

The skeleton of a freshly killed animal is more or less carefully cleaned of muscles and embedded in a plain agar solution (15 gm. per liter of water) which has been cooled to the pouring temperature (43° to 45° C.). The medium is allowed to solidify and the preparation is covered and set away at room temperature. The digestion requires from ten days to several weeks, depending largely on the extent of the preparatory cleaning. The time may be reduced by the use of incubator temperature. We have tried inoculating the skeletons with cultures of anaerobic proteolytic bacteria, but without great advantage.

The medium absorbs much of the odor and with suitably covered dishes it has been possible to leave the cultures standing in the laboratory. When the digestion is completed the bones can be conveniently dissected from the medium in their original relations. Washing the parts as removed completes the process. The skeletons thus prepared are very white, and bleaching is usually unnecessary. The method is best adapted to small skeletons, which can be embedded easily. It is these, however, which present the greatest liability to loss of parts in a fluid medium. The method promises to be particularly useful in the study of the cartilaginous skeletons of embryos.

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SHALL THE USE OF THE ASTRONOMICAL DAY BE DISCONTINUED?

TO THE EDITOR OF SCIENCE: The question has recently been raised in England whether the astronomical day should not be set back twelve hours, so as to begin at midnight instead of at noon. It is stated by those advocating the change that the practical consideration of those using the Nautical Almanacs should prevail as against the usage of astronomers. The opinion of American astronomers has been requested and a committee of the American Astronomical Society has been appointed to collect information for presentation at the next meeting of the Society.

The committee desires to obtain an expres-

sion of opinion on this subject from as large a number as possible of astronomers, geodesists, surveyors, navigators, and all others who have occasion to use Nautical Almanacs.

Communications may be sent direct to Professor W. S. Eichelberger, Director of the Nautical Almanac, U. S. Naval Observatory, Washington, D. C., or possibly better to some journal, where a public expression of opinion may stir up further discussion.

W. S. EICHELBERGER,
Chairman

SCIENTIFIC BOOKS

The Microscope. By SIMON HENRY GAGE, Professor of Histology and Embryology, Emeritus in Cornell University. The Comstock Publishing Company, 1917. Twelfth edition, 472 pages, 252 text figures.

This standard work is so well known to American students that extended comment upon its usefulness or upon its special merits is superfluous. The twelfth edition has been more extensively revised and rewritten than any one of the earlier ones. While many new things are presented, nothing has been considered which the author has not personally tested and found practical. Among the more important new devices described are: (1) the single objective binocular for both high and low powers; (2) improved apparatus for drawing with the projection microscope; (3) perfected ray filters which make it possible to get photomicrographs of almost any microscopic specimen; (4) the use of "daylight" glass in microscopical illumination, and (5) the dark field illumination for all powers which makes it possible to study living structures in much greater detail than heretofore. Some subjects treated in the previous edition, such as metallography and microchemistry, which are now presented adequately in other available works, have been omitted. Because of its clearness and accuracy of statement, its well-chosen material, and its wealth of information, the book will without doubt continue to be the most widely used volume on the microscope in American laboratories.

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