sary for artillery work, gathered during two years spent as Chef de Brigade Topographique. No claim is made to the production of a complete text-book of surveying; the author's limited experience would preclude that; and, as will be naturally understood, the practised surveyor has little to learn from this volume. The only point where it may possibly be of service in supplementation to more complete treatises is in the discussion given of the problem of resection, particularly of resection from more than three points, a problem somewhat neglected by English writers. A fervent claim is made to the superiority of the centesimal division of the quadrant, which, it is held, offers practical advantages, such that, once used, it is hard to understand how its merits can be doubted; "one returns with difficulty to the sexagesimal division." However this may be, the subject is now beyond discussion, there not being the remotest chance of the use of the centesimal system spreading outside the pale of the Service géographique de l'Armée. Even admitting that there are some gains in facility of computation, we think these dearly purchased at the cost of this isolation.

A recommendation is made that when taking out the number corresponding to a given logarithm a table of antilogs should be used, and it is regretted that no such table, extending to more than four decimal places, has been published. This must be read as meaning published in France. Such tables are common here, and an excellent little set of five-figure tables, including antilogs, is (or was?) procurable at the modest price of sixpence, while Filipowski's seven-figure tables are well known. They are not more generally employed solely because computers find that, on the whole, the use of the simple log table is preferable. E. H. H.

Basic Slags: Their Production and Utilisation in Agriculture. (Reprinted from the Transactions of the Faraday Society, vol. xvi., part ii., 1920.) Pp. 259–335. (London: The Faraday Society, n.d.) 7*s.* 6*d.*

THIS full report of the discussion organised by the Faraday Society last March on the utilisation of basic slag in agriculture forms a convenient little booklet which agricultural lecturers and experts will find of considerable value.

The necessity for the discussion arose out of the change in the manufacture of steel which began before the war, but has proceeded at an increasing rate in the past few years. In consequence, agriculturists no longer obtain the slag to which they have been accustomed, and which was used in the classical experiments that have passed into agricultural tradition; they obtain instead something completely different under, however, the same name. An account of the discussion was reported in NATURE of April 8, 1920 (p. 183).

From the agricultural point of view there is an interesting account of the field trials with the new slags, which suggests for them a better value than was first expected from the chemical analysis. On the works side the report does not make very hopeful reading; no easy way could be found for increasing the phosphorus content of the slag, apart from the simple addition of mineral phosphates, which would be quite unnecessary.

The meeting was useful, and the publication of the papers will prove even more so, as it will enable a wider circle to appreciate the present position of the basic slag problem. It is gratifying to know that, as the direct outcome of the discussion, the Ministry of Agriculture set up a Committee of steel-makers and agriculturists to go into the question of the improvement of basic slag, and to report on any action that could be taken. The Committee is presided over by Dr. E. J. Russell, of the Rothamsted Experimental Station, and is understood to be pursuing its inquiries with a view to an early report. The Faraday Society is to be congratulated on the success of its efforts.

Les Variations et leur Hérédité chez les Mollusques. By Paul Pelseneer. (Mémoires de l'Académie Royale de Belgique, Classe des Sciences, Collection in-8°. Série II., tom. v.) Pp. 826; 286 illustrations in the text. (Brussels, 1920.)

CUT off from the sea, his library, and his laboratory at Ghent, that doyen of malacologists, Dr. Paul Pelseneer, during the German occupation of Belgium, fell back on his note-books and such material as lay to his hand, and has put together a fine volume that will be a work of reference for practically all time.

The variations observable in the Mollusca have never hitherto been systematically studied as a whole. Dr. Pelseneer now takes them up seriatim as they occur in the shell, in the external features of the animal, and in the various internal organs and their systems (circulatory, respiratory, nervous, etc.), plentifully quoting original observations in addition to his own, and illustrating the whole with reproduced and new figures. He classes these variations and discusses their interrelationships, individual and specific, in different organs, their cause, especially when due to environment, and finally their heredity.

It is impossible within the limits of a short notice to summarise even the author's conclusions: the work itself must be consulted. When, however, he states that there is no example in the Mollusca of preadaptation, we venture to think he must have overlooked the case of the myophore in Velates, and of the dorsal depression in the shell of the young Nautilus, which later on receives the ventral curve of the preceding whorl, as pointed out by Hyatt in his "Phylogeny of an Acquired Characteristic."

The book is touchingly dedicated "A la mémoire de mes Compatriotes victimes de l'agression Allemande (1914–1918)." B. B. WOODWARD.