ciation.—Chas. E. Bouton, Harvard University (D); Paul Capron (D); Mr. Nichols, Brown and Nichols School, Cambridge (D).

Association of Teachers of Mathematics in the Middle States and Maryland.—John C. Bechtel; Fletcher Durell, Lawrenceville, N. J.; A. Newton Ebaugh; Miss Susan C. Lodge; Donald C. MacLaren; Wm. H. Metzler, Syracuse University (D); J. T. Rorer, Central High School, Philadelphia (D); Arthur Schultze, High School of Commerce, N. Y. (D); H. C. Whitaker.

Central Association of Science and Mathematics Teachers.—Otis W. Caldwell; Jos. V. Collins (D); C. E. Comstock (D); G. W. Greenwood (D); Charles H. Smith; Charles M. Turton; J. W. Young, Charles W. Wright.

Missouri Society of Teachers of Mathematics.—F. T. Appleby; J. S. Bryan, Central High School, St. Louis (D); H. Clay Harvey (D); E. R. Hedrick (D); B. F. Johnston; John R. Kirk; J. W. Whiteye.

Chicago and Cook County High School Teachers' Association.—Edward E. Hill (D); Fred R. Nichols (D); Chas. M. Turton (D).

Mathematical Section of Michigan School-Master's Club.—Miss Emma C. Ackermann (D).

New York State Science Association, Mathematical Department.—Glenn M. Lee.

North Eastern Ohio Center, G.A.S. and M.T.—Lemar T. Beman, Cleveland High School (D); Charles A. Marple (D).

Ohio Association of Teachers of Mathematics and Science.—Franklin T. Jones (D); Wm. McLair (D).

St. Louis Association of Science and Mathematics Teachers.—Wm. Schuyler, McKinley High School, St. Louis (D).

DISCUSSION AND CORRESPONDENCE.

THE BOLYAI PRIZE.

America will rejoice that at last Hungary is honoring herself in honoring her wonder-child, John Bolyai. His marvel diamond, the most extraordinary two dozen pages in the history of human thought, appeared in America in English before it appeared in Hungary in Magyar, proud as they are of their language; and more, the American was reproduced entire in Japan before even the original was reproduced in Hungary.

An American, not a European, was the first from outside Hungary to make the journey to Máros-Vásarhely only for John Bolyai's sake and to see there the letter in Magyar which constitutes his preemption claim and title-deed to the new universe, and to publish for the first time that letter making the date 1823 ever memorable. On its publication thus in America Charles S. Peirce wrote in *The Nation,* March 17, 1892, p. 212 in a review of Halsted's Bolyai:

> There is a winningly enthusiastic letter from Bolyai János to his father, telling him of the great step. He says: "I have discovered such magnificent things that I am myself astonished at them. It would be damage eternal if they were lost. When you see them, my father, you will yourself acknowledge it. At present I can not say more than that from nothing I have created a wholly new world."

Ten years later this letter was published in Hungary in Magyar and Latin, and now comes the establishment of the great Bolyai prize (Prix Bolyai) by the Hungarian Academy of Sciences, of which the statutes are as follows:

> 1. On the occasion of the hundredth anniversary of the birth of John Bolyai the Hungarian Academy of Sciences wishing to perpetuate the memory of this illustrious scientist, as likewise that of the profound thinker, Farkas Bolyai, his father and teacher, has decided to establish a prize to be called the Bolyai Prize. This prize, which is to consist of a commemorative medal—whose obverse will represent the academy with the view of Budapest, and whose reverse will bear an inscription—and of a sum of ten thousand crowns, shall be adjudged for the first time in 1905, then every five years, to the author of the best work in mathematics published during the five preceding years.
>
> The prize may be given to any work deemed worthy of it, whatever the language in which it be written, and in whatever form it be published.
>
> The announcement of the winner will take place during the general meeting of the academy in December.
>
> 2. In case the work of a deceased author be deemed worthy the prize, this shall be given to his heirs.
>
> 3. The third section of the academy, section of

sciences, is entrusted with constituting, at its March meeting, a committee composed of two home and two foreign members, whose duty it shall be to judge of the value of the works. The committee will meet at Budapest in the first fortnight of October, and name from their number a president and a reporter.

In case of a tie the president's vote is preponderant.

It shall be the duty of the reporter to present a detailed report on the committee's decision.

This report is to be read at the general meeting of the Academy of Sciences the day the prize is adjudged.

4. The works of authors on the committee are excluded from the competition, and they are not to be mentioned in the committee's report.

5. The foreign members designated as part of the committee and who, participating in the deliberations, will spend some days at Budapest, shall receive a compensation of 1,000 crowns. The honorarium accorded to the reporter for his work is fixed at 300 crowns.

6. The report is to be published in the journal 'Akadémiai Értesitö.' The Hungarian Academy of Sciences will publish this report abroad, and will make it known to all the associated academies.

In accordance with the above statutes, in the course of this present year the Hungarian Academy of Sciences will confer for the first time the Bolyai Prize, consisting of a medal and ten thousand crowns.

The commission constituted by the academy from its members and endowed with the powers of a jury consists of Gaston Darboux (Paris), Felix Klein (Göttingen), Julius König (Budapest), Gustav Rados (Budapest). The deliberations of this commission will be held this October in Budapest.

If I may be forgiven for a bit of prophecy, I venture to predict the prize goes to Poincaré.

GEORGE BRUCE HALSTED.

KENYON COLLEGE,
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SPECIAL ARTICLES.

ON THE PROBABLE ORIGIN OF CERTAIN BIRDS.

IT is my purpose to examine in this article the status of nine kinds of birds that have been recorded from North America, and one that has been taken in southern Europe, and to discuss in some detail their relationship and probable origin.

Appended to the 'Check-list of North American Birds' published by the American Ornithologists' Union there is a 'Hypothetical List' consisting of twenty-eight different birds which, for various reasons, have an uncertain status in the bird fauna of the region for which the list is given. Of these twenty-eight birds I shall consider nine, as from the evidence at hand it would appear that together they throw much light on some hitherto obscure problems. The list includes Cooper's sandpiper, *Tringa cooperi* Baird; Brewster's linnet, *Acanthis brewsterii* Ridgway; Townsend's bunting, *Spiza townsendii* (Audubon); Lawrence's warbler, *Helminthophila lawrencii* (Herrick); Brewster's warbler, *Helminthophila leucobronchialis* (Brewster); Carbonated warbler, *Dendroica carbonata* (Audubon); Blue Mountain warbler, *Dendroica montana* (Wilson); Small-headed warbler, *Wilsonia microcephala* (Ridgway); Cuvier's kinglet, *Regulus cuvierii* Audubon.

Of these nine kinds of birds seven either are represented by single individuals or are known only from figures and descriptions in the works of Audubon and Wilson. On the other hand, the two remaining birds of this series are known by numerous specimens, and my reasons for including them will be presented as each is considered in detail.

It seems essential at this point to call attention to the fact that a number of these birds were discovered at a time when field naturalists were not nearly so numerous as at the present day, and that there may be no doubt as to the reality of at least some of these forms, a number of the types still exist, as will presently be shown.

COOPER'S SANDPIPER, TRINGA COOPERI BAIRD.

Cooper's sandpiper is known from a single individual that was taken on Long Island in May, 1833. The type is still in the National Museum at Washington. The evident relationship of this bird to the knot, *Tringa canutus* Linnæus, is at once apparent to a student, and even an untrained eye might readily distinguish their similarity. For the