

basket an advertising pamphlet; cut from it plain capitals of sufficient size—they need not be A, B, C, D; any other letters will do as well; and paste the letters on the drawing. Erasure of pencil lines before pasting is advisable, because if a pencil line is accidentally covered by paste, it can hardly be erased. Do not guess at the size the letters should be; find some journal in which the illustrations are satisfactorily lettered, and enlarge the height of the letters as much as the drawing frame was enlarged; then search for letters as nearly as possible of that enlarged height. If names must be added, print them in unshaded Roman letters, **BbRrKk**, without serifs. Here again, do not guess at the size of the letters, but determine the proper size by enlarging good hand-printing on a figure in some book.

Do not print or write the title of a figure inside of its frame; the title will look much better if set up in type below the figure and printed with it. When a drawing is finished and unnecessary blank paper is trimmed off, paste it at the corners on a blank half sheet. Below it draw a line, crossed like a T at its ends, to show the width to which the drawing is to be photographically reduced. Below this line write the title of the figure and any explanatory legend that is to be printed with the title. Wait until the final copy of an article is about to go to the publisher before numbering the figures and inserting the numbers in the text. Then add to the half-sheets which carry the drawings the figure numbers and the number of the manuscript page where each figure belongs. Finally, write out a list of the figures with their numbers and titles and add the list to the clean copy of the manuscript. If it is proposed to have photographs reproduced in half-tone illustrations, be sure that they are worth reproducing. Many poor photographic views have been undeservedly immortalized in recent years of inexpert Kodakery. Better than a poor photograph is an outline neatly traced from it.

If a book is contemplated, the larger it is to be the more all the above suggestions or their equivalents should be emphasized. The record book, the orderly listing of all questions in it for which answers have to be looked up, the careful authentication of titles and

quotations, the adjustment of illustrations to pages, all gain greater and greater importance as the size of the book increases. The advice but not the dictation of an experienced publisher regarding the form and style of the book is valuable; and this advice should be sought early, in order that the work done in composition and illustration should be properly directed toward its goal.

When galley proof is received, indicate the position desired for each illustration on the margin. If page proof is seen later, some figures may be found on the back of the page that carries their text. It is then desirable to rearrange the text if possible by shifting paragraphs so as to bring the figure and its explanation together. If an order for reprints is given, be sure to request that the pages of the reprints be neither rearranged nor renumbered; the reprints should be exact duplicates of the article as originally paged and printed. If a cover is ordered it should bear the title of the article and the author's name, and the name of the journal of publication, with its volume and year, and the first and last pages of the article. It is desirable that the author's address should also be given, for it is very likely unknown to some of those to whom reprints are sent.

The plan of work outlined above may be called methodical; and some writers, deeming themselves unmethodical, may regard the plan as too systematic for their adoption. Yet it is particularly to such writers that the plan is submitted, for I began unsystematically myself and long failed to form orderly habits of work—in consequence of which I have had to retrace many steps and reopen many books needlessly. A little patient practice on the plan here set forth or on some other consistent plan can not fail to be serviceable to many a young scientist in reducing accidental and more or less disorderly habits of work to more orderly and time-saving habits. The use of half-sheets is a very helpful device, especially in the early stages of composition; the addition of authenticating nicks on reference slips, soon becoming habitual, will save hours and days in verifying quotations. One more suggestion in closing: condense all manuscripts as much as is reasonably possible.

OBITUARY

RECENT DEATHS

DR. JAMES MORFORD TAYLOR, professor emeritus at Colgate University, where he held a professorship of mathematics from 1873 to 1920, died on July 31 at the age of eighty-six years.

DR. HENRY W. HENSHAW, formerly chief of the

U. S. Biological Survey, died at Washington on August 1 at the age of eighty years.

PROFESSOR ALLVAR GULLSTRAND, professor of physiological optics at the University of Upsala, who received the Nobel prize for medicine in 1911, died on July 27. He was sixty-eight years old.

GLENN H. CURTISS, the widely known aviation pioneer, died on July 23.

THE death at the age of sixty-three years is reported of Dr. Wyatt William Randall, chief of the bureau of chemistry of the Maryland Department of Health and associate in chemistry in the School of Hygiene and Public Health of the Johns Hopkins University.

DR. ARTHUR A. LAW, one of the founders of the American College of Surgeons and for many years a professor in the department of surgery of the University of Minnesota, died on July 9 at the age of fifty-eight years.

DR. CHARLES CHANNING ALLEN, dean emeritus of the Kansas City Western Dental College, died on July 15.

WILLIAM HENRY BRISTOL, president of the Bristol Company at Waterbury, Connecticut, known as the manufacturer of recording instruments and as the inventor of the Bristolphone, an instrument which synchronized sound and action in motion pictures, died in June at the age of seventy-one years.

MEMORIALS

A DISPATCH from Oslo reports that a ceremony took place recently at the monument of Niels Henrik

Abel, the great mathematician, when the Italian mathematicians paid him homage through Dr. Bruno de Mori. The Italian legation, the University of Oslo, Norwegian mathematicians and the government were represented.

A MEETING in honor of the late Dr. Fridtjof Nansen held on July 14 at the Royal Society of Arts was addressed by Lord Cecil, Mr. P. N. Baker, Mr. Cunninghame Graham, the Norwegian minister and others. The chair was taken by Mr. J. Howard Whitehouse, chairman of the committee for the preservation of the *Fram*.

THE *Journal* of the American Medical Association states that "fellows and friends of the London School of Tropical Medicine have subscribed more than £6,000 toward the establishment of a memorial home for the school which Sir Patrick Manson founded and where he taught for twenty years. To further this tribute to the father of modern tropical medicine, the fellows have sent out a general appeal for £20,000 in the belief that many individuals outside of the small professional circle of tropical medicine will help. Donations may be sent to Dr. George Carmichael Low, the Royal Society of Tropical Medicine and Hygiene, 11 Chandos Street, Cavendish Square, London, W. 1."

SCIENTIFIC EVENTS

SCIENCE SERVICE RADIO TALKS

THROUGH the courtesy of the Columbia Broadcasting System in placing a weekly fifteen-minute period at its disposal, Science Service has been presenting a radio talk by a prominent scientist every Friday afternoon at 3:45 p.m., Eastern Time. These began on Friday, March 28, with a talk by Dr. Warren S. Thompson, director of the Scripps Foundation for Research in Population Problems, on "Our Future Population." They are presented through a network of thirty to forty broadcasting stations covering the country from coast to coast.

Other speakers in the series to date have been: Dr. Paul Heyl, U. S. Bureau of Standards; Dean Edward W. Berry, the Johns Hopkins University; Dr. Charles G. Abbot, secretary, Smithsonian Institution; Dr. Harlan T. Stetson, director, Perkins Observatory, Ohio Wesleyan University; Dr. Ray Lyman Wilbur, president of Stanford University and Secretary of the Interior; Dr. Walter V. Bingham, director, Personnel Research Federation; Dr. John C. Merriam, president, Carnegie Institution of Washington; Sir William Bragg, director, Royal Institution of Great Britain; Dr. A. C. Lane, professor of

geology, Tufts College; Dr. Fay-Cooper Cole, professor of anthropology, University of Chicago; Dr. Kirtley F. Mather, chairman, department of geology and geography, Harvard University; Dr. Frank E. Lutz, curator of entomology, American Museum of Natural History; Mr. H. N. Eaton, physicist, U. S. Bureau of Standards; Dr. Samuel A. Mitchell, director, Leander McCormick Observatory, University of Virginia, and Dr. Knight Dunlap, professor of experimental psychology, the Johns Hopkins University. All the talks are arranged by Mr. James Stokley, of the editorial staff of Science Service, under the general direction of Watson Davis.

For the months of August and September, Science Service has announced the following program.

- August 1. Dr. Charles P. Olivier, director of the Flower Observatory of the University of Pennsylvania—"The August Meteors."
- August 8. Dr. W. J. Humphreys, professor of meteorological physics, U. S. Weather Bureau—"Weather and Aviation."
- August 15. Mr. H. N. Wheeler, U. S. Forest Service—"Fighting Forest Fires."
- August 22. Dr. John M. Arthur, Boyce Thompson