

years. Therefore in this notice it will be necessary to indicate only the changes (not many in number) which have been made in the second edition. These are of two kinds: changes in content, and changes in arrangement and printing.

The principal changes in content consist of two additions. There is an introduction taken from the chapter entitled *Le hasard* in Poincaré's *Science et Méthode*. It has to do with the philosophical considerations connected with the possibility of a mathematical theory of probability. There is a fresh chapter at the close of the book dealing with a number of miscellaneous questions. Besides this there are some rearrangements of old matter and additions of new matter throughout the book; but in no cases do these changes seem to be of sufficient importance to require separate consideration.

In the first edition the material was grouped by lectures and not by topics, and no page headings were given to indicate the nature of the contents at any place. On this account the book was inconvenient for purposes of reference. In the second edition there is an arrangement of the matter by topics into chapters and page headings are given to indicate the chapter to which any page belongs. This adds greatly to the reader's comfort and will increase the usefulness of the book.

Concerning a work of Poincaré's, one scarcely needs to add that it is interesting and valuable to the student of the subject with which it deals.

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*The Dynamical Theory of Sound.* By HORACE LAMB. New York, Longmans, Green and Co. (London, Edward Arnold), 1910. viii + 303 pp.

To the two hundred or more foreign mathematicians gathered at Cambridge last summer the atmosphere of the Congress may well have appeared somewhat foreign; for prominent among the "home talent" were Sir George Darwin, the president, Lord Rayleigh, the honorary president, Sir J. J. Thomson, Sir Joseph Larmor, M.P., and Professor E. W. Brown, three of the lecturers, all in the front rank of mathematicians in the Cambridge sense, but elsewhere ranked rather as physicists or astronomers. Indeed, although Cambridge has been and still is graced by the presence of eminent pure mathematicians, there is no more striking phenomenon in university history, no more persistent and justified tradition,