on which they are each engaged, and the contrast between the astronomy of to-day and of sixty years ago is apparent. The absolute magnitude of a star or its actual luminosity independent of its distance is now a commonplace and forms the subject of many investigations. Certain peculiarities of spectrum have been correlated with the absolute magnitude in cases in which the latter is known, and, generalizing from this, a method has been devised for finding from the spectrum the absolute magnitude, and therefore the parallax, of stars. Professor W. S. Adams, to whom this conception is due, was constrained to say that the data on which his first list of parallaxes was based are capable of improvement, but this research is as yet in its early stages. Dr. Seares, also of Mount Wilson, has devised new photographic methods for determining the colors of stars, and a correlation between color, spectral type and absolute magnitude is being established. Professor Benjamin Boss, of the Dudley Observatory, whose name is associated more with geometrical astronomy than with physical, had some interesting facts to tell about the difference in direction of motion of the classes of stars known as the Giant and Dwarf, which is a distinction depending on luminosity.

Dr. Schlesinger, of Allegheny, and Professor Joel Stebbins gave details of their work in determining the variation of brightness of variable stars, the method of the photo-electric cell used by the latter being a very recent adaptation of physics to astronomy not unknown in England; whilst Professor Campbell, director of Lick Observatory and president of the delegation, refrained from speaking of his well-known observations of radial velocity, but told his audience of the observations of the Lick Observatory party on the occasion of the eclipse of June 8, 1918. An attempt was made to detect the Einstein effect, or a light-displacement effect from any cause, by comparison of a photograph of the stars round the sun with a photograph of the same field in the night sky, but the comparison failed to show any displacement of this nature. It is regrettable that the Harvard Observatory was not represented owing to the recent death of Professor E. C. Pickering.

This brief sketch of the proceedings at this meeting is sufficient to show the trend of modern astronomy. It was impressing to see so many men, comparatively young, who are devoting themselves to abstract science. That there is similar progress on this side of the Atlantic reference to recent volumes of the Monthly Notices will show. Here, as counterpart to the brilliant invention of new methods of attack by observation above recorded, we have development by mathematical theory and the statistical discussion of results.

## ORGANIZATION OF THE AMERICAN METEORO-LOGICAL SOCIETY

AN American meteorological society is being formed and will be definitely organized at the A. A. A. S. meeting in St. Louis next December.

The *purpose* of this society is to fill the need for an easy interchange of ideas among those interested in atmospheric phenomena and their effects on man, and thereby to promote instruction and research in these important subjects. There never has been a national association in this large field in America.

The accomplishment of these objects may be brought about (1) by general meetings with the A. A. A. S., and local meetings at other times; (2) by using the *Monthly Weather Review*, the only meteorological magazine of the United States, as a medium for publishing meteorological and climatological articles, and (3) by issuing a monthly leaflet containing news, announcements, notes, and queries.

The principal sources of membership will be, teachers of meteorology (about 200), Weather Bureau employees (around 300), former Signal Corps and Navy meteorologists (nearly 600), and the numerous corps of amateur meteorologists. Dues of \$1 a year should be sufficient to cover all expenses of the monthly leaflet and arrangements for meetings.

The need for considerable meteorological work in connection with military and naval operations during the war and our present expanding demands for weather forecasts not only at the surface but also at various levels in the free air makes the present the opportune time to capitalize the war-time interest as a foundation for the great future needs of meteorology. I would be glad to have communications from prospective members of a meteorological society in order to have a strong, tentative organization and working plans for the formal establishment of this society.

CHARLES F. BROOKS WEATHER BUREAU,

WASHINGTON, D. C.

## SCIENTIFIC NOTES AND NEWS

AT the recent meeting of the American Academy of Arts and Sciences Professor Forest Ray Moulton, of the department of astronomy and astrophysics of the University of Chicago, was elected a fellow in the section of mathematics and astronomy.

AT the recent commencement exercises of the University of Georgia, Augusta, the honorary degree of doctor of science was conferred on Dr. John M. T. Finney, of Baltimore.

QUEEN'S UNIVERSITY, Belfast, has conferred the degree of LL.D. on Lieutenant-Colonel Ribert McCarrison, I.M.S., a graduate of the university, in recognition of his investigations into the causes of goiter and cretinism; on Dr. Johnson Symington, for twenty years professor of anatomy in the university, and now emeritus professor; the D.Sc. on Sir David Semple, late R.A.M.C., a medical graduate of the university, formerly assistant of pathology in the Army Medical School, Netley, and director of the Pasteur Institute, India; the M.D. on Professor J. G. Adami, F.R.S., vice-chancellor of the University of Liverpool, and lately professor of pathology in McGill University, Montreal, in recognition of his researches in pathology; on Dr. Alexis Carrel, member of the Rockefeller Institute of Experimental Medicine, New York, and during the war medical officer of the Special Research Hospital of the French Army; on Professor Harvey Cushing, of Harvard University; on Lieutenant-Colonel J. A. Sinton, V.C., I.M.S., formerly Riddell demonstrator in pathology at Queen's University, in recognition of his early distinctions and of his valor in the field while engaged in the treatment and succor of the wounded.

THE Navy Department announces the promotion of the following officers of the Medical Corps, Reserve Force, to the rank of commander; William Seaman Bainbridge, Robert Crier LeConte, William Baret Brinsmade, Stanley Stillman, Eugene Floyd DuBois, Rea Smith, John Chalmers DaCosta, Milton Joseph Rosenau, George Gorgas Ross, Albion Walter Hewlett, Hobart Amory Hare, Robert Battery Greenough, Judson Deland, James Eli Talley, Edward Milton Foote, Paul Adin Lewis, Guy Cochran, Verne Adams Dodd, Edgerton Lafayette Crispin, John Aloysius McGlinn, Le-Roy Goddard Crandon, Harold Denman Meeker, Nelson Henry Clark, Halsey DeWolf, Charles W. Moots, George Arnold Matteson, James Taylor Hanan, Francis Joseph Dever, Frank Cousins Gregg, Clifford Elmore Henry, Porter Bruce Brockway, Clinton C. Tyrrell, Frederick Obadiah Williams, Harvey Mitchell Righter, Zachray Thomas Scott, William Curtis Newton, William Henry Areson. This is the first time in the history of the Navy that medical reserve officers have been ranked higher than Lieutenant Commander.

R. F. BACON, A. V. Bleininger, G. A. Burrell, F. G. Cottrell, J. O. Handy, G. A. Hulett, G. F. Mason, Samuel R. Scholes and Alexander Silverman have been appointed delegates from the American Chemical Society to attend the ceremonies, exhibits and demonstrations to be given at Pittsburgh, Pa., September 29–30 and October 1 at the time of the dedication of the new buildings of the Bureau of Mines.

DR. JACK J. HINMAN, JR., after having been on leave of absence as a captain of the Sanitary Corps in the A. E. F., engaged in water supply work, has returned to his work as water bacteriologist and chemist for the Iowa State Board of Health, and assistant professor of epidemiology in the State University of Iowa.

DR. EDWARD G. BIRGE has been appointed state epidemiologist of Iowa, succeeding Dr. John H. Hamilton, Iowa City. Dr. Birge is the son of President Birge of the University of Wisconsin.