

be made to two positions as laboratory assistant in physics, National Bureau of Standards, Treasury Department, one at a salary of \$1,200 and the other at a salary of \$1,400 per annum.

On the same day an examination, which also will not require attendance, will be held for two assistant agrostologists in the U. S. Department of Agriculture, with salaries respectively of \$1,600 and \$1,400 per annum. The Department states that the positions for which this examination is held require thorough training and practical experience in subjects pertaining to grasses and forage plants and animal foods, and the management of grass lands and forage crops in the field. The subjects and weights are:

Training and experience with special reference to:	
(a) Theory and practice in agriculture.....	25
(b) Teaching or scientific research.....	10
(c) Publications and editorial work.....	15
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	50
Thesis .....	30
Plan (to be devised by the applicant) for experiments to solve any forage problem .....	20
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Total.....	100

On the same day there will, further, be an examination, not requiring attendance, for the position of scientific aid with a knowledge of statistics in the Department of Agriculture.

This examination will consist of the following subjects:

College course (with bachelor's degree) or its equivalent .....	40
Post-graduate work and special qualifications.....	30
Thesis or other literature .....	30
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	100

Applications will not be received from other than graduates of colleges receiving benefits from grants of land or money from the United States, unless it is shown that the applicants have pursued courses of instruction having an economic bearing which will qualify them for the work of the Department of Agriculture. Applicants must show the scope of the studies pursued and the length of time devoted to them, the standing in such studies, especially with regard to the subject of statistics, and the special qualifications which they have for work

upon this subject. They must also submit a thesis upon the subjects of statistics, or in lieu thereof such other literature on the subject as may have been published over their own signature. The salary of the position is \$40 per month and no person will be permitted to serve as a scientific aid for more than two years. Scientific aids who pass in an open competitive supplementary examination in some technical or scientific subject or subjects which may be held will be eligible to certification from such supplementary register to higher positions within the classified service, regardless of their services as scientific aids.

#### THE AMERICAN ASSOCIATION.

##### SECTION A. MATHEMATICS AND ASTRONOMY.

The officers of the section, Professor James McMahon, chairman, and Professor George A. Miller, secretary, have received the following titles for presentation at the Denver meeting. They have not, however, yet been approved by the Sectional Committee:

'A Summary of the Salient Effects due to the Secular Cooling of the Earth': Professor R. S. WOODWARD, Columbia University.

'The Energy of Condensation of Stellar Bodies': Professor R. S. WOODWARD.

'Supplementary Report on Non-Euclidean Geometry': Professor GEORGE BRUCE HALSTED, University of Texas.

'On the Application of the Fundamental Laws of Algebra to Infinite Series': Professor FLORIAN CAJORI, Colorado College.

'Conditionally Convergent Series whose Product is Absolutely Convergent': Professor FLORIAN CAJORI.

'Report on Continuous groups': Professor H. B. NEWSON, Kansas University.

'The Great Meteor of December 7, 1900': Professor H. A. HOWE, University of Denver.

'Note on a Direct Solution of Kepler's Problem': Professor H. A. HOWE.

'The Next Appearance of Eros': Professor H. A. HOWE.

'On Systems of Isothermal Curves': Professor L. E. DICKSON, University of Chicago.

'On the Modular Function Associated with the Irrationality  $s^3 = z(z-1)(z-x)(z-y)$ ': Dr. J. I. HUTCHINSON, Cornell University.

'The Physical Bases of Long-Range Seasonal Forecasts': Professor CLEVELAND ABBE, U. S. Dept. of Agriculture, Weather Bureau.

'Philosophy of Mathematics': Professor W. J. KERR, Agricultural College of Utah.

'Astronomy in the High Schools': MISS MARY PROCTOR, New York City.

'Concerning (a) the Concept of  $n$ -Dimensional Space and (b) Self-Reciprocal Geometries': C. J. KEYSER, Columbia University.

'On the Probable Densities of the Satellites of the Solar System': Professor T. J. J. SEE, U. S. Naval Observatory.

'Photometric Observations of Eros': HENRY M. PARKHURST, New York City.

'The History of Several Fundamental Theorems in the Theory of Groups of Finite Order': Dr. G. A. MILLER, Cornell University.

#### SECTION F. ZOOLOGY.

Professor Henry B. Ward, secretary, has sent the following circular letter to members of the section:

The next meeting of the A. A. A. S. will be held in Denver, Colorado, August 24th to 31st, 1901. The opportunity is good for bringing together a large number of zoologists and making the meeting particularly interesting.

A provisional program of papers to be read before Section F will be printed within a short time and all members are urged to send titles as soon as practicable.

Permit me to call your attention to Article 28 of the constitution which designates how the sectional committee shall complete the final program from abstracts of papers presented. Kindly conform to the conditions as given there. I enclose blanks for titles and abstracts of papers.

The work of section F would be much strengthened if a larger number of the morphologists of the country were enrolled in its membership. Now that each member of the association receives gratis the official journal, *SCIENCE*, it is certainly true that no one can afford to be without membership in the organization.

Will not each present member assist in the work of enlarging the membership roll?

#### CONVOCATION WEEK.

It will be remembered that, at the instance of a committee of the American Association for the Advancement of Science, the Association of American Universities recently took action recommending that a convocation week be set aside for the meetings of scientific and learned societies. Columbia University, Cor-

nell University, the Catholic University of America, Clark University and Johns Hopkins University have altered their calendars, so that exercises will not be held during the week in which January 1 falls. The schedules of California, Leland Stanford Junior, Michigan and Yale are already such that no exercises fall in this week. Pennsylvania and Princeton have arranged to permit all instructors who wish to attend the meetings held during convocation week to do so, and it is expected that they will alter their official calendars next year. The faculty of the University of Wisconsin has voted to lengthen the Christmas holidays so that convocation week will be left free till 1905; this action will doubtless be confirmed by the regents and made permanent. The only members of the Association of American Universities, whose sessions begin during the week above mentioned and which has not yet taken action are Harvard and Chicago. It is to be hoped, may we not say expected, that all the institutions of the United States and Canada will give their support to this important movement.

#### SCIENTIFIC NOTES AND NEWS.

THE HON. CHARLES D. WALCOTT, director of the U. S. Geological Survey, gave an address before the University of Chicago on June 17, his subject being 'The Relations of the National Government to Higher Education and Research.' We hope to publish this address next week.

DR. PAUL C. FREER, professor of general chemistry in the University of Michigan, has been granted leave of absence for one year to go to Manila on an important scientific commission on behalf of the Philippine Commissioners.

DR. WILLIAM Z. RIPLEY, of the Massachusetts Institute of Technology, has been invited to deliver the Second Huxley Memorial Lecture before the Anthropological Institute of Great Britain. The first lecture was given last year by Lord Avebury.