

A Bibliography of the Writings of Harvey Cushing
Prepared on the occasion of his Seventieth Birthday, April 8, 1939, by the Harvey Cushing Society. Pp. xv+108. (Springfield, Ill., and Baltimore, Md.: Charles C. Thomas; London: Baillière, Tindall and Cox, 1939.) 5 dollars.

THIS book, the sale of which is limited to four hundred copies, contains the bibliography of a man who was equally well known as an eminent brain surgeon and the author of one of the most successful biographies of recent times. The work, which is preceded by a sympathetic and humorous note by Dr. Arnold Klebs, the well-known medical historian, entitled "Bibliographia Animata", consists of four parts and appendixes. The first part gives a short account of Dr. Cushing's life, degrees and honours bestowed upon him by more than twenty different nations. In the second part are listed his books, thirteen in number, of which the best known are "The Pituitary Body and its Disorders" (1912), the "Life of Sir William Osler" (1925), and "Intracranial Tumours" (1932), of which a German translation appeared in 1935 and a French one in 1937. The third part contains a list of his addresses, papers in journals, and reports published between 1898 and 1938 numbering 306, while the fourth part is devoted to papers emanating from Dr. Cushing's clinics and laboratories.

The appendixes contain the names of his assistants in neurological surgery from 1908 to 1932 and voluntary graduate assistants from 1920 to 1932, hailing from England, France, Germany, Belgium, Holland, Rumania and Esthonia, and a list of members of the Harvey Cushing Society.

German-English Science Dictionary
For Students in the Agricultural, Biological and Physical Sciences. By Prof. Louis de Vries, with the collaboration of Members of the Graduate Faculty. Pp. x+473. (New York and London: McGraw-Hill Book Co., Inc., 1939.) 18s. net.

IT was Dr. Samuel Johnson who emphasized our indebtedness to the compilers of dictionaries when he wrote, "Every other author may aspire to praise, the lexicographer can only hope to escape reproach". Scientific men will indeed be grateful to Prof. de Vries for having brought together some half a million stock words which are representative of German scientific language. No attempt has been made to include all the names of animals, plants, chemical compounds, etc., since each subject would need a dictionary of its own. But since research in the various departments of science now extends into complicated inter-departmental problems, the author has included terms which enter into the chemical, physical and biological sciences. Further selection has made use of the fact that the compounding of words is such a characteristic feature of the German language, only sufficient basic information being included to permit of the building-up of composite words. The book is strongly and attractively bound, but still remains a very convenient size for purposes of frequent reference.

T. H. H.

PHYSICS

Cosmic Machinery in an Electro-Magnetic Universe
By Capt. H. A. Staples. Pp. vi+224. (London: William Clowes and Sons, Ltd., 1939.) 12s. 6d.

THE author of this work claims to have constructed a magnetic machine which was able to produce motion "similar to the motion of the solar and planetary bodies". As the sun rotates, its field of radiation rotates with it, and this "solar sweep" is responsible for the forward motion of the earth in its orbit. Capt. Staples states on page 139 that, with reference to Kepler's Third Law, "the reason for the application of the power of the cube in association with the power of the square have [sic] remained obscure". Apparently, however, this obscurity disappears with his electro-magnetic interpretation, planetary motions falling into line with the laws relating to wave motion issuing from a radiant source. It is only necessary to point out that there is nothing obscure about Kepler's Third Law, which is very easily derived from the inverse square law. It may be added that the electromagnetic field of the planets appears to play an important part in their orbital motion, according to the author, but he makes no attempt in this book to apply his theory to other bodies of the solar system, such as meteor streams, comets, or even the minor planets. Quantitative results on the motions of the satellites would have been useful to verify or disprove the theory, but the figures and explanations given on pp. 149-51 are too vague to be applied.

Although the author has spent twenty years of research on his work, it will not yet be generally accepted.

M. D.

Spontaneous Fluctuations of Voltage due to Brownian Motions of Electricity, Shot Effect and Kindred Phenomena

By E. B. Moullin. (Oxford Engineering Science Series.) Pp. viii+252. (Oxford: Clarendon Press; London: Oxford University Press, 1938.) 17s. 6d. net.

TO an engineer the result of the spontaneous fluctuation of voltage is a noise which is getting in his way, and which he calculates from formulæ which give approximately the result he requires; he knows that he is up against a natural limitation of what he wants to do. The author of the volume now under review takes a novel view; he rather startles the engineer by making the subject of philosophical interest, and by showing that the physicist does not know as much about the subject as the engineer thought he did. The author does not think that theory has caught up with the abundant experimental data, and he has done a remarkable service in collecting such information as is available in a readable way, so that some super-mathematician may be inspired to find a link between atomic data and the nuisance being examined.

The text is produced with the care and clarity we have been led to expect from the Oxford Engineering Science Series.

L. E. C. H.