

article is apparently written) would have difficulty in following, partly owing to the use of many technical terms, and partly to the sudden appearance of a mathematical formula. Nevertheless, the "Notice" forms a valuable addition to the very few elementary explanations of the tides which are at present available.

The present being an odd numbered year, the tables relative to physics and chemistry are omitted, in accordance with the general plan. Some additions have been made. The most interesting is a chapter devoted to meteorology. This mainly consists of a table giving mean maxima and minima temperature in various parts of the globe and two other tables relating to the temperature and barometric pressures at Paris. As usual, several of the other chapters, in particular those on geography, have been much improved with additional matter and more recent information.

ERNEST W. BROWN.

*Diagrammes et Surfaces Thermodynamiques.* Par J. W. GIBBS. Traduction de M. G. ROY. Avec une Introduction de M. B. BRUNHES. C. Naud (Scientia), Paris, 1904. 8vo. 100 pp. Price 2 Francs.

THIS little brochure forming Volume 22 of this series of scientific publications is a translation into French of the two original memoirs by J. Willard Gibbs, published in the *Transactions of the Connecticut Academy of Sciences*, Volume 2 (1873), pages 309-342 and 382-404, and accompanied by an introduction serving to interpret for the modern reader the special significance of these epoch-making memoirs, and in particular the trend of the lines of modern development at the hands of later workers in the same field.

It would be superfluous to speak here by way of review of such classic and well-known memoirs as those here translated for the benefit of the French reader. The introduction however may well merit a word, giving as it does an excellent presentation of certain collateral and introductory points, the discussion of which will be found of aid to any one reading these memoirs for the first time. A brief résumé is also given of the leading work of Duhem, Van der Waals and others who have found in these memoirs special inspiration, and have built so largely on this foundation. The introduction together with