

strong, Sir Henry Roscoe, Professor G. Lunge of Zurich, Mr. G. R. Redgrave and others. The United States appears not to have been represented by delegates.

A DECREE has been signed by the President of the French Republic regarding medical experts before the Courts of Algeria. It appears that such experts must be appointed at the beginning of each year, and receive a fixed compensation for such services as are rendered.

UNIVERSITY AND EDUCATIONAL NEWS.

THE will of the late Dr. George Edwards leaves \$50,000 to Princeton University for the endowment of a chair in American History and \$2,500 for other purposes.

AT the commencement exercises at Beloit College, Dr. G. K. Pearsons presented the College with \$30,000 to build a woman's hall. Dr. Pearson's previous gifts to the College amount to \$250,000.

PRESIDENT SEELEY announced at the commencement exercises of Smith College that \$10,000 had been offered to the College for the erection of a building for the scientific laboratories on condition that \$9,000 should be subscribed by the alumnae.

UPON the recommendation of the Faculty of the College of Physicians and Surgeons, Columbia University, the title of the chair of chemistry and medical jurisprudence was changed to that of physiological chemistry. The chair has not yet been filled.

DR. THOMAS S. FISKE, adjunct professor in mathematics in Columbia University, has been promoted to a full professorship.

PROFESSOR M. V. O'SHEA, of the Buffalo School of Pedagogy, has been appointed to the chair of pedagogy in the University of Wisconsin.

THE trustees of Oberlin College have elected as President, Dr. William Slocum, now President of Colorado College.

DR. FUCHS has been promoted to an associate professorship of paleontology in the University at Munich. Dr. G. Boccardi has been appointed associate professor of microscopical anatomy at the University of Naples, and Dr. J. Szadowski

associate professor of geology at the University at Klausenburg. Dr. E. Wiechert has qualified as docent in physics at the University at Göttingen, Dr. Adolf Marcuse as docent in astronomy in the University of Berlin, and Dr. Max Dettrich as docent in chemistry in the University at Heidelberg.

DISCUSSION AND CORRESPONDENCE.

PALEONTOLOGICAL AND EMBRYOLOGICAL METHODS.—A REJOINDER.

ALTHOUGH I would have preferred to postpone the discussions on the systematic position of *Tarsius* which was commenced a few months ago (*SCIENCE*, February 12th, April 2d, April 23d) till the publication of a more extensive memoir which is at present in preparation, I may yet be allowed to say a few words in reply to Mr. Earle's "claim that the paleontological method in determining phylogeny is more nearly accurate than the embryological, as in the latter many characters are lost and innumerable *cænogenetic* variations are introduced which the embryologists often cannot distinguish from real *homogenetic* structures."

Leaving aside the somewhat loose constructions as to a 'method' in which 'characters are lost and 'variations introduced,' and considering it to be the writer's intention to point out to us that the facts which are brought to light by embryological research are for many reasons less reliable than those which we owe to paleontological science, I would wish the readers of *SCIENCE* to follow up that line of reasoning a little more closely. For it would seem to me that if we run a great risk of going astray in comparing the characters of the early embryos with each other because these characters are influenced by '*cænogenetic* variations,' it is *a fortiori* none the less dangerous to compare the adult structures which develop out of these embryonic rudiments and upon which the same caution should necessarily be brought to bear. In that respect a paleontologist can hardly be said to be in a safer corner than an embryologist.

When, however, the embryologist wishes to construct phylogenetic trees out of his ontogenetical data I quite agree with Mr. Earle

that he is on less stable ground than the paleontologist who, for example, in the case of the horse has dug up the actual tree out of the successive Tertiary strata. Ontogenetic development undoubtedly makes us acquainted with cænogenetic variations which have been the cause of many a premature conclusion. In *Tarsius*, however, it was not to any changes, hypothetical or otherwise, that attention was directed by me, but on the contrary to a *persistence* of a most unexpected *agreement* which reveals itself in the numerous details of a complicated arrangement, such as is only found in man, the monkeys (as far as investigated) and *Tarsius*. And whoever calls attention, as Mr. Earle does, to the liability of embryological structures to vary must necessarily recognize the high value of those cases in which there is evidence not of variation, but of stability. It is because of this stability that *Tarsius* should be placed somewhere between (though not, of course, in the direct line) the Anthropoids and their unknown Mesozoic ancestors with a non-diffuse placentation.

Mr. Earle's assumption that the diffuse stage of placentation of some of the Anthropoids is apparently directly comparable to that of the Lemurs is invalidated by recent researches on early human blastocysts, researches which all tend to confirm the objections against such comparison which were raised by me in 1889 (*Quar. Journ. of Micr. Science*, Vol. 30, p. 364 and p. 382).

Finally, Mr. Earle's contention "that it has not been shown as yet that the placenta in the lemurs is not a derivative of the chorion, as in the apes," although perfectly justified when it was written, is nevertheless unsupported by the actual facts.

Since Milne-Edwards has emitted the opinion which Mr. Earle cites in a footnote, the Lemurine placentation has been again described in the *Quart. Journ. of Micr. Science*, Vol. 36, p. 90, pl. 9-12. In addition to that I may now state, on the strength of observations as yet unpublished, that in a true Lemur, such as *Nycticebus*, the fusion of the vascular walls of the allantois with the non-vascular diplotrophoblast can be followed step by step. It is a totally different process from that by which the vascu-

lar chorion of man, monkey and *Tarsius* comes into existence.

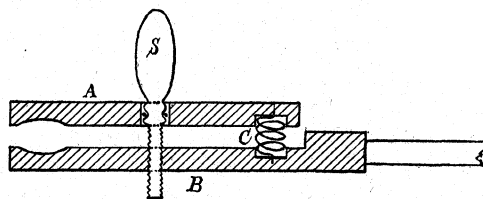
Another important point of difference between Lemurs and *Tarsius* which I have only lately been able to establish, thanks to the preparations just alluded to, is the presence in *Nycticebus* of a typical proamnion, so common among the lower Placental Mammalia and wholly absent in *Tarsius* and in man.

A. A. W. HUBRECHT.

UTRECHT, May 18, 1897.

A CLAMP FOR FRAGILE GLASSWARE.

We have for some time been using a simple modification of the well-known wood clamp, which has given sufficient satisfaction to warrant a brief description. The clamp is constructed for holding light tubular glassware like Crookes' tubes, and it acts at once as a screw clamp and a spring clamp. The jaws, *A*, *B*, are set at any desirable distance apart by the screw, *S*. Loose pins allow *A* to rock slightly in the plane of the screw. The spring, *C*, in the rear presses strongly outward. When set, the jaws may thus be further opened (like a spring clip) by compressing the spring, *C*, with the hand. The jaws may be either flat or notched and need no packing.



This clamp has the following advantages: By aid of the screw the clamp may be adjusted to fit any tube up to over 2 inches for the ordinary size of clamp. The tube is removed or again inserted by mere pressure of the hand in the rear end of the jaws, *A*, *B*; the gradual counter-pressure of the spring prevents crushing of fragile apparatus, even when no cork or rubber cushion is used, while it can be intensified to hold very heavy objects.*

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* The clamp can be obtained from Eimer & Amend, in New York.