AMERICAN MATHEMATICAL SOCIETY.

THE regular meetings of the American Mathematical Society were formerly held at monthly intervals from October to May, the program being readily disposed of in a single afternoon session. A summer meeting, occupying two days, was also held, usually in connection with that of the American Association. At the Buffalo meeting in 1896 and the Boston meeting in 1898 a colloquium, or course of lectures on recent developments in mathematics, was also provided. With the growth of the Society in maturity and productiveness it was found advisable about two years ago to modify this plan so far as concerned the winter meetings. In order to make the individual meetings more prominent and to secure them a concentration of interest, it was decided that they should be held at intervals of two months, viz., on the last Saturday of October, February and April, and on a variable day in the last week of December. In compensation for the reduction in the number of meetings, provision was made for two sessions at each meeting, to be held in the morning and afternoon. About the same time the Chicago Section was organized, and its April and December meetings have proved valuable additions to the Society's activities. The results have fully justified the wisdom of the new departure. The attendance has greatly increased, the number of papers presented at each meeting has quadrupled, and the meetings have become more substantial and active centers of mathematical intercourse. This remarkable advance is in one way occasioning the Society a delectable embarrassment. The number of papers offered for presentation is becoming so great that the two sessions of the meetings no longer furnish anything like adequate time for their reading and discussion. It will apparently soon be necessary to provide longer or more frequent meetings, against both of which suggestions valid objections can be urged. Another consequence of this profusion of mathematical riches is the growing inadequacy of the present facilities for publication of original mathematical articles in the country. The *Bulletin* of the Society was established as a journal of critical and historical investigation, and although, by the publication of a great number of shorter original articles, it has widely departed from its original purpose, it is no longer able to keep pace with the steadily increasing output without sacrificing its proper functions, a course which cannot be permitted. The Council of the Society has, therefore, had for some time under consideration the question of providing better facilities for publication, and is at present seriously contemplating the periodical publication of Transactions of the Society. This is a project very near to the hearts of many influential and productive members of the Society, and the enthusiasm which it has aroused has again contributed to stimulate the energies of the Society and affords gratifying evidence that the undertaking will be successfully carried through.

A regular meeting of the Society was held at Columbia University on Saturday, February 25th. The total attendance at the two sessions was forty-seven, including thirty-nine members of the Society. President R. S. Woodward, who has succeeded President Simon Newcomb, occupied the chair. The Council announced the election of the following persons to membership in the Society: Mr. John B. Faught, Bloomington, Ind.; Professor Edward B. Fishburne, Waynesboro', Va.; Professor William P. Graham, Syracuse, N. Y.; Dr. Waldemar Schulz, Ithaca, N. Y.; Dr. Ernest J. Wilczynski, Berkeley, Cal. Four nominations for membership were received. An amendment to the constitution was adopted, by which retiring Presidents of the Society

are retained in the Council for one year after retirement.

The following papers were read at the meeting:

(1) PROFESSOR M. I. PUPIN: 'Electrical oscillations on a loaded conductor.'

(2) PROFESSOR MAXIME BÔCHER: 'An elementary proof that Bessel's functions of the zeroth order have an infinite number of real roots.'

(3) PROFESSOR J. M. PEIRCE: 'Determinants of quaternions.'

(4) PROFESSOR HENRY TABER: 'The chief theorem of the theory of finite continuous groups.'

(5) PROFESSOR ALEXANDER MACFARLANE: 'On the imaginary of geometry.'

(6) PROFESSOR EDGAR ODELL LOVETT: 'On a certain class of differential invariants.'

(7) PROFESSOR JAMES PIERPONT: 'On arithmetizing mathematics.'

(8) DR. VIRGIL SNYDER: 'Lines of curvature on annular surfaces having two spherical directrices.'

(9) PROFESSOR W. F. OSGOOD: 'On a continuous function of a real variable whose derivative cannot be integrated.'

(10) PROFESSOR ERNEST W. BROWN: 'On the progress of the calculations in the new lunar theory.

(11) PROFESSOR M. I. PUPIN: 'Lagrange's equations and the principle of equality of action.'

(12) PROFESSOR E. B. VAN VLECK: 'On the determination of a series of Sturm's functions by the computation of a single determinant.'

(13) DR. G. A. MILLER: 'On the primitive groups of degree 17.'

(14) DR. L. E. DICKSON: 'Concerning the abelian and hypoabelian groups.'

(15) DR. F. H. SAFFORD: 'Surfaces of revolution in the theory of Lamé's products.'

(16) DR. D. F. CAMPBELL: 'On linear differential equations of the third and fourth orders in whose solutions exist certain homogeneous relations.'

(17) MR. E. R. HEDRICK: 'On three-dimensional determinants.'

(18) DR. G. H. LING: 'An examination of groups whose orders lie between 1093 and 2000.'

(19) PROFESSOR A. G. WEBSTER: 'Traces illustrating the motion of the top.'

The next meeting of the Society will be held on Saturday, April 29th. The Chicago Section meets at the University of Chicago on Saturday, April 1st.

F. N. COLE,
Secretary.

THE NOMENCLATURE OF THE HYOID IN BIRDS.

THE hyoid apparatus of birds is so simple a structure, one so long known and so well studied, that it would naturally be supposed anatomists might agree upon the names of its component parts. Those who have occasion to refer to anatomical text-books, however, are well aware that there is a surprising, not to say bewildering, variation in the nomenclature used by different authors, as a glance at the accompanying figure and table of names will make apparent.

It is quite evident that all of these names cannot be correct, and a little reflection will show some of the changes that are certainly needed, and others that probably should be made. Taking the last first, let us consider that part, B, termed urohyal by Mivart and Gadow. The urohyal of fishes is a membrane bone developed beneath the anterior portion of the branchial arches; hence, it is quite evident that the name cannot be consistently applied to a cartilage bone at the posterior end of the branchial apparatus, and that Parker's term, second basibranchial, should stand. Equally simple is the case of the paired bones, D, called basibranchials by Gadow and hypobranchials by Beddard. Basibranchials are unpaired bones developed in the median line, and the term is inapplicable to paired bones lying on either side of an unpaired basal bone. As for hypobranchials, these are among the first seg-