SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

EDITORIAL COMMITTEE: S. NEWCOMB, Mathematics; R. S. WOODWARD, Mechanics; E. C. PICKERING,
Astronomy; T. C. MENDENHALL, Physics; R. H. THURSTON, Engineering; IRA REMSEN, Chemistry;
JOSEPH LE CONTE, Geology; W. M. DAVIS, Physiography; HENRY F. OSBORN, Paleontology;
W. K. BROOKS, C. HART MERRIAM, Zoology; S. H. SCUDDER, Entomology; C. E. BESSEY,
N. I. BRITTON, Botany; C. S. MINOT, Embryology, Histology; H. P. BOWDITCH,
Physiology; J. S. BILLINGS, Hygiene; WILLIAM H. WELCH, Pathology;
J. MCKEEN CATTELL, Psychology; J. W. POWELL, Anthropology.

FRIDAY, APRIL 26, 1901.

CONTENTS:

Convocation Week	641
The National Academy of Sciences	643
The Social Service of Science: PROFESSOR WIL- LIAM HARMON NORTON	
LIAM HARMON NORTON	644
The Gravity Measures of Europe and of the United States: DR. JOHN F. HAYFORD The American Institute of Electrical Engineers:	
States : DR. JOHN F. HAYFORD	654
The American Institute of Electrical Engineers:	
W. C. ANDREWS	655
Scientific Books :	
Kölliker's Erinnerung aus meinen Leben: PRO-	
FESSOR CHARLES S. MINOT. Eckstorm's Bird	
Book, and Woodpeckers: C. F. B. Stillman's	
Engineering Chemistry: PROFESSOR W. A.	
NOYES. Classen's Method of Analytical Chem-	
istry: PROFESSOR H. P. TALBOT	657
Scientific Journals and Articles	661
Societies and Academies :	
Section of Anthropology and Psychology of the New York Academy of Sciences: DR. R. S.	
New York Academy of Sciences: DR. R. S.	
WOODWORTH. Geological Society of Washington:	
DR. F. L. RANSOME and DAVID WHITE. Chem-	
ical Society of Washington : DR. L. S. MUNSON.	
Philosophical Society of Washington: C. K.	
Philosophical Society of Washington: C. K. WEAD, JOHN F. HAYFORD. Anthropological	
Society of Washington: DR. WALTER HOUGH.	
The Academy of Science of St. Louis: PROFESSOR	
WILLIAM TRELEASE. The Elisha Mitchell Scien-	
tific Society: PROFESSOR CHAS. BASKERVILLE	662
Discussion and Correspondence :	
Oil in Texas: PROFESSOR G. D. HARRIS. Dis-	
claimer No. 2: PROFESSOR E. F. BUCHNER	1
	666
Shorter Articles :	
The Development of the Pollen Tube and Fertiliza-	
tion in Pines: MARGARET C. FERGUSON	668
Notes on Entomology: NATHAN BANKS	668
Working of Patents Acts: PROFESSOR R. H.	
	669
THURSTON A Mineral Survey of Texas : PROFESSOR FRED-	
ERIC W. SIMONDS	671
Proposed Survey of the Antiquities of Michigan	672
The Davenport Academy of Science	672
The Statistical Study of Biological Problems	673
The School of Pedagogy of New York University	674
Scientific Notes and News	675
University and Educational News	000
	680

CONVOCATION WEEK.

THE action of the Association of American Universities recommending the adoption of a 'convocation week' to permit learned societies to hold their meetings at some other period than during the summer vacation has already been reported in these The action was taken in consecolumns. quence of the request made officially to the Association by the committee appointed by the American Association for the Advancement of Science. The vote determining the recommendation was unanimous, and has now been reported formally to the fourteen universities which are members of the Association making the recommendation. The next step must be the adoption of the plan by our higher educational institutions. It is therefore desirable that all scientific men should understand the project, which may properly claim universal support.

The week proposed is that in which January 1st falls. In some universities, as for example Yale, this week is already included in the regular vacation, so that for them no change is involved. Many universities have already a vacation beginning just before Christmas and extending to the second or third of the following January. For them the changes will be In those cases in which the two or slight. three days involved cannot, in the opinion of those deciding, be spared, it will probably be practicable to shorten correspondingly one or more of the vacations at other periods of the year. As regards the few colleges and technical schools which do not have the usual Christmas vacation, it may be suggested that it will suffice to vote to grant leave of absence during convocation week to those who desire to attend the society meetings, and perhaps later, when the 'week' has an assured and clearly permanent place these institutions, will conform to what will then be a recognized as a prevailing custom.

Columbia University has the honorable distinction of being the first to adopt the important innovation, and has already changed its calendar for 1901–1902, setting free the week of January first for convocation purposes. It is expected that several other universities also will soon announce their adherence to the plan, and it is hoped that in a short time the majority of American and Canadian universities will adopt the recommendation under consideration.

The reasons for asking for the establishment of a convocation week are obvious, since they are the direct outcome of conditions and experiences which are distinctively American and are familiar to all.

The general proposition that annual meetings of scientific men are desirable requires no demonstration. Every one realizes that, after remaining a long time within the circle of his own university, it is immensely stimulating to meet with a number of other men, pursuing the same branch of science. Moreover, the oral presentation of the results of investigation has certain real advantages over the written form, while the informal discussions at meetings are frequently worth more than the whole cost and trouble of attendance. The gain in these ways and many others is so great for the professors that it must be considered an important part of sound university policy to encourage and promote attendance at scientific meetings, since thereby a university can easily, and often greatly, increase the value of its teaching staff.

It is to be recalled next that attempts to hold meetings in summer time encounter difficulties so serious that such attempts are and can be only 'partially successful. It is the conviction that this difficulty is great and without remedy which has led the American Association for the Advancement of Science to wish to change its time of meeting to the winter season. It accordingly appointed a committee to take necessary action for this purpose. The committee, of which Dr. Minot is chairman and Professor Cattell secretary, is constituted by Charles S. Minot, President-Elect; R. S. Woodward, President ; L. O. Howard, Permanent Secretary; E. L. Nichols and J. McK. Cattell.

The tropical character of the American summer has led to the gradual extension of the national custom of scattering to mountain, seashore and country, and those connected with universities utilize the long vacation to settle down in a summer home, from which it is more than difficult to entice them. It must be further remembered that all those whose studies are with nature—the geologists, botanists, zoologists, anthropologists and others—use the summer for their expeditions, so that for many of them attendance at summer meetings is impossible.

On the other hand, there has grown up within the last dozen or fifteen years the custom of holding meetings of learned societies during the brief Christmas holidays. The first society to adopt this time for its gathering was the American Society of Naturalists, which held its first December meeting in New York, in 1883. Since then a number of other societies, more or less national in scope, have been formed and hold their meetings during the same period. We may mention among scientific societies the following :

The American Society of Naturalists.

The American Morphological Society.

The Association of American Anatomists.

The American Bacteriological Society.

The American Physiological Society.

The American Psychological Association.

The American Folklore Society.

The American Society of Plant Morphology and Physiology.

The Anthropological Section of the American Association.

The Geological Society of America.

The American Chemical Society.

The American Mathematical Society.

The American Physical Society.

All these societies, we think, without exception, have found from experience that the Christmas holidays are a convenient time for their meetings, except in one respect that the time is too short, especially when Christmas day falls on a Wednesday or Thursday, for then Sunday falling half way between Christmas and New Year, it is impracticable to get more than two days for a meeting, and two days, as we have all learned, is far too brief a time for our needs.

These circumstances point obviously to the lengthening of the Christmas vacation past New Year as the remedy, hence the selection of the week in which the first of January falls as 'convocation week.'

Should the proposition be carried out, it will afford an opportunity for the elevation of science in America of inestimable value and will be a contribution to the advancement of learning in all its branches, well worthy to initiate the progress of the new century.

THE NATIONAL ACADEMY OF SCIENCES.

THE annual stated session of the National Academy of Sciences was held in Washington, April 16 to 18 inclusive. The following papers were read :

'The Climatology of the Isthmus of Panama': HENRY L. ABBOT.

'The Effects of Secular Cooling and Meteoric Dust on the Length of the Terrestial Day': R. S. Wood-WARD.

'The Use of Formulæ in demonstrating the Relations of the Life History of an Individual to the Evolution of its Group': ALPHEUS HYATT.

'Artificial Parthenogenesis and its Relation to Normal Fertilization ': E. B. WILSON.

'Simultaneous Volumetric and Electric Graduation of the Condensation Tube': CARL BARUS.

² 'Table of Results of an Experimental Enquiry regarding the Nutritive Action of Alcohol, prepared by Professor W. O. Atwater, of Middletown, Conn.': Presented by J. S. BILLINGS.

'The Significance of the Dissimilar Limbs of the Ornithopodous Dinosaurs': THEO. GILL.

'The Place of Mind in Nature': J. W. POWELL.

'The Foundation of Mind': J. W. POWELL.

'Conditions Affecting the Fertility of Sheep and the Sex of their Offspring': ALEXANDER GRAHAM BELL.

' The New Spectrum ': S. P. LANGLEY.

Mr. Alexander Agassiz, of Cambridge, Mass., was elected president of the Acad-