

Hence, by locating the points  $a$ ,  $a'$  and  $a''$  one can determine, with almost mathematical precision, the land next in order to be removed and the location of the new deposit. Again, sooner or later points  $a$  and  $a'$  will coincide and lines  $aX'$  and  $a'X''$  will coincide.

The dotted line  $yy'$  represents the manner of washing since this article was first prepared. The railroad and station at Barney have been washed out and a new station has been located farther to the southwest as indicated on the chart.

We have taken simply one section of the river as an illustration; but, after studying in detail a large number of these curves and after studying in a general way the entire river bed from Sioux City to the southern border of Nebraska we believe no exception to the chart can be found. In applying these principles to the washings of the eastern bank of the river all positions would be reversed.

The effort to hold the channel of the river under the bridges at Omaha and Nebraska City has greatly influenced the recession of the series of curves below each bridge.

We may, therefore, summarize the following points:

1. That the Missouri River channel is methodical in its shiftings.
2. The location of the new channel and the new deposit may be determined beforehand with mathematical precision.
3. There is a recession of the series of curves down stream.
4. The channel cuts the western bluffs at more or less regular intervals.
5. At no point does the river encroach upon the eastern bluffs.

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THE PROPER NAME OF THE AMERICAN EEL  
ANGUILLA ROSTRATA (LE SUEUR)

THROUGH an error in recording the date of publication the common American eel has been given a later-bestowed technical name and the author of a prior name and description has been denied the honor of first naming the American species.

In the *Journal of the Academy of Natural Sciences*, Philadelphia, No. 5, Vol. I., p. 81, C. A. Le Sueur described the common American eel under five specific names, viz.: *rostrata*, *Bostoniensis*, *serpentina*, *argentea* and *macrocephala*, all of which he erroneously placed under the genus *Muraena* of La Cèpede.

Several months later C. S. Rafinesque, in *The American Monthly Magazine and Critical Review*, No. II., Vol. II., p. 120, described this eel under the name *Anguilla chrisypa* and *A. blephura*, and his note after the descriptions, "These two species of eels appear different from all the new species lately described by Mr. Lesueur, under the old name of *Muraena*, which belongs properly to a very different genus without pectoral fins," led me to look into the matter of the proper name for the American eel.

Rafinesque's name *chrisypa* has of late years been applied to this eel, authors citing 1821 as the date of publication of the journal in which Le Sueur's descriptions occur notwithstanding the fact that the numbers are plainly marked, No. 1, May, No. 2, June, No. 3, July, No. 4, August, and No. 5, September, 1817. From the dates and other marks on these numbers it was evident that they were promptly printed, but having been informed that the journal had not been printed and published, as dated, I addressed a note to Mr. Witmer Stone, of the Philadelphia Academy of Natural Sciences, and quote his courteous and satisfactory reply, written March 17, 1909.

*My dear Mr. Bean:* Such data as I have accumulated on dates of issue of our publications relate to our Proceedings only & I had little hope of solving the problem contained in your letter. Fortunately I asked Mr. Wm. J. Fox our Asst. Librarian if he knew of any clew and he suggested looking in a bound volume of manuscript letters from Thos. Say to Rev. J. F. Melsheimer, from which he had published extracts some years ago in *Entomological News*, as he thought there was some allusion to sending parts of the *Journal* to Melsheimer. Curiously enough the first mention of the matter that we found was as follows, in letter dated November 6, 1817, "yesterday I sent you the *Fifth* part of the Academy's *Journal* and tomorrow I will send you the *sixth*."

The fact that the sixth part was out or was daily expected would go far to prove that the fifth part had been out about a month. Any way we *know* that it was issued by Nov 6, 1817, and are pretty safe in saying that October was the month of issue, no doubt the first week.

I am glad to have been able to settle this matter for you, but the credit is due to Mr. Fox not to me.

Sincerely yours,

WITMER STONE

The proper technical name for the common eel of eastern North America is *Anguilla rostrata* (Le Sueur), described from specimens taken in Lakes Cayuga and Geneva, New York.

B. A. BEAN

U. S. NATIONAL MUSEUM,  
WASHINGTON, D. C.,  
March 20, 1909

THE AMERICAN ASSOCIATION FOR THE  
ADVANCEMENT OF SCIENCE  
SECTION L—EDUCATION

THE Baltimore meeting of Section L showed that this new section is growing in strength and usefulness. The section's policy of devoting each session to a single topic with set papers by invited speakers was tried and proved a great success. The section plans to devote itself to a scientific study of educational problems, and has appointed a committee to study the distribution of students in elective courses in college and report at the next meeting. This committee consists of Professor E. L. Thorndike, chairman, and Messrs. J. G. Bowman, George E. Fellows, Abraham Flexner, C. H. Judd, Frederick Keppel and C. R. Mann.

Officers for the coming year were elected as follows:

*Vice-president*—Dean James E. Russell, Columbia University, New York.

*Member of the Council*—President Charles S. Howe, Case School of Applied Science, Cleveland.

*Member of the General Committee*—Professor Charles H. Judd, Yale University, New Haven.

*Member of the Sectional Committee*—Hon. Elmer E. Brown, United States Commissioner of Education, Washington.

Vice-president John Dewey presided at all the meetings. The address of the retiring vice-president, Hon. Elmer E. Brown, dealt with great insight with the subject "World Standards of Education." This paper will be printed in SCIENCE.

The first session of the section was devoted to

a discussion of the United States Bureau of Education by Mr. W. Dawson Johnson, librarian of the bureau; Professor C. E. Elliott, of the State University of Wisconsin, and Mr. E. C. Moore, superintendent of schools, Los Angeles, Cal.

Mr. Johnson showed that the Bureau of Education is, on the one hand, the representative of the nation among the nations of the world; and, on the other hand, the representative of the common interests of the several states of the United States. As the representative of the United States in international intercourse its duty is, first, to study foreign educational experience with a view to selecting that which best fits American needs, and, second, to communicate to foreign countries official information regarding our own educational experience. This international intercourse may take the form of expositions, or congresses, or tours of investigation; it may require the direction of exchanges of professors and teachers between the United States and foreign countries, and of interchanges of students. With the development of international relations the work of the bureau as an office of international communication will become increasingly important, and as American conditions approximate those in European countries its service as a bureau of information regarding European educational experience will become more and more necessary. The duties of the bureau to the state departments are twofold: first, to relieve them of the duty of carrying on scientific investigations which may be carried on more economically or more efficiently by a central bureau; second, to carry on such other investigations as may facilitate and improve the administrative source of the state offices. The need of such work has been recognized in several states by the creation of special educational commissions. It has been recognized by the leading educational institutions and societies also. The growing recognition of the importance of such investigations and the advantages which a central bureau has for carrying them on must lead inevitably to the strengthening of the federal office. At present the bureau is being reorganized with a view to more adequate performance of its duties. The work of reorganization has begun in the library of the bureau. Little progress can, however, be made without larger appropriations by Congress, especially such appropriations as may enable the office to be of greater service to state school officers, educational commissions and legislative committees.

Professor Elliott pointed out that, notwithstanding the evident phenomenal advance which