

(18) DR. G. A. MILLER: 'On the simple isomorphisms of a Hamiltonian group to itself.'

(19) DR. L. E. DICKSON: 'A new triply-infinite system of simple groups obtained by a two-fold generalization of Jordan's first hypoabelian group.'

(20) DR. L. E. DICKSON: 'Construction of a linear homogeneous group in  $m$  variables.'

(21) MR. JACOB WESTLUND: 'On a class of equations of transformation.'

(22) PROF. F. MORLEY: 'A generalization of Desargues' theorem.'

(23) DR. E. L. STABLER: 'A rule for finding the day of the week corresponding to a given date.'

(24) DR. ARTEMAS MARTIN: 'Evolution by logarithms.'

(25) DR. ARTEMAS MARTIN: 'A method of finding without tables the number corresponding to a given logarithm—II.'

F. N. COLE,  
*Secretary.*

#### BOSTON MEETING OF THE NATIONAL GEOGRAPHIC SOCIETY.

A SPECIAL meeting of the National Geographic Society was held, in connection with Section E of the American Association for the Advancement of Science, in the lecture hall of the Boston Society of Natural History, August 25th, 2 to 4:30 p. m., Vice-President W J McGee presiding in the absence of President Bell; in addition to the members of the Section, a number of the working members of the Society, including a quorum of the Board of Managers, were in attendance.

The first communication was by Marcus Baker, of the U. S. Geological Survey, on 'The Venezuela-British Guiana Boundary Dispute.' Mr. Baker was the geographer of the Boundary Commission appointed by President Cleveland near the end of 1896, consisting of Justice David J. Brewer, Dr. Andrew D. White, Professor Daniel C. Gilman, Justice Richard H. Alvey and F. R. Coudert, Esquire, with S. Mallet-Prevost as Secretary. This Commission, made up of eminent American citizens, undertook a critical examination of

the boundary dispute in that broad and liberal spirit characteristic of American statecraft and diplomacy. Their inquiries were so shaped as to cover the entire history of settlement and occupation of the territory involved; months were spent in searching the archives of both America and Europe for maps and records; and considerable progress was made in the arrangement of this material before the duties of the Commission were brought to an end through an international agreement. While peace-loving citizens and subjects alike rejoiced when the Commission found its occupation gone, those who knew of its work and plans suffered a certain disappointment; for the Commission was the ablest and most disinterested ever created to consider international complications, and the report, if carried out in accordance with the original plan, would undoubtedly have afforded a model for all nations. It was in line with the policy of rendering every line of inquiry exhaustive that the Commission employed a geographer, recommended by the President of the National Geographic Society and the heads of the scientific institutions engaged in geographic work for the federal government. The report of the Commission was far from complete, by reason of the cessation of the work when only well begun, but comprises three octave volumes with a folio atlas, published within a few months. Mr. Baker summarized the geographic material contained in this report, and described the geographic conditions of the disputed territory. His remarks were illustrated by maps compiled from all available sources.

Mr. F. P. Gulliver, of Harvard University, discussed a 'Classification of Coastal Forms,' giving on the blackboard full illustrations of types. The classification proposed is genetic; and the great facility of classifying islands, bars, promontories, sea-cliffs, beaches and other coastal fea-

tures in this way, and thereby forming simple conceptions of otherwise complex phenomena, was happily brought out. The communication marks a noteworthy advance in the coordination of geographic knowledge.

Vice-President McGee gave an address on 'The Growth of the United States,' illustrated by tables and diagrams. It was the purpose of the address to direct the attention of geographers to the more important episodes in the history of the country and the beneficial effect of these episodes on individual and national prosperity. The territorial growth of the United States has been almost unparalleled in the areas acquired, and quite unparalleled in the rapidity and completeness with which the new territory and resources have been assimilated; no acquisition has been followed by disaster or difficulty, while every accession has stimulated enterprise and quickly resulted in increased facilities, augmented population and greatly enhanced individual and collective wealth. The values were shown quantitatively by means of diagrams, which render it clear that the incomparable growth of the United States in enterprise, population, commerce and wealth is directly traceable to that territorial expansion which has been one of the most conspicuous features in the history of the nation. It was pointed out that the Louisiana purchase made America a steamboat nation; that the acquisition of Texas and California made America a railway and telegraph nation, and incidentally that the events of 1898 must bring America to the front in the only line in which she is backward and feeble, *i. e.*, marine shipping. The address is printed in the September number of the *National Geographic Magazine*.

Mr. Mark S. W. Jefferson presented an illustrated paper on 'Atlantic Estuarine Tides.' His data were derived partly from the reports of the U. S. Coast and Geodetic

Survey, partly from other sources; they were combined in such manner as to explain the apparent abnormalities in the tides of the middle and northern Atlantic slopes, and to reduce the whole to definite system. The tides of the principal estuaries were tabulated; the bay type and the river type of tide were distinguished; and the relation between configuration and other factors and the ebb and flow of the local tide was illustrated by numerous examples. The paper is one of a series on which the author is engaged, some of which are assigned for early numbers of the *National Geographic Magazine*.

Mr. John Hyde, Statistician of the Department of Agriculture, presented a summary statement of 'Considerations Governing Recent Movements of Population.' Adverting to the marvellous development of transportation facilities within recent decades, the author directed attention to the growing instability of population; to the habit of seeking new lands and climates where conditions of life were more favorable, and to the flocking of people to districts giving promise of material or moral advantage. It is largely to these conditions that the enormous immigration to the United States must be ascribed. It is a significant fact that, when the emigration from fatherlands in Europe to the United States and to the colonies of the home governments is compared, it is found that the greater part of the home-seekers have drifted to America, rather than to the colonies of their own country. This fact indicates that material advantage is but one of the conditions governing movements of population, and that another impressively potent factor is the desire for that intellectual freedom guaranteed to the American immigrant by the Constitution and consistent policy of the United States.

In the absence of the authors, the following papers were read by title: 'Some New

Lines of Work in Government Forestry,' by Gifford Pinchot; 'The Forestry Conditions of Washington State,' by Henry Gannett; 'The Five Civilized Tribes and the Topographic Survey of Indian Territory,' by Charles H. Fitch; 'The Bitter Root Forest Reserve,' by Richard U. Goode.

On motion of Mr. Hyde, the following resolution was adopted:

"WHEREAS, through the increasing consumption of forest products, the destruction of forests and the vast extension of means of transportation, questions hitherto of restricted bearing are rapidly assuming grave international importance, and

"WHEREAS, the National Forest Association of Germany has undertaken to collect throughout the world forest information and statistics of commercial importance.

"Resolved, That the National Geographic Society express its deep sense of the value to mankind of the work thus begun, and pledge its countenance and support to the investigation, and

"Resolved, That a committee of three be appointed by the Chair to communicate these resolutions to the National Forest Association of Germany, and to take such other steps as may be necessary to carry them into effect."

In conformity with the resolution, the Chair appointed Mr. Gifford Pinchot, of Washington, Chairman, and Messrs. William H. Brewer, of New Haven, and Arnold Hague, of Washington, as a committee to take requisite action on behalf of the National Geographic Society.

W J M

#### CURRENT NOTES ON ANTHROPOLOGY.

##### THE CASTINGS FROM BENIN.

WHEN the English captured the city of Benin last year they found and sent to the British Museum some three hundred remarkable bronze castings. These present animal and human figures with various ornaments in relief, the line strong and the workmanship of singular beauty.

The origin of this work has greatly puzzled ethnologists. Carlsen (*Globus*, 1897, No. 20) and Mr. C. H. Read, of the British Museum, think they are the work of

some European bronze founders who settled in the sixteenth century. Mr. H. Ling Roth (*Reliquary and Illustrated Archaeologist*, July, 1898) attacks this position with some good arguments, but closes his paper with the negative decision that "the question of the origin of this Bini art remains unsolved."

##### CRANIOLOGICAL INFORMATION DESIRED.

DR. MIES, whose address is 'Schildergasse, 21, Cologne, Germany,' has issued a leaflet requesting particulars as to the greatest breadth of normal adult skulls. Those who can furnish him such information should apply for his leaflet, which is ruled and numbered so that the measurements can be entered in the briefest and most perspicuous manner.

##### ETHNOGRAPHY OF THE UPPER PARAGUAY.

FOR an American ethnologist it is as agreeable to discover a new linguistic stock as it is for the zoologist to discover a new genus of mammals. This good fortune happened to Mr. Guido Boggiani on the river Paraguay. He obtained a vocabulary from a tribe called Guanas (a Guarani term meaning 'fine people' and applied to various tribes), living near the river about lat. 23° south. It turned out entirely different from any other known tongue. He proposes for it the name 'Ennima stock.' After comparing its words with those of all the stocks anywhere near it, I find no affinities except a few, and these doubtful, with some of the Tsoneca dialects of Patagonia.

The position of the Ennima as well as the other tribes on the upper Paraguay are described and figured by Mr. Boggiani in an article in the *Boletín* of the Argentine Geographical Institute, Vol. XVIII., 1898.

##### MOTIVES OF SUICIDE.

IN *Globus*, July 16th, Dr. Richard Lasch refers to such motives for suicide as love,