at about $62,500. Of this, the city of Dresden will furnish $37,500; the special income of the museum from entrance money and fees for attendance at lectures, etc., is estimated at $20,000. The rest, it is hoped, will be supplied by gifts. The museum is to include three chief divisions, "Der Mensch," the historical division and the ethnologic division.

UNIVERSITY AND EDUCATIONAL NEWS

NEARLY two hundred thousand dollars have been subscribed to the equipment fund in the past two weeks, according to the announcement of the Alumni Fund Committee of the Massachusetts Institute of Technology.

THE Sheffield Scientific School of Yale University has received from Mr. Murray Gugenheim, of New York City, $20,000 as a nucleus of a fund for additional instruction and equipment in the branches of mining and metallurgy.

BY act of legislature of the state of Pennsylvania, dated April 20, a charter of incorporation, with the power to grant degrees, was given to the Carnegie Technical Schools, and the name of the institution is changed to the Carnegie Institute of Technology.

WORK has been commenced upon the construction of the new Ceramics and Mining Engineering Laboratories of the University of Illinois. These buildings are to form a part of the group of engineering buildings to be located upon ground east of Mathews Avenue, which has recently been acquired by the university. The contracts for the new Transportation Building and the Locomotive Testing Laboratory will soon be let.

PROFESSOR FILIBERT ROTH, head of the forestry department of the University of Michigan, who recently accepted the chair of forestry at Cornell, has reconsidered his decision and will remain at Michigan where the regents have agreed to provide additional facilities for the forestry school.

PROFESSOR FREDERICK E. BOLTON, professor of education and director of the school of education in the State University of Iowa, has accepted a call to become head of the department of education in the State University of Washington at Seattle, and will begin his work at that place in September.

DR. ROBERT CHAMBERS, JR., has accepted an appointment as assistant professor of histology and embryology in the University of Cincinnati. Dr. Chambers is on the teaching staff of the Marine Biological Laboratory, Woods Hole, Mass., and has held the position of lecturer in the University of Toronto for the last three years. He now has a fellowship in Professor E. B. Wilson's department.

DISCUSSION AND CORRESPONDENCE

THE NAME AND BRAIN OF THE GAR

TO THE EDITOR OF SCIENCE: From my former pupil and assistant, Asa C. Chandler, A.B., now on the staff of the University of California, I have recently received a copy of his paper, "On a Lymphoid Structure Lying Over the Myelencephalon of *Lepisosteus*," constituting No. 2 of Vol. 9 of the "Publications in Zoology" edited by Professors Ritter and Kofoid of that institution. Every such contribution to the knowledge of this genus is to be welcomed as helping to remove the "reproach to the comparative anatomists of this country that the brain of this [almost] exclusively American form should not have been fully elucidated."[1] Material and literature for the profitable discussion of the structure and homology of the newly described organ are now inaccessible; but a careful

[1] The sentence here quoted is from my review of Wiedersheim's "Comparative Anatomy of Vertebrates," SCIENCE, N. S., Vol. 27, May 8, 1908, under the caption, Fig. 159. The bracketed word is introduced in qualification of the too sweeping statement as to the distribution of the genus; according to Jordan and Evermann it is represented in China by a single species, *L. sinensis*. Never having seen an example of this species, or even a picture or description of it, I had forgotten its existence not only when the sentence quoted was written, but also when trying to enumerate my errors ("Some Mistakes of the Writer and Others," etc., SCIENCE, N. S., Vol. 34, July 21, 1911). Are the other readers of this journal equally ignorant, or forgetful, or simply indifferent, or needlessly sparing of my feelings?

reading of the paper has led me to make some notes which I should submit to the writer were we still associated and which I hope will not be without interest and profit to others.

1. *The Generic Name of the "Gar."*—Mr. Chandler and the editors adopt *Lepisosteus* as introduced by Lacépède in 1803 rather than *Lepidosteus* as corrected by the elder Agassiz and—till lately—almost universally employed. With all admiration for President Jordan (another former pupil who, I think, suggested or at least sanctioned the change), I feel that this is too rigid an application of the "priority rule." Had an ignorant or heedless person first christened the "duck-bill" as *Ornisorhynchus* should we have perpetuated a blunder that would offend all scholars? I doubt it. Conceding, however, that in this matter each has a right to his own opinion and usage, I protest against the change in the title of my paper, "On the Brains of *Amia*," etc.,[2] where the original *Lepidosteus* is converted into *Lepisosteus*. I hold that the latter form has no etymologic standing, and—excepting in quotation—would no more use it than a profane expletive.

In this connection it may be properly mentioned that the specific name of the "alligator gar" is not *tristœchus*, as used by Mr. Chandler on p. 87, but *tristœchus*, from στοῖχος.

2. *The Contour and Constitution of the Gar's Brain.*—The dorsal aspect is represented in the text-figure *A*. It is very unlike the corresponding figure of Balfour and Parker as reproduced by Wiedersheim. Although I have exposed several gar brains, unable now to refer to them, I will not undertake to say which of these figures is the more nearly correct; possibly difference of species or age may account for some discrepancies, certainly not for all. Chandler's figure contains no indication of the thalamic region (diencephalon or "thalamencephalon") or explanation of its omission. The outline is represented by a continuous line; it should be interrupted at the place of emergence of the olfactory nerves even if the nerves themselves are omitted.

[2] Amer. Asso. Adv. Sci., Proc., 1875.

3. *The Names of the Parts.*—Why should the two cephalic ("anterior") pairs of lobes be designated as "anterior" and "posterior lobes of the cerebrum" when there can be no doubt that the first pair are the hollow olfactory bulbs and the second the solid striata (unfortunately called "prothalami" by me in 1875)? And since the, so to speak, "specific" names of these two parts, of the "optic lobes," and of the "trilobed cerebellum," were deemed adequate for their designation, and since the segmental constitution and names were in no way concerned in the general treatment of the subject, why should the region supporting the newly described lymphoid structure be singled out for the application of the ponderous title, "myelencephalon" when "oblongata" or "medulla oblongata" would have sufficed? "Oblongatal gland" would be unobjectionable. Excepting, perhaps, his own coinage, "Isthmus rhombencephali," for a region since commonly admitted to be non-existent or negligible, *myelencephalon* is one of the most objectionable components of the neurologic nomenclature selected by the late Professor His, adopted by the Anatomische Gesellschaft, and blindly, hastily or slavishly employed by many in this country. Its only logical justification would be the adoption of Owen's "myelon" in place of "medulla spinalis." Even if myelencephalon is preferred, should not "metencephalon" have been added as a synonym? It is a more appropriate equivalent of Von Baer's "Nachhirn"; it is quite as familiar to most anatomists; it was preferred by the majority of the committee on nomenclature of the Association of American Anatomists in 1897; and, as has been pointed out by me on several occasions, the prefix lends itself readily to useful and euphonious compounds, *metacele, metaplexus, metatela* and *metapore* ("Foramen of Magendie"). These considerations render me hopeful that when there comes a subsidence of "Hisolatry" and of the prevailing obsession of most American anatomists for ideas and words "made in Germany," the last encephalic segment will be known as *metencephalon* and the last but one as *epencephalon*.

To offset in some measure the foregoing criticisms of the terminology of Mr. Chandler's paper let me commend his use of pial, dorsal, caudad and cephalad.

BURT G. WILDER

A FISTULA IN THE DOGFISH

IN a shipment of dogfish pups (*Mustelis canis*) sent from Woods Hole to the Biological Laboratory of New York University during the summer of 1910, there was a specimen about 20 inches long with a cœlomic fistula which had been closed in a curious manner. The opening was on the ventral surface, just posterior to the left pectoral fin. Externally it was not conspicuous, the tissue of the oval scar being much the same color as the surrounding skin, although evidently of a somewhat different texture.

On laying open the body cavity it was found that the fistula had been plugged by a growth from the left lobe of the liver, which had filled the wound completely without adhering to the structure of the body wall. The edge of the cicatrice, after the liver had been drawn away intact, was smooth and thoroughly healed.

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NOTE ON "SOME EARLY PHYSIOGRAPHIC INFERENCES"

AMONG the interesting physiographic comments quoted from early writers by Dr. Emerson on page 374 of SCIENCE for March 4, the one by James Hall is evidently misinterpreted. The quotation is as follows:

> About midway between St. Louis and the mouth of the Ohio, masses of limestone rock are seen on either side, which, though now unconnected, have the appearance of once having formed a continuous ridge crossing the river in an oblique direction.

This is supposed by Emerson to refer to the bluffs bordering the new trough of the Mississippi River near Thebes, Ill., where it leaves its old valley and crosses into another formerly occupied by the Ohio River. It seems practically certain, however, that Hall had in mind a conspicuous ridge of limestone beds dipping steeply northeastward, which appears on the west bank of the Mississippi in Perry county, Mo. Just below Wittenberg, this ridge has evidently been obliquely intersected by the river, the obvious southeastward continuation in a direct line appearing on the east bank in the picturesque series of isolated rock masses known locally as the Devil's Bake-oven and Devil's Backbone; the latter ending abruptly at the town of Grand Tower, Ill. This is about three fifths of the distance from St. Louis to the Ohio, while the Thebes cut is only a short distance above the mouth of the Ohio; and at the cut neither the rock masses nor the oblique direction are especially evident.

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SCIENTIFIC BOOKS

The Mechanical Factors of Digestion. By WALTER B. CANNON, A.M., M.D., George Higginson Professor of Physiology, Harvard University. Illustrated. London, Edward Arnold; New York, Longmans, Green and Co. 1911. Pp. 227.

The motor activities of the muscle tube which forms the digestive system has long been a favorite subject of investigation, and a considerable mass of valuable information is at our disposal. But this evidence often shows a marked lack of harmony, even though the observations were made upon the same organ in the same animal. The fault, however, lay not so much with the experimenters, as with the methods employed; there was no single procedure which was applicable for the study of the entire gastro-intestinal canal without grave operative interferences, and these interferences often altered or even abolished the very function which was to be investigated. It was therefore natural that varying interpretations and consequent confusion should arise. In 1896, a method was developed by means of which the motor functions of the entire digestive tube, from pharynx to rectum, could be observed without