reporting of association meetings in the daily press and the data given in the following table will be of interest in this connection. This table has been prepared by Mr. W. Eric Drake, of the Washington office of the association. Eight leading newspapers that gave special attention to the meeting were selected and the amount of space given by each of them to news from the meeting, for each branch of science and for science in general, was determined in terms of column-inches. Illustrations were not included; they are generally half-tone reproductions of photographs of eminent men, though pencil sketches are sometimes used. The results are the data given in the table, the names of the eight dailies being shown at the top. The several fields of science are shown in the first column, referring generally to the sections of the association. But it will be noted that the F-G category includes material of zoology and botany that could not be readily separated. Also, the last category of the list is, for the same reason, made to include both general science and the special field of education (Section Q). To avoid these combinations, which are perhaps not logically satisfactory, would have required more time and attention than seemed to be justified in such a little study as this.

Members of the association and of the associated societies who are interested in this aspect of the popularization or humanization of science will find interest in the fact that the permanent secretary's office now prepares regularly a scrap-book of newspaper clippings for each annual meeting, each clipping being marked to show the name and date of the paper in which it appeared. The clippings are attached to strong sheets, which are finally bound in permanent form. These scrap-book volumes may well be of considerable interest as time goes on. They form a part of the association archives. Any one who cares to examine the scrap-books may do so at the Washington office at any time.

Turning to the table of measurements of space given by the newspapers to reports of the fifth Philadelphia meeting, it will be noticed that all eight papers together devoted nearly 1,400 column inches to the sessions. The largest space (347 in.) was given by the Boston Transcript and the next largest (235 in.) by the Philadelphia Public Ledger. As to the amounts of space devoted to the association sections by all papers together, it appears that Section D (Astronomy) was most generously treated and that nearly as much space was devoted to the programs of Section K (Social and Economic Sciences). Section B (Physics) received a large amount of space. If zoology and botany were combined (items F, G and F-G in the table) the resulting total (232 in.)

would be larger than any other in the table, but the separate items are not very large.

If one studies the general program of the meeting it becomes clear that at least three factors take part in determining the amount of space devoted to any branch of science: the number of papers presented in the given branch; the adaptability of the material presented, with reference to popular accounts such as are suitable for newspaper publication; and the degree of reportorial or editorial interest in the given branch. The figures given in the table are not to be taken to represent any single one of these factors, but in some cases one factor appears to have dominated while in other cases another factor seems to have been most pronounced. Mathematics is perhaps least adaptable to popular presentation and only three of the dailies attempted to do anything with this field. On the other hand, all of the eight dailies dealt with physics and astronomy as well as with social and economic science. Special editorial interest, or lack of interest, in certain fields appears to be indicated in some cases.

> BURTON E. LIVINGSTON, Permanent Secretary

SCIENTIFIC EVENTS

RESEARCH FELLOWS AT YALE UNIVERSITY

INVESTIGATIONS into scientific and literary problems are being made this year under Yale University auspices in Greece, England, Scotland, Germany, Austria, Belgium, Russia and Africa, according to an announcement by Dean Wilbur L. Cross, of the Yale Graduate School.

Eight holders of Sterling fellowships, the funds for which were provided by the trustees of the estate of John W. Sterling, are carrying on their work abroad. These include: Dr. Hempstead Castle, who is in Europe collecting material for a world monograph of the known species of radula; Dr. Filmer Stuart Cuckow Northrop, who has been studying in Berlin and Zurich the generalization beyond the general theory of relativity, and Dr. Prescott Wilson Townsend, who has been continuing his archeological research in northern and western Africa.

John Wynn Gillespie, M.A., Stanford University, and Victor Pietschmann, University of Vienna, who are the holders of Bishop Museum Fellowships, are conducting research in botany and zoology in the islands of the Pacific. Mr. Gillespie is concentrating on the Fiji and Samoa Island groups, and Dr. Pietschmann on the New Hebrides and Loyalty Islands.

Six of the scholars awarded Sterling fellowships

for research at Yale University this year are of foreign birth. These include Dr. Blythe A. Eagles. of the University of Toronto, who is conducting research in biochemistry; Amihud Crasovsky, of Jaffa, Palestine, a graduate of the University of California, who is in the department of botany; Catherine L. T. Lucas, B.Sc., University of London, M.Sc., London School of Tropical Medicine and Hygiene, who is in the department of zoology; Paul Slavenas, of the University of Lithuania, Kaunas, Lithuania, who is conducting research in astronomy, and Desire T. Veltman, of the University of Holland, of Dutch citizenship, who is in the department of philosophy. Mr. Dirk Brouwer, who is assistant at the observatory at Leiden. Holland, is doing work in astronomy at Yale.

The Lilly research fellowship in organic chemistry has been awarded this year for the first time. The recipient is Dr. Richard Helmuth Fred Manske, Ph.D., Manchester University, England, 1926. Dr. Manske is conducting research in organic chemistry under Professor Treat B. Johnson.

Among the visiting members of the faculties of other institutions who are making use of the facilities of the university are, Professor Magumi Eri, of the Higher School for Women, of Nari, Japan, who is working under Professor Ross G. Harrison in the department of zoology; Professor C. C. Chen, Ph.D., Yale, of Shanghai College, who is undertaking special research in bacteriology, and Miss Isabella Gordon, Ph.D., University of London, from Scotland, is doing research work in zoology and anatomy.

PUBLIC LECTURES ON ASTRONOMY

A SERIES of five "Open Nights," under the auspices of the Bond Astronomical Club, are being held at the Harvard College Observatory. A short non-technical talk is followed, when the weather permits, by telescopic observations of celestial objects. Exhibits showing the work of the observatory are explained by members of the club. Tickets for these open nights must be obtained in advance. There is no charge for admission. The lectures begin at 7:45 P. M. The dates, titles of lectures and the speakers are as follows:

Oct. 10.—The full moon and the eclipsed moon. Dr. W. J. Fisher.

Oct. 13.—The winter constellations. Dr. Cecilia H. Payne.

Oct. 18.-The planets. Mr. Leon Campbell.

Oct. 24.-New stars. Dr. Annie J. Cannon.

Oct. 27.—Star clouds and nebulae. Professor Solon I. Bailey.

The Astronomical Society of the Pacific has ar-

ranged two series of lectures for the coming season, one of six lectures at Culbertson Hall, Pasadena, and one of six lectures at the Public Library, Los Angeles. All of these are free to the public, although tickets, which may be obtained at the office of the Mount Wilson Observatory, will be needed for admission to all lectures in Culbertson Hall. All the lectures are to begin at 8:00 P. M. The subjects, dates and lecturers are:

Culbertson Hall, Pasadena

Sept. 29.—Sun rays in the service of man. Dr. C. G. Abbot.

Oct. 27.-The exploration of space. Dr. E. P. Hubble.

Nov. 17.—Sun-spots. Dr. S. B. Nicholson.

- Dec. 15.-Stars in action. Professor A. H. Joy.
- Jan. 26.-How stars are made. Dr. H. N. Russell.
- Feb. 24.—Our planet neighbors. Dr. R. G. Aitken.

Public Library, Los Angeles

Dec. 15.—Telescopes. Dr. F. G. Pease.

Jan. 19.-The sun. Professor F. Ellerman.

Feb. 23.-The solar system. Dr. R. G. Aitken.

March 23-Giant and dwarf stars. Dr. F. C. Leonard.

CHANGES IN THE ORGANIZATION OF THE U. S. BUREAU OF STANDARDS

An important change in the administrative organization of the U. S. Bureau of Standards, which it is believed will make for increased efficiency through a better grouping of the bureau's numerous activities, has been announced by the director, Dr. George K. Burgess.

Under the new arrangement, Dr. L. J. Briggs has been appointed assistant director in charge of research and testing, while Ray M. Hudson becomes assistant director in charge of commercial standards.

The regrouping is a recognition of the importance of standardization in the commercial world, this portion of the bureau's work having grown with great rapidity during the last few years.

As stated above, the bureau's activities will be divided into two main groups. The first, under the immediate supervision of Dr. Briggs, will include all the bureau's scientific research and testing, the development, construction, custody and maintenance of reference and working standards and their intercomparison, improvement and application in science, engineering, industry and commerce.

The second group, headed by Mr. Hudson, will include the supervision, direction, formulation and coordination of commercial standards, with particular reference to the needs of industry, involving the oversight of the division of simplified practice, division of commercial standards and part of the work of the division of building and housing relating to codes and