

recorded by public bodies in favour of the metric movement; there are also lengthy lists of municipal authorities, commercial associations, and manufacturing companies which have definitely adhered to the proposed reform. The rest of the work is devoted mainly to the history of metric legislation in the United States and the British Empire, selected articles on the metric system, and a comprehensive bibliography.

From what has been said, it will be seen that the contents of the book are somewhat heterogeneous, and in parts reminiscent of a collection of press cuttings; it necessarily presents only one aspect of the question, being propagandist in the extreme. We cannot conceive of any reader faithfully perusing its pages from cover to cover, any more than he would an encyclopædia, but as a storehouse of opinion, anecdote, and similar material for the apostle of metric weights and measures to draw upon it will exercise considerable influence upon the rate of progress towards "world metric standardisation." A good index facilitates reference to the principal topics and authorities dealt with in the book, which is dedicated to James Watt as the originator of the decimal method of measurement, and contains many portraits of its advocates.

In Great Britain there is at present little evidence of a popular demand for the compulsory adoption of the metric system, though Chambers of Commerce and the Trade Union Congress annually pass resolutions advocating the reform; the Decimal Association, whilst continuing its metric propaganda, is devoting attention mainly to the decimalisation of the coinage, with the adoption of the "high-value penny" (one-tenth of a shilling, the latter retaining its present value) as the principal item in its programme. In the United States, where the benefits of decimal coinage are already enjoyed, strong efforts are being put forth to add thereto the advantages of decimalised weights and measures, and a Bill is now before Congress for that purpose. The energy devoted to the campaign in that country, of which the volume under review affords striking evidence, commands our admiration; but it must be admitted that the opposition to the movement in certain quarters is both bitter and powerful.

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### Our Bookshelf.

*Catalogue of Scientific Papers.* Compiled by the Royal Society of London. Fourth Series (1884-1900). Vol. 18: Q-S. Pp. iv + 1067. (Cambridge: The University Press, 1923.) 9s. net.

FROM the outset this monumental work has occupied a very high position as a trustworthy work of bibliographical reference—due to the judicious extension of its range, the faultless accuracy of its entries, and the

critical examination to which its author headings have been subjected. It is international in scope and appeal, but of purely British manufacture, and is now nearing the completion of the first century of its labours, for the final volume of the present series is promised next year. At first sight it might appear a tolerably simple matter to assign to their proper author headings a collection of carefully prepared transcripts of the titles of papers; but this view would not be confirmed by any cataloguer or indexer of experience. Initials of the forenames of writers have to be expanded, entries under writers of the same name and forenames to be distinguished, pseudonyms to be unmasked, and changes of name accounted for. With the spread of Western science to the East, the difficulties of accurate editing have multiplied. Nevertheless the standard of sound workmanship set by the editors of the earlier volumes has been maintained.

No great loss, we think, has resulted from the partial elimination in the present series of references to serials containing reprints, abstracts or translations of original papers. The retention of these references in the case of papers written in the less familiar languages serves most practical purposes of research. We trust that in the concluding volume Dr. Forster Morley will furnish us with complete statistics of the number of papers and their authors for the period 1800-1900, together with a chronological table or graph showing the rate of growth of scientific periodical literature for the same period.

*Handbook for Electrical Engineers: a Reference Book for Practising Engineers and Students of Engineering.* Compiled by a Staff of Specialists. Edited by H. Pender and W. A. Del Mar. Pp. xxiii + 2263. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1922.) 30s. net.

THE many engineering researches both theoretical and experimental which have been carried out in recent years have created a demand for handbooks which will give the practical results obtained in a way that can be readily understood. The principal articles in this work under notice are written by well-known engineers and professors. The arrangement is excellent and there is practically no overlapping. It contains more theory than is usually found in similar works. The mathematical symbols are very clearly printed, the diagrams are excellent, and the index is very complete and well arranged. Although there are many references to radio communication, "wireless" is not mentioned. We are pleased to see that both "ground" and "earth" are given. The word "hydrology" is used to denote the "science of water." In water power engineering, for example, hydrological data such as the rainfall, natural drainage, and the velocity of the stream are required.

*The Evolution of the Conscious Faculties.* By Dr. J. Varendonck. Pp. 259. (London: G. Allen and Unwin, Ltd.; New York: The Macmillan Co., 1923.) 12s. 6d. net.

THIS book contains much valuable matter in the shape of introspective analysis, experimental investigation, and critical examination of theories, of the mental faculties. Dr. Varendonck leaves the impression of an enthusiastic and competent student of