large debt to an able author to say that more adequate coverage is needed for a number of the topics discussed in these surveys—for example, in the prelude on man's knowledge from antiquity to the 17th century of blood circulation. Here we might expect the author at least to mention in passing the improvement made in the understanding of blood circulation, because this understanding differed from the Galenic interpretation and was expressed 4 centuries prior to the monumental experiments and resolutions of William Harvey. Also, the attempt to connect Sarton's comment on Leonardo da Vinci with Leeuwenhoek's achievement seems artificial, because the circumstances that led da Vinci to write his notes for "his own private use" were completely different from those of Leeuwenhoek. In fact, it seems in several passages that Schierbeek tries to put words into Leeuwenhoek's mouth by interpreting his ideas and modifying the interpretations to fit modern scientific concepts. Such ideas, it is fairly safe to say, were in all probability not so clearly conceived in the mind of our 17th-century scientists. For the same reason we might have hoped that Schierbeek would translate Leeuwenhoek's own words on the axons of nerve fibers and their structure, as he faithfully does other passages, rather than give us Cole's summary.

A minor criticism is in regard to the language of the book. Since English is not my native tongue nor that of the author, I am more appreciative of the difficulties faced in avoiding weak sentence construction, and from this point of view, I am sure that the author has secured a greater measure of success. Nevertheless, here and there a few grammatical errors and awkward sentences do appear. They are not serious mistakes, but they could be corrected. Up to a point, however, originality of expression in several passages rendered the discussion more interesting and genuine.

In concluding, I must state that this book, which deserves large credit, has given us a remarkable presentation of the intellectual activities of an immortal scientist. A close study of it will repay not only those concerned with the history of biological studies but also other historians of science who are interested in scientific progress in the early modern period.

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**Medizinische Grundlagenforschung.** vol. 2. K. Fr. Bauer, Ed. Thieme, Stuttgart, Germany, 1959 (order from Intercontinental Medical Book Corp., New York). viii + 827 pp. Illus. DM. 168.

Volume 2 of the scheduled series, *Medizinische Grundlagenforschung* (Fundamental Medical Research Problems), continues the tradition of volume 1 and presents the acute borderline problems of medicine and natural sciences in a form which, although apparently heterogeneous, nevertheless tends to assist in finding a synopsis for the multiplicity of modern scientific life. This main purpose of the series has been achieved with volume 2. In 17 chapters it deals with such problems as the formation of structure in nature and the second law of thermodynamics, cellular theory, cell electrophoresis, the importance of fibrinolyses, the chemotherapy of tumors and skin diseases, cancerogenic substances, and others. The presentation is clear and concise with the author's original work skillfully blended into the general review of the problems. Numerous, well-selected references encourage further studies and research.

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**Photographic Lunar Atlas.** Based on photographs taken at the Mount Wilson, Lick, Pic du Midi, McDonald, and Yerkes Observatories. G. P. Kuiper, Ed. University of Chicago Press, Chicago, Ill., 1960. $25.

This atlas is a magnificient achievement, prepared with loving care. I well remember my astonishment, while spending a day at the Lick Observatory in June 1957, at finding Kuiper in the darkroom making some of the prints which are now published.

Planning for the project began some 5 years ago. Fine photographs of the moon were already in existence at a number of the major observatories, and these were the source material for the volume. In August 1955 the proposal was discussed at the Dublin meeting of the International Astronomical Union, and the work of copying the negatives was begun in 1956. From some 1200 prints, final selection of the prints to be used was made late in 1959.

The prints are on a scale of 1:1,370,000, which corresponds to a lunar diameter of about 100 inches. On this scale a mile equals 1.2 mm. A supplement is planned, on double the scale, giving high-quality photographs of selected objects.

The atlas is divided into three parts: (i) an introduction (11 sheets), showing the subdivision of the lunar surface into 44 fields, and so forth; (ii) the main body (184 sheets); and (iii) 35 supplementary sheets. The total number of sheets is 230 and each sheet measures 17 by 21 inches.

In the main section, 176 sheets are printed in sets of four and folded. This makes them extremely awkward to handle in normal office use. These 34 by 42 inch sheets will doubtless be even more awkward to handle at the telescope. It seems unlikely that the paper will survive more than a few refoldings without cracking. Most users will probably decide to cut these sheets.

The atlas was planned for use at the telescope, and the type of reproduction and the paper were selected to permit the charts to be retouched at the telescope with pencil, crayon, or ink. Kuiper recommends "that observers use at least two copies, one for reference and the other(s) as research material at the telescope. The cost of the atlas has been held to a minimum, roughly 10 cents a sheet, not much more than drawing paper." It would be a real service to observers if replacement sheets could be purchased separately.

Packaging anything as heavy and bulky as this volume always presents problems, and these problems have not been completely solved in the present case. The box containing the review copy started coming apart shortly after it was received, and it is obvious that it is not sturdy enough to be used for library storage and handling. The charts could be kept in a table drawer, or they could be stored vertically in a standard x-ray file cabinet. Such files have been used very successfully for the *Palomar Sky Atlas*, and those who own that atlas might have enough space left for the *Lunar Atlas*. A more durable box could be made by having an inner box that slides into an outer box with the openings on the 2½ by 22 inch side. A more durable holder should be seriously considered when future editions are prepared.

Kuiper's introduction states that "The purpose of this atlas is to present the surface record of the moon as