black ones, etc. Apparently she does not require to pass the alphabet in review to decide this. The numbers also have colors to her, as follows: —

1, black; 2, cream color; 3, light blue; 4, brown; 5, white; 6, crimson, pink; 7, greenish; 8, white; 9, greenish (?) 10, brown; 11, black; 12, cream color; 13, blue; 14, brown; 15, white: that is, 11 has the same color as 1, 12 as 2, 13 as 3, etc. These colors are also named instantly, and in any order, and in groups.

No other member of my family has this idiosyncrasy. A cousin, Miss S., staying with me, arranges the months in an ellipse, in her mind. The major axis of the ellipse is conceived to be horizontal. March is at the left hand, October at the right, July at the upper extremity of the minor axis, January at the lower. The other months occupy equal spaces between those already named. Hence it follows that their lengths are conceived as unequal. Half the ellipse is occupied by the five months, October to March. The direction of motion round the ellipse is indifferent, left-right or right-left. This ellipse is conceived of as having absolute dimensions. The major axis is taken as about three and a quarter inches. In this connection I would refer to *Science*, July 31 and Aug. 21.

These cases appear to me sufficiently noteworthy to deserve this record in passing.

EDWARD S. HOLDEN.

Madison, Sept 7.

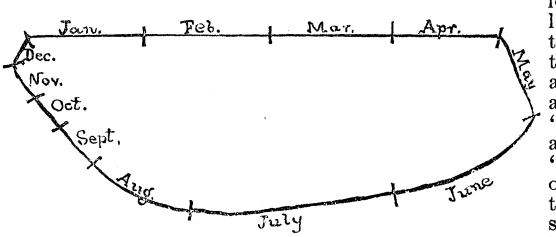
In my mind, there has always been associated with every name or word a color, or shade of color. With some names the color is clear and well defined, with others somewhat vague. I can only distinguish them as light or dark. I give you a few instances: In my mind, John, Jane, Ann, Mary, are red; William, Walter, Robert, blue; George, Nathan, Gilbert, white; Joseph, black; Mark, Judas, Humphrey, brown; James, yellow.

New York, red; Chicago, light; St. Louis, reddish; Portland, dark; San Francisco, yellowish; Leadville, gray; Denver, yellow; St. Paul, dark, etc. I never mentioned this, excepting once or twice when a boy, and was laughed at as trying to say something peculiar.

GEO. S. MILLER.

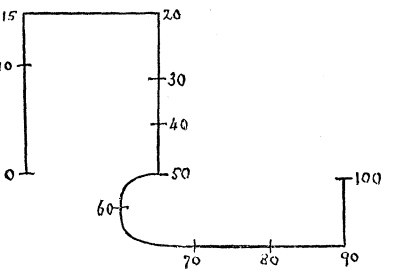
St. Paul, Minn.

Mr. Ruheit's diagram of the months of the year as pictured in his mind, and as represented in *Science* of Aug. 21, is so strikingly similar to a conception of my own, that I am led to present my diagram also.



The similarity seems very remarkable to me. I cannot explain the *raison d'être* of the diagram. Perhaps, as most boys go through about the same alternations of rest and work during their earlier years, Mr. Ruheit's explanation may apply here, and may also account for the similarity of the diagrams.

A diagram of numbers which also forms itself in my mind, is of peculiar form, and is equally difficult to explain.



I cannot think of any number less than a hundred, that does not place itself immediately in its appropriate place in the diagram. ARTHUR WINSLOW.

Raleigh, N.C., Aug. 27.

The ginkgo-tree.

The paper on Salisburia adiantifolia, illustrating the 'phylogeny' of the genus Ginkgo, by Lester F. Ward, in *Science* for June 19, is one of great interest to botanists. In the Central Park we have a group of six trees in close proximity to each other, and which bear fruit abundantly. The group is composed of three males and three females, and for the past four years have borne an abundance of fruit. I herewith send you a photograph of a fruiting-branch, which will give an exact idea of how it appears.

E. B. SOUTHWICK,
Botanist and entomologist.

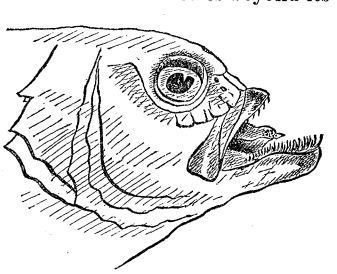
Department of public parks,
Central Park, New York, Aug. 28.

An abnormal black bass.

A black bass, weighing upwards of half a pound, was caught at Webster Lake, Franklin, N.H., Aug. 21, 1885, by Mr. Charles Aiken. The head of this fish presented a singular abnormality, which seemed worthy of a short notice.

The malformation was apparently restricted to the forehead and upper jaw. In other respects, the fish seemed to be normally developed, and in good condition.

The lower jaw was of proper size, and, when the mouth closed, protruded seven millimetres beyond its fellow, exposing the tongue for a length of three millimetres from its tip. This state of things gave the fish a very grotesque appearance, the 'nose' rising quite abruptly to the 'forehead' instead of making with it the customary straight line. The teeth of the lower jaw were entirely exposed, and, not meeting those of the superior maxillary, had become very numerous, and nearly twice their natural size, the exterior curving outward. The vomerine teeth, and those of the upper jaw which met the tongue, were about normal. The exposed parts of the mouth were unduly pigmented;



MICROPTERUS SALMOIDES (LAC.) GILL. MALFORMED.

also the tongue, which was roughened at the apex, and unusually wide and thick.

A general foreshortening and lateral compression of the bones of the face have taken place, resulting, among other things, in limiting the gape, contracting the palate, and crowding the exterior nares to a position nearer the orbit, and on a line with the superior portion of the pupil. The symmetry of the head is unaltered; and there is no evidence that this condition was due to a wound inflicted by a fish-hook, or otherwise.

Some measurements of the head, taken in straight lines, are as follows: —

	mm.
Depth of head (through centre of pupil and angle of mouth)	51
Angle of mouth to symphysis of inferior maxillary,	27
" " superior "	23
Pupil " inferior "	35
" " superior "	25
Width of mouth	24
Distance between orbits	23
Nares from orbit	2
Width of tongue at base	16
Root of tongue to symphysis of inferior maxillary	16

The accompanying figure is intended to represent in profile the head of this specimen, half life-size, drawn with the mouth open to show better the points in question. A careful dissection would probably show some anatomical facts of interest.

F. H. HERRICK.

The magnetic declination in 1728.

In an official publication lately issued by the U. S. geological survey (Bulletin No. 13, Washington, 1885), we notice an error, which, if not corrected, would do injustice to the memory of the surveyors of 1728, by throwing doubt upon their work on the coast where the state boundary between Virginia and North Carolina intersects it near the head of Currituck Sound, and which reflects injuriously on a chart published by the U. S. coast and geodetic survey.

It is asserted (p. 95) that there is a discrepancy of 6° in the variation of the compass as given by the boundary commissioners, and as inferred from a magnetic chart of the Coast and geodetic survey. We quote from the bulletin: "It is stated in Byrd's journal, that the variation of the compass was ascertained to be a little less than 3° W. [The magnetic chart of the U. S. coast-survey would make it 3° E.]" We take exception to this last statement. The magnetic chart referred to is published in the Coast and geodetic survey report for 1882, illustrating Appendix No. 13, on the distribution of the magnetic declination in the United States at the epoch 1885, Jan. 1. It gives the declination for the present year 3° 36′ W., and is supported by an observation at the north end of Knott Island in latitude 36° 33.9′, long. 75° 55.3′, which gave in April, 1873, 2° 54.8′ W., and, when reduced to 1885, 3° 38′ W. For the effect of the secular change between 1728 and 1885 we make use of the Baltimore series of observations, Coast and geodetic survey report for 1882, Appendix No. 12, p. 273, and find the declination in 1728 nearly 0.45° smaller or less west than at present: hence it was then nearly 3° W., as closely as can now be computed, and not 3° E. as stated in the bulletin. It is true, that, about 1800, the declination was slightly *east;* and it was probably overlooked that the needle *reversed* its motion about that time.

An interesting account of the labors of the surveyors, the hardships they had to endure, and of the anxiety felt for the safety of the party while traversing the Dismal Swamp, is contained in the Westover manuscript by William Byrd [now accessible in print: two copies exist in the Congressional library]. He states that the commissioners of the dividing line found on March 6, 1728, the variation somewhat less than 3° W.; and had any serious error been committed by the surveyors, they could not have helped discovering it.

In connection with the above, the bulletin also states: "But it appears from the operations of the U. S. coast-survey at both ends of the line, that the point of beginning on Currituck Inlet, instead of being, as so constantly assumed, in latitude 36° 30′, or, as determined by the surveyors of 1728, in 36° 31′, is in 36° 33′ 15″." On this point it may be remarked that the line laid down on Coast chart No. 137A, edition of 1885, in latitude 36° 33′ nearly, rests, not on direct evidence, since no ancient boundary mark was ever discovered, but simply on tradition, and was so laid down on the best information that could be had. The Coast and geodetic survey was never officially called upon either to recover or to rectify this ancient boundary line. It may also be stated that the old Currituck Inlet closed long ago. C. A. S.

Washington, D.C., Sept. 4.

The Kongo free state.

The account of the Kongo free state in a recent number of *Science* suggested an idea which is, perhaps, not undeserving of some attention. The two principal difficulties in the way of Mr. Stanley's enterprise, seem to be the climate, which is deadly to white men, and the absence of a civilized population with which to trade. Now, it might be found that both these difficulties would be overcome by colonizing the country with American negroes. They have become re-acclimated on the coast of Liberia, where the climate is fatal to white men; and it is not unfair to assume that the difficulty of acclimatization would be much less in the high regions of the Kongo country. They will bring with them some of the wants of civilized life, thus furnishing a basis for trade. They would, perhaps, furnish the best class of workmen for the projected railway, and form a happy medium of communication between the whites and the natives. A PATRIOT.

Washington, Sept. 1.

GERMAN UNIVERSITIES FROM A NEW POINT OF VIEW.

So much has been written about the German universities, — so many histories of separate foundations, so many discussions of academic methods, so many descriptions of student-life, and the like, — that it would seem hardly possible to bring their merits and their limitations before the public in any fresh aspect. Yet a recent writer has done exactly this. He has studied the subject from the point of view of a political economist, or more exactly of a philosophical statistician. That is to say, by a very careful and orderly comparison of the recorded facts of different decades and of different parts of the country, he has thrown such light on the results of an academic system as he might have thrown upon a system