describes the perspective grid (oblique photograph, small scale) mapping method, originally suggested by the late Dr. Deville and used with such success in the mapping of the Laurentian Plateau.

(2) Commandant Ollivier deserves our thanks. He deals with ground photo surveying—from Laussedat and Deville to Van Orel, and from photogrammetry to the stereoautograph—and he promises another volume to deal with air photo survey. History, instruments, precision, errors, methods, processes, and results are all as clear and logical as one expects from the best French books. It is perhaps not very important that the author's lack of interest in foreign methods and personalities is equally French.

This is, for its compass, the clearest guide to the subject which has appeared. It is all to the good, too, that Commandant Ollivier is an enthusiast. The comparisons with ground methods are, however, exactly on a parallel with those of Deville. Neither the one nor the other knows how small scale topography should really be done. But that is not the point. Anyone who wants the theory and practice of photo surveying can get it from this book, and will be very interested; but let him remember two points which are not brought out. First, you cannot survey if you cannot see, and therefore you cannot use photo surveying in a forest or in a flat country of hedgerow timber; and secondly, photographic methods are essentially medium scale. They offer little, if any, advantage to the property surveyor or the small scale topographer.

(3) Here we have a Swiss book on a third, equally important, aspect of surveying, that of optical methods of measuring distance—methods which lend themselves obviously to a subsequent plotting by polar co-ordinates. British surveyors of the past were content to class tachymetry as a method giving, roughly, errors of the order of one part in five hundred. Modern telemeters (for which the base, or graduated staff, is held horizontally, thus escaping the troubles of unequal refraction) have greatly increased its possibilities. Were Great Britain faced with original property surveying at the present time, there is no doubt that optical measures would be given their chance, and engineers and other large scale surveyors will do well to explore their possibilities.

Mr. Bosshardt's book is well designed, clear, and definite in its analysis of errors and description of instruments, and those who read French with greater facility than German will find excellent reading in Prof. Delessert's translation.

Our Bookshelf.

A List of Official Chemical Appointments: compiled by direction of the Council of the Institute of Chemistry and under the supervision of the Publications Committee. Seventh edition, revised and enlarged. Pp. 402. (London: Institute of Chemistry, 1931.) n.p.

"OFFICIAL Chemical Appointments", now in its seventh edition, has firmly established its right to a place on the most accessible shelf of the chemist's library. Moreover, since it catalogues the personnel of professional chemical services in connexion with State and municipal administration, it is consulted with increasing frequency by official, educational, and commercial authorities. The new edition of some 400 pages, compiled under the auspices of the Institute of Chemistry, is divided into four parts. The first gives information concerning the activities of official establishments employing chemists in the British Isles, with a list of holders of the appointments (with degrees and universities). In this section are found, for example, the universities and schools, Government departments, water boards, industrial research associations, the National Physical Laboratory, public analysts, etc., and similar appointments in Northern Ireland and the Irish Free State. In the second part, appointments in the Empire overseas are recorded.

The third portion deals with societies and institutions, briefly referring to their objects, regulations for admission, etc., as well as mentioning the names of their officers. The fourth section contains a list of acts of Parliament, orders, regulations, etc., affecting official chemical appointments, and is followed by indexes of names and places, unfortunately marred by long errata lists arising from the printer's oversight. Subsidiary to its real utility as a book of reference are the pleasure which one may find in a study of the movements of one's former colleagues and acquaintances and the interest to be derived from the unexpected association of names with places.

God and the Universe: Eddington, Jeans, Huxley and Einstein. By Chapman Cohen. With a Reply by Prof. A. S. Eddington. (Issued by the Secular Society, Ltd.) Pp. 133. (London: The Pioneer Press, n.d.) Paper, 2*s*.; cloth, 3*s*.

THE issues raised in this book are too important to be discussed casually in a few lines. The relation between religion and science is, of course, a very old problem. But the amazing developments of physical theories are apt to give a new setting to it. When scientific workers find themselves in a philosophical mood, they indulge in offering their readers some tentative suggestions about the theological extension of their particular science. So we get Eddington's scientific approach to religion, Huxley's religion without God, Jeans's mathematical God, and perhaps Einstein's Spinozistic God. Philosophers should be thankful to men of science for such indications; the more so as they are not forced upon one by their authors with the same mental pressure often displayed by