

DR. W. W. CAMPBELL, president of the University of California, gave the Halley lecture at Oxford University on June 17.

A PORTRAIT of William Harvey, discoverer of the circulation of the blood, attributed to Van Dyck, has been presented to Jefferson Medical College by Dr. J. Ackerman Coles, Newark, N. J., in memory of his father. It was a possession of Oliver Wendell Holmes, who for years was professor of anatomy at the Harvard Medical School.

PROFESSOR GILBERT VAN INGEN, since 1908 assistant professor of geology at Princeton University, died on July 9, aged fifty-five years.

UNIVERSITY AND EDUCATIONAL NOTES

THE board of trustees of Indiana University have made available sums totaling \$700,000 for improvements in the medical school and a university library. The funds to be used for the medical school were derived from a gift of \$375,000 from William E. Coleman, Indianapolis; a gift of \$6,000 from the Eli Lilly Company, of Indianapolis, and from the sale to the state of the building formerly used by the medical college, for \$100,000.

RECEIPT of a gift of \$250,000 from Mrs. Stephen V. Harkness, completing the \$1,000,000 fund raised by the Presbyterian Hospital nurses for the new school of nursing at the Presbyterian-Columbia Medical Center in New York, has been announced by the board of managers of the hospital. Mrs. Harkness's cash gifts to the medical center now total \$800,000.

BY the will of the late William J. Cooper, of Camden, N. J., Swarthmore College will receive \$100,000 for the establishment of a memorial lecture fund.

GEORGE WILKINSON CASE, formerly professor of sanitary engineering at the University of Pittsburgh, has been appointed dean of the college of technology and professor of mechanical engineering.

PROFESSOR A. A. BENNETT, of the University of Texas, has been appointed professor and head of the department of mathematics at Lehigh University.

DR. C. DALE BEERS, Ph.D., Johns Hopkins University, and Dr. Harold Kirby, Jr., Ph.D., University of California, have been appointed instructors in biology at Yale University.

DR. HANNAH E. HONEYWELL, formerly of Columbia University and of the Carnegie Station for Experimental Evolution, Cold Spring Harbor, L. I., has been appointed assistant professor in agricultural and biological chemistry at the Pennsylvania State College.

DR. MARION HINES LOEB, assistant professor of anatomy at the University of Chicago, has accepted the position of associate in anatomy at the Johns Hopkins University Medical School.

DR. HALBERT DUNN, Ph.D. (Minnesota, '23), of the Mayo Clinic, has been appointed associate professor of biometrics in the School of Public Health at the Johns Hopkins University.

PROFESSOR LOUIS WADE CURRIER, assistant professor in mineralogy at Syracuse University for the past four years, has been elected to a similar position in mineralogy at the Missouri School of Mines.

DR. THOMAS ALTY, lecturer in physics at Durham, has accepted an invitation to a chair of physics in the University of Saskatchewan.

DISCUSSION AND CORRESPONDENCE

THE DEMONSTRATION OF NEPHROSTOMES IN THE EARTHWORM

WITH the exception of the testes, probably the most difficult structures to demonstrate in the earthworm are the nephrostomes, or funnels of the nephridia. If the removal of a nephridium is attempted either in a living or in a preserved worm, usually the postseptal portion is the only part secured. The delicate tube is readily torn at the point where it passes through the anterior septum. As a result the preseptal part remains when the postseptal portion is removed. The form of the nephridium is difficult to make out in its normal colorless or nearly colorless condition. The following method has been used successfully to demonstrate the entire nephridium *in situ*. It also simplifies the removal of the entire organ for the purpose of making permanent whole mounts.

A solution of vital methylene blue in distilled water, concentration 1:1000, is drawn into a hypodermic syringe, or into an ordinary dropping pipette whose tip has been heated and drawn out to a fine point. A large specimen of *Lumbricus terrestris* is held firmly in the hand and the needle of the syringe or pipette pushed through the dorsal wall of the worm approximately in the region of the tenth segment. The needle is then turned to a position parallel to the dorsal surface and pushed posteriorly for a distance of ten or twenty segments. The dye is forced into the coelomic cavity with pressure sufficient to render the worm decidedly turgid in the segments affected. The needle is slowly withdrawn, pressure being maintained during the withdrawal. In this way the coelomic cavity in each of several segments becomes gorged with dye.

After ten minutes the worm is killed with chloroform vapor and covered with water. A median dorsal incision is made, the body wall pinned out, and the digestive and reproductive organs removed. The nephrostomes are seen distinctly as deep blue structures. Other parts of the nephridia are colored somewhat less intensely. If one wishes to make an entire nephridium stand out more clearly, the preparation is removed from the water, moistened with a few drops of the dye and exposed to the air for ten minutes. As a result of this treatment the entire nephridium is clearly delineated and, when covered with water, may be examined under the hand lens or the binocular microscope. The preparation will remain in good condition for several hours.

If a permanent mount is desired, the organ is carefully excised, and fixed in an 8 per cent. solution of ammonium molybdate. The usual treatment of tissues stained *intra vitam* with methylene blue is then followed. A simpler way is to fix in corrosive acetic or any other general fixing solution, stain with Delafield's haematoxylin and with eosin, dehydrate, clear and mount in the usual way. The presence of methylene blue in the tissues does not interfere with the use of other stains, since it is decolorized by the acid of the fixing solution and is extracted by the alcohols during dehydration.

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PROFESSOR O. C. MARSH AND PITHECANTHROPUS

I DESIRE to call attention to a statement in the chapter on "Animal evolution" in "Contributions of Science to Religion," by Dr. Shailer Mathews. On page 200 is the following statement:

Some question as to the authenticity of the published account of the remains of *Pithecanthropus erectus* arises out of the fact that their custodian, Dr. Dubois, will not permit its further study by his colleagues. The extreme fragility of these valuable relics is perhaps sufficient extenuation for what might appear to be a selfish attitude.

A footnote is appended as follows:

Since this was written news has reached us that at least one leading American anthropologist has been permitted to examine the *Pithecanthropus* remains; but no report has been made public.

Remembering an article which I had read in the *American Journal of Science*, but not having present access to files of that journal, I asked Miss Lowes, librarian of Washington and Jefferson College, to look up the reference for me, which she has kindly

done. It will be found on page 475, Vol. I (4th series), 1896, *American Journal of Science* (Silliman's journal).

The paper, as I remember it, was illustrated with figures of the cranium, femur and molar; and in it Professor Marsh states that at the meeting of the International Zoological Congress, in Leyden, September, 1895, Dr. Dubois, a half an hour before reading his paper, invited him and Professor Flower, of England, to examine the *Pithecanthropus* material; further, that both he and Professor Flower were in agreement with the conclusions of Dr. Dubois.

If any one will take the trouble to examine the files of the *American Naturalist* for the years 1895-96 he may be able to confirm my recollection of the opinions of two eminent scientific men concerning *Pithecanthropus*, Professor E. D. Cope, then editor of the *Naturalist*, and Dr. Harrison Allen. Professor Cope, the comparative anatomist, did not look upon Dr. Dubois's specimens as simian, but was inclined to refer them to the race of Neanderthal men. On the other hand, Dr. Allen, the human anatomist, saw nothing human in the remains. Of course neither of them had had the opportunity which Professor Marsh later enjoyed, of examining the material. One might, however, conclude, from this disagreement of two eminent authorities in their several lines, that their different opinions really tended to confirm Dubois's decision that *Pithecanthropus* is "neither beast nor human," but a veritable missing link, even if in a more or less collateral line.

My reason for making this communication is not for the purpose of criticising the chapter on "Animal evolution," which is an excellent presentation of the subject, nor of the volume of which it is a part, which is an admirable and timely contribution to the literature of these atavistic times, but to do what I can to render innocuous any use that might be made of the oversight by the "energetic ignorance" of the present day.

I have lately had occasion to read some of the present-day anti-evolutionary literature, and have been much impressed by its similarity to the erratic writings of opponents of animal experimentation, vaccination and the like. There is displayed the same facility in special pleading and the same disregard of facts. While it is not possible for one to say truthfully of these eccentric people that they are "ever learning," one may be permitted to say that they seem to be "never able to come to a (full) knowledge of the truth."

Of some of these anti-evolution writers I think that it should be said that they write with the best of intentions, albeit, it must be owned, not always in the best of tempers. If any such should chance to see