

therium, they are more specialized than any recent armadillos.

MARSUPIALS AND MONOTREMES.

PROFESSOR C. F. W. McCCLURE* contributes an exhaustive paper on the venous system of *Didelphys*, based on the examination of very extensive material which shows wide individual variation, partly reversional. In general, the venous system runs back through the monotreme to the sauropsidan or reptilian type, and exhibits profound differences from the venous system of the Placentalia.

Dr. B. Arthur Bensley† contributes a valuable paper in which he demonstrates that the groove on the inner side of the jaw of the Jurassic mammalia erroneously described by Owen and Osborn as a 'mylohyoid groove' is actually a 'meckelian groove,' lodging the Meckelian cartilage. After very extensive comparison of this groove in various types of mammals, he finds it frequently present in the Marsupialia, Edentata and certain Insectivora and Cetacea. It is, however, absent in the Multituberculata; the groove is also wanting in the Echidna, owing perhaps to the degeneration or reduction of the jaw. The paper is fully illustrated.

HORSES AND MAN.

A MOST interesting recent contribution to the *Comptes Rendus des Séances de l'Académie des Sciences* is by Emile Rivière‡ on the prehistoric figures of horses in the cave de La Mouthe found with figures of the reindeer, antelope, bison, buffalo, mammoth. Although for the most part crude outlines, they all possess a certain artistic value.§ H. F. O.

* 'A Contribution to the Anatomy and Development of the Venous System of *Didelphys marsupialis* (L.),' Part I., Anatomy, *Amer. Jour. Anat.*, Vol. II., No. 3, July 1, 1903, pp. 371-404.

† 'On the Identification of Meckelian and Mylohyoid Grooves in the Jaws of Mesozoic and Recent Mammalia,' *University of Toronto Studies*, No. 3.

‡ 'Les figurations préhistoriques de la grotte de La Mouthe (Dordogne),' *Comptes Rendus des Séances de l'Académie des Sciences*, 28 July, 1902.

§ 'Les Parois gravées et peintes de la Grotte de La Mouthe (Dordogne),' *Extr. de 'l'Homme préhistorique,'* t. I., fasc. 3, 1903.

THE ENDOWMENT OF APPLIED SCIENCE AT HARVARD UNIVERSITY.

By the will of the late Gordon McKay, of Newport, R. I., inventor of the sewing machine that bears his name, Harvard University receives a very large bequest for applied science, estimated by the daily papers to be 'about \$4,000,000 and eventually many millions more.' According to the terms of the will, Harvard University is to receive \$1,000,000 when this amount has accumulated from the income, and is thereafter to receive 80 per cent. of the balance of the income after annuities have been paid, and is to receive the entire residue of the estate after the death of the last surviving annuitant.

The portion of the will defining the object of the bequest is as follows:

The net income of said endowment shall be used to promote applied science.

First, by maintaining professorships, workshops, laboratories and collections for any or all of those scientific subjects which have, or may hereafter have, applications useful to man; and

Second, by aiding meritorious and needy students in pursuing those subjects.

Inasmuch as a large part of my life has been devoted to the study and invention of machinery, I instruct the president and fellows to take special care that the great subject of mechanical engineering, in all its branches and in the most comprehensive sense, be thoroughly provided for from my endowment.

I direct that the president and fellows be free to provide from the endowment all grades of instruction in applied science, from the lowest to the highest, and that the instruction provided be kept accessible to pupils who have had no other opportunities of previous education than those which the free public schools afford.

I direct that the salaries attached to the professorships maintained from the endowment be kept liberal, generation after generation, according to the standards of each successive generation, to the end that these professorships may always be attractive to able men and that their effect may be to raise, in

some judicious measure, the general scale of compensation for the teachers of the university.

I direct that the professors supported from this endowment be provided with suitable assistance in their several departments, by the appointment of instructors of lower grades, and of draughtsmen, foremen, mechanics, clerks or assistants, as occasion may require, my desire being that the professors be free to devote themselves to whatever part of the teaching requires the greatest skill and largest experience, and to the advancement of their several subjects.

I direct that the president and fellows be free to erect buildings for the purposes of this endowment, and to purchase sites for the same, but only from the income of the endowment.

I direct that all the equipment required to illustrate teaching or to give students opportunity to practice, whether instruments, diagrams, tools, machines or apparatus, be always kept of the best design and quality, so that no antiquated, superseded, or unserviceable implement or machinery shall ever be retained in the lecture-rooms, workshops or laboratories maintained from the endowment.

Finally, I request that the name Gordon McKay be permanently attached to the professorships, buildings and scholarships or other aids for needy students, which may be established, erected or maintained from the income of this endowment.

*THE AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE AND
AFFILIATED SOCIETIES.*

THE American Association for the Advancement of Science will meet at St. Louis during convocation week, beginning on December 28, 1903, under the presidency of the Hon. Carroll D. Wright, U. S. commissioner of labor and president of Clark College. We hope to publish shortly full details in regard to the meeting and the local arrangements.

THE American Society of Naturalists will meet at St. Louis during convocation week. The exercises will consist as usual of a lecture followed by a smoker, a business meeting

and a discussion on Wednesday afternoon, and a dinner in the evening followed by the address of the president, professor William Trelease, director of the Missouri Botanical Garden.

THE sixteenth winter meeting of the Geological Society of America will be held at St. Louis, Mo., probably in a parlor of the Planters Hotel. The meeting will be called to order by President S. F. Emmons at 10 o'clock A.M., on Wednesday, December 30. The meeting of the Cordilleran Section will be held January 1 and 2, 1904, in the Academy of Sciences, San Francisco.

THE American Chemical Society will meet in St. Louis on December 28 and 29. The headquarters will be the Southern Hotel, and the meeting place will be the Central High School Building. The retiring address of the President, Dr. John H. Long, will be given, probably, on Wednesday evening at 7:30. Subject: 'Some Problems in Fermentation.'

THE American Psychological Association will meet at St. Louis on Tuesday and Wednesday of convocation week under the presidency of Dr. W. L. Bryan, president of the University of Indiana.

THE next meeting of the American Philosophical Association will be held at Princeton, N. J., on December 29 and following days. The hospitalities of the meeting and program are also extended to those members of the American Psychological Association who do not meet with their own association in St. Louis.

WE hope to publish next week official notices in regard to the other scientific societies meeting during convocation week.

SCIENTIFIC NOTES AND NEWS.

THE medical faculty of the University of Buffalo has invited Dr. Samuel J. Meltzer, of New York, to deliver the Harrington lectures for 1903. The subject selected by Dr. Meltzer is 'Edema, a consideration of the physiological and pathological factors concerned in its formation.' The lectures will be delivered in the Medical College, November 30, and December 1, 2 and 3, at 5 P.M.