SCIENCE.

FRIDAY, JULY 31, 1885.

COMMENT AND CRITICISM.

FROM A CIRCULAR signed by Elliott B. Page, F.T.S., general secretary for America, it seems that the American board of control of the Theosophical society held a session at Cincinnati on July 4, and, presumably among other business, passed a resolution to the effect "that the Theosophical society shall assume and exercise supervision of the American society for psychical research." This board of control thereupon 'authorized and required' one of their number, Professor Elliott Coues, the well-known ghost-smeller, "to act as censor of the said American society for psychical research, and to publicly review and criticise any and all of the proceedings, transactions, bulletins, or other printed matter which the said society may publish, at his judgment and discretion." The board further "expressly requires him, when any fact in psychic science shall have been satisfactorily established by the American society for psychical research, to explain such fact to the said [American] society according to the doctrines, and upon the principles of psychic science, of which the Theosophical society is the custodian in the United States."

The labor of sifting the evidence in regard to psychical phenomena is no mean one; and we feel sure that the managers of the American society for psychical research will feel deeply indebted that one so well posted in the phenomena of the occult world should have been appointed to the duty of aiding them, pointing out their errors when they may have gone astray, and informing them when they have made a discovery. To be sure, on account of our kindly feeling toward Professor Coues, we declined last winter to publish some of his statements in regard to ghosts which he had seen, felt, heard, and smelled, but which were afterward published by our less thoughtful contemporary, *The nation*. Possibly the members of the Theosophical society may have seen more ghosts than have been favored to our vision, and, considering themselves well posted, have felt justified and called upon to put forward Professor Coues as a public censor. Now, what body will come forward to 'assume and exercise' supervision of the American board of control of the Theosophical society?

ALTHOUGH THE CONFLICT over the evolution of man is practically ended so far as the general question in the opinion of scientific biologists is concerned, yet the special question through what series of forms man has been evolved is still unsettled. In regard to the descent not only of the vertebrates and the various classes of vertebrates, but also of the various orders of mammals, our knowledge has been rapidly extended, and we can now outline with some degree of accuracy the genealogical history of the higher animals. Of some forms we can give with remarkable precision the exact ancestry for some distance, but man is not one of these forms. The origin of a species may be ascertained either by direct observation or by inference: the former is the method of paleontology; the latter, of embryology and morphology. Since the paleontologist has as yet gathered no material to trace the immediate ancestry of man, we are obliged to trust to the indications of the embryologist, who finds in the foetal structures hints of ancestral organization, which, properly utilized, guide investigation to sure results. A most interesting step in advance is the discovery by Professor Fol, noted in another column, that the human embryo has four temporary caudal vertebrae, which must be interpreted as proof that man is derived from a long-tailed animal. Evidence is thus accumulating that the human

species is indeed related to the monkeys, possibly more closely than even to the anthropoid apes.

THE REPORT ON THE MUSEUMS of America and Canada, recently made by Mr. Ball of the Dublin museum to the Science and art department of England, is not a very satisfactory document. Apparently designed to furnish hints to similar museums in the United Kingdom, it is nevertheless chiefly occupied with descriptions of the scope of the different establishments and of the contents, and to some extent the general arrangements of the several museums. But the account of the last is generally unsatisfactory and imperfect, while very slight or no mention is made of such devices as are characteristically American, and in which museology has been notably advanced by us. The best applications of American ingenuity to questions of installation are unnoticed: such as, the methods by which cases are made air-tight, and are locked at several points by a single turn of the key; by which shelf-supports are made light, secure, and graceful, and variable at pleasure with slight labor; by which a case applied to one use can be converted in a few minutes to another very different one without interfering with its sightliness;—these and many other problems of museum economy are altogether overlooked. The unit system of the National museum and the systematic registry of the Smithsonian institution are praised but not explained; while the applications of museums to public educational uses by the special arrangement of their material is very inadequately treated. Although it is true that in this last point our museums have more to show in promise than in fulfilment, we have still not a little to teach Europe; while America, on its side, has much to learn from such collections, for example, as the Liverpool free museum.

LETTERS TO THE EDITOR.

Miocene deposits in Florida.

IN view of the discussion as to the extent of miocene deposits in Florida, it may be of interest to call attention to the discovery of the extremely characteristic Ecphora quadricostata by Dr. R. E. C. Stearns at Tampa. The matrix is a compacted fine greenish sand, crumbling under moderate pressure. The locality of the find is on the long rocky point. It is probable that there is a large area in Florida corresponding in age to what has been called miocene in Virginia and the Carolinas, and that it includes part of the phosphatic sandstones, as well as the mammalian and reptilian bone-deposits noted by Jeffries Wyman, Leidy, Neill, and others.

WM. H. DALL, *U.S. geol. survey.*

Washington, D.C., July 23.

Abert's squirrel.

I have read with interest the article in *Science* respecting the Sciurus Aberti, from Dr. Shufeldt.

Sciurus Aberti is not uncommon in northern Colorado. I have seen it as far north as the Câche à La Poudre River, about 40° 30′ north latitude, and up to eleven thousand six hundred feet altitude near Gray's Peak. In this part of Colorado (latitude 39° 45′ north), and along the South Platte River in the mountains south-west of Golden, I have seen this spring three different individuals,—two of them black; one gray and lighter beneath, with tips of its hair on its back and sides mottled with black. In fact, we see them here from gray to blackish gray, and entirely black, although but little differing in size, and all noticeable by long, tufted ears. It is more terrestrial than arboreal in its habits, and, from its extreme range, cannot be called or considered a southern species straggling northward. Having been in the San Francisco mountains, and in all northern Arizona, I have not seen any S. Aberti as deep black as those in northern Colorado.

I have mentioned its existence here up to eleven thousand six hundred feet altitude; but I should qualify this statement by saying, that a squirrel in every respect identical with the S. Aberti was seen by me several times at the Loneland Pass, west of Gray's Peak. But it was more than twice its size; indeed, larger than any other species of gray, black, or fox squirrel I have ever shot or seen. Its habitat was near timber-line, feeding on pine-cones, and generally returning to the enormous heaps of disintegrated rocks which seemed its usual abiding-place. I never succeeded in getting a specimen of this rare squirrel at that place.

E. L. BERTHOUD.

Golden, Col., July 2.

Color associations with the months.

A lady whom I had the pleasure of visiting to inform myself concerning some curious planchette-writing in which she had participated, has, she told me in answer to my inquiries, several interesting arbitrary associations of the class which was discovered by Mr. Francis Galton, and of which the number-form is the most familiar example. She had a curious number-form, — a form for the twenty-four hours, and another for the months. A sister had likewise various forms, but different from those of the first-mentioned lady. Both said that music always speaks. 'Why, yes! it speaks, *of course*,' they both remarked.

The one to whom I wish specially to refer associated colors with the months, and in a way which struck me as particularly curious, as it is a jumble of arbitrary and of obviously natural associations.