For this reason I feel that Dr. Sholl's excellent book will interest a wide variety of readers. This work provides a clearly stated review of established facts and hypotheses concerning both the structure and function of the cerebral cortex. In this monograph, Dr. Sholl stresses the limitations of neurohistology, and provides a summary of his own contributions to this field. The latter are, in the writer's opinion, of considerably more importance than their factual content, since they seem to mark the end of an era of descriptive histology and the beginning of a quantitative study of structure.

An English translation, by Lisbeth M. Kraft, of Cajal's papers on the mammalian olfactory cortex is also now available, under the title "Studies on the Cerebral Cortex". Cajal's anatomical studies of the limbic system certainly represent the most comprehensive and precise account available of what is now called the limbic system. Cajal was the master of qualitative micro-anatomy and there are few neurophysiologists who have not leaned heavily upon his works. But while descriptive histology of central nuclei and tracts has proved invaluable to an understanding of the more primitive functions of the nervous system, history shows that it has contributed little to our present understanding of the cerebral cortex.

It is not possible at present to link up such scanty knowledge as we have of cortical function with the available micro-anatomical data, and in fact Dr. Sholl is forced through no fault of his own to present his review in two independent sections, dealing separately with structural and functional information. It is only within recent years that physiological study of the cerebral cortex has become quantitative in nature; the recent development of quantitative micro-anatomy may well prove the essential step toward an understanding of normal and abnormal cerebral function.

B. Delisle Burns

INTERNATIONAL METEOROLOGY

Scientific Proceedings of the International Association of Meteorology, Rome, September 1954

(International Union of Geodesy and Geophysics, Tenth General Assembly.) (Publication AIM No. 10/c.) Pp. xiii+594. (London: Butterworths Scientific Publications, 1956.) 80*s*.

THIS publication is the official report of meetings held as part of the tenth general assembly of the International Union of Geodesy and Geophysics. While most of the one hundred and four papers stated to have been read are apparently reported in full, some are merely given in title and many in a short abstract. Against some of these nominally reported papers there is stated the periodical in which a full account was destined to appear.

The meetings, apart from the presidential address by Prof. K. R. Ramanathan, were divided into eighteen colloquia on specific subjects, ranging from cloud physics to numerical prediction of the pressure distribution. The papers relating to the distribution and transport of ozone in the atmosphere seemed to me to be the best. The presidential address is a notable survey of this subject right up to date at the time of delivery. The outlines of a picture of the transport of ozone from the region 20–30 km. high where it is produced by photochemical action on oxygen to the lower atmosphere are beginning to take shape and ozone to be used as a tracer to reveal the circulation.

Dr. Schumann of South Africa put forward a strong plea for the formulation, by a world conference, of an international co-operative plan to guide meteorological research for twenty years or more. This proposal met with strong opposition from the audience of freedom-loving research workers. On a more practical level he demanded much greater co-ordination, simplicity, and uniformity in the publication of meteorological information, rightly pointing out the loss of time involved in searching for data at present. He should be given strong support in this by the World Meteorological Organization, one of the functions of which is to co-ordinate publication arrangements between meteorological services. Perhaps unfortunately, he seems to have attempted to urge too much and, moreover, to have gone out of his way to attack that document beloved of so many meteorologists, the synoptic chart.

Other subjects than those mentioned which were treated very fully at the meeting were radiation and the mechanics of the general circulation. The meteorology of the lowest layers of the atmosphere at normal breathing-level was the most conspicuous absentee. Although there has been at least one instance of a new idea of basic importance being first put forward at a meeting of the International Association of Meteorology, it seems unlikely that the event will often be repeated. Authors are unlikely to wait three or more years for such congresses to publish their new ideas. The most useful functions of congresses seem to be personal intercourse of research workers from all over the world and the preparation and later publication of surveys of the current state of knowledge.

G. A. Bull

KEEPING UP WITH LOW-TEMPERATURE PHYSICS

Progress in Low Temperature Physics

Edited by Prof. C. J. Gorter. Vol. 2. Pp. xi+480. (Series in Physics.) (Amsterdam: North-Holland Publishing Company; New York: Interscience Publishers, Inc., 1957.) 42 guilders; 84*s*.

WITHIN the past year or two, the closely related topics of low-temperature physics and solid-state physics have been exhaustively reviewed: we have had three volumes of "Advances in Solid State Physics", the four relevant volumes of the new "Handbuch der Physik", and now here is the second volume of Prof. Gorter's "Progress in Low Temperature Physics". Even before the appearance of this last, the point had been reached where at least two, and often three or four, lengthy and up-to-date review articles were available on most of the major topics in these fields, and it is a measure of Prof. Gorter's skill as an editor that he has succeeded in choosing for his second volume a number of topics which have not recently been treated elsewhere. Perhaps inevitably, the result has a somewhat heterogeneous appearance. As Prof. Gorter himself remarked in his preface to the previous volume, low-temperature physics nowadays constitutes a 'transverse section' of paragraphs from many different chapters of physics, and it is debatable whether a useful purpose is served by bringing to-