, however, seem likely that a table of triangular numbers will be much used (as M. Arnaudeau intends) by persons who are not familiar with logarithms, or that it will, to any serious extent, be adopted as a substitute for logarithms. Tables of quarter squares or of triangular numbers may, however, be of great service in the comparatively rare cases where it is necessary to have more than seven correct figures in the product. Without the use of these tables such multiplications are probably most readily performed by using Crelle's Tables, or the arithometer. M. Arnaudeau's work should be gladly welcomed as a valuable and interesting addition to the tables now in existence for facilitating multiplication and as a great advance over any previously published table of triangular numbers. The author's perseverance in computing so extensive a table should be highly commended, and it is to be hoped that he will have no difficulty in obtaining, from learned societies and others, the pecuniary assistance needed for the publication of the tables.

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NOTES.

THE Committee of Arrangements of the International Congress of Mathematicians at Zürich has announced the following preliminary programme:—Monday, August 9: Opening of the Congress; Address by H. POINCARÉ, “*Sur les rapports de l'analyse pure et de la physique mathématique*”; Report of the committee on the functions and organization of international mathematical congresses; Address by A. HURWITZ, “*Modern development of the general theory of analytical functions.*” Tuesday, August 10: Sectional Meetings. The following sectional divisions are contemplated: Arithmetic and Algebra, Analysis and Theory of Functions, Geometry, Mechanics and Mathematical Physics, Astronomy and Geodesy, History and Bibli-