

to their study. And I respectfully submit that no one should accept the geological generalizations of chemists, astronomers, and physicists until their utterances have been approved and accepted by those whom we recognize as the ablest and most authoritative expounders of our science. As regards origin of earthquakes and the condition of the interior of the earth, as well as the other questions I have mentioned, I must decline to retract the opinions I have advanced until they shall be met with new facts or better arguments than any yet offered.

J. S. NEWBERRY.

New York, Jan. 14.

#### A card to American geologists.

A meeting of the American committee of the International congress of geologists will be held in Albany from April 6 to April 9, 1887.

The object of this meeting is to perfect a scheme embodying the thoughts of American geologists on the questions of classification, nomenclature, coloration, etc., entering into the system of unification of geological science, which is the object of the International congress.

In order that the committee may represent the views of all geologists in the United States, it hereby invites from all, their individual opinions on any subjects likely to arise in the congress. Those who will meet the American committee in Albany are requested to send to the undersigned a note of the topic or topics they propose to treat, and the time which they will require. In cases where it is not convenient for them to go to Albany, they are requested to forward a statement of their views to the undersigned in writing before April 1, for presentation to the committee.

For information as to the kind of questions to be discussed, attention is called to the 'Report of the American committee,' published last spring, in which the debates in the third session of the International congress are reported.

The following are the sub-committees of the American committee: archæan, Hunt, Hitchcock, Winchell, Pumpelly; lower paleozoic, Hall, Winchell, Lesley; upper paleozoic, Hall, Lesley, Newberry, Stevenson, Williams; mesozoic, Newberry, Cook, Cope, Powell; Cainozoic (marine), Smith, Newberry; Cainozoic (interior), Cope; Quaternary, recent, archeology, Powell, Winchell, Cook.

PERSIFOR FRAZER, *Secretary*.

Philadelphia, Jan. 22.

#### Loco-weed.

In your note on the 'loco-weed,' on p. 32 of *Science* for Jan. 14, reference is made to the belief of the Indians that an insect is the cause of the disease supposed to be produced in horses and cattle by eating this weed. In western Kansas there are two plants called 'loco' by the ranchmen. These are *Oxytropis lamberti*, Pursh, and *Astragalus mollissimus*, Torr. Specimens of the latter plant were brought to me a few days ago, whose lower stems were abundantly occupied by a stalk-boring insect larva. These insects are believed, not by Indians but by a certain physician, to be the cause of the 'loco' disease in horses by producing 'bots.' Moreover, this physician has frequently seen the horse bot-fly deposit its eggs

upon the leaves of the *Astragalus*. Henceforth let elementary entomology be added to the courses of study in our medical schools.

I may add, that Prof. L. E. Sayre, of the department of pharmacy of the University of Kansas, is making an exhaustive study of the 'loco' problem.

FRANCIS H. SNOW.

Lawrence, Kan., Jan. 16.

#### Spiders and the electric light.

Some disadvantage or evil appears to be attendant upon every invention, and the electric light is not an exception in this respect. In this city they have been placed in positions with a view of illuminating the buildings, notably the treasury, and a fine and striking effect is produced. At the same time, a species of spider has discovered that game is plentiful in their vicinity, and that he can ply his craft both day and night. In consequence, their webs are so thick and numerous that portions of the architectural ornamentation are no longer visible, and when torn down by the wind, or when they fall from decay, the refuse gives a dingy and dirty appearance to every thing it comes in contact with. Not only this, but these adventurers take possession of the portion of the ceiling of any room which receives the illumination.

It would be of interest to know whether this spider is confined to a certain latitude, and at what seasons of the year or temperature we can indulge in our illumination.

G. THOMPSON.

Washington, D.C., Jan. 24.

#### A pineal eye in the mesozoic Mammalia.

Among the large number of mesozoic genera which have been determined by Owen, Marsh, and others, only one genus has any considerable portion of the skull preserved. This is *Tritylodon*, a comparatively large animal from the upper triassic of South Africa, described and figured by Professor Owen in the *Quarterly journal* of the Geological society in 1884. In describing the cranium, he writes (p. 146), "A short anterior divarication [of the parietals] bounds a small vacuity exposing matrix which has filled the cerebral cavity; which vacuity is completed anteriorly by a similar divarication of the mid and hind angles of the frontal bones, the mid suture of which is unobliterated. The above vacuity, *v*, if natural, represents a fontanelle, or it may be interpreted as a pineal or parietal foramen; it may, however, be due to posthumous injury."

Now that the meaning of the pineal gland has been made clear, this observation is of very great interest and importance. *Tritylodon* is one of a large and widely spread group of mammals, represented by *Triglyphus*, from the triassic bone-bed near Stuttgart; *Bolodon*, from the English Purbeck (Jurassic); *Allodon*, from the American upper Jurassic; and *Polymastodon*, from the American lowest eocene, or 'Puerco.' From the large size of the parietal foramen in *Tritylodon*, which greatly exceeds that of any of the recent lizards in relative diameter, and compares with that of the labyrinthodonts and saurians, we may safely infer that the primitive Mammalia, of this family at least, had a pineal eye of some functional size and value.

HENRY F. OSBORN.

Princeton, N.J., Jan. 24.