from down upward and make all tight. Repeat at will, working always toward the right. I am now writing up the Dr. W. L. Abbott basketry, from southwestern Malaysia, and desire to use nomenclature that will stand for the Philippines, where the 'Malay knot' is in vogue. The trouble with the name is twofold, there are other Malay knots and other peoples who use the same knot. Perhaps 'Malay double hitch' would be better, but it is somewhat nautical.

O. T. Mason.

THE RIGIDITY OF THE EARTH.

Professor See's computation of the mean hydrostatic pressure within the earth, deduced from Laplace's law of density, is doubtless correct. That the modulus of rigidity is equal to the hydrostatic pressure is, however, purely an assumption.

L. M. Hoskins.

Palo Alto, Cal.,
November 10, 1906.

THE LIGHTNING-ROD COINCIDENT WITH FRANKLIN'S KITE EXPERIMENT.

A file of the *Pennsylvania Gazette* for the year 1752 furnishes facts which corroborate my conclusions, in Vol. XXIV., pages 374–376, that the lightning-rod was in use about the time Benjamin Franklin flew his electrical kite. The supposition there discussed, that the news of the successful experiments in France by MM. Dalibard and Delor during the month of May did not reach Philadelphia in June, during which month Franklin is said to have brought down electricity from the clouds, is supported by the fact that a letter from Paris describing the French experiments, and dated May 26, N. S., 1752, was not published in the *Pennsylvania Gazette* until August 27 of the same year.

That Franklin did not fly his kite until later in the summer than June is likewise indicated by the circumstance that the first account of the experiment appeared in the *Gazette* of October 19. This account is identical with the oft-quoted letter to Peter Collinson, which was read before the Royal Society in December and printed in the *Philosophical Transactions*, excepting that it lacks the closing statement about the experiments in France with 'points' and their prior use in America.

Finally, my assumption that the directions for erecting lightning-rods, which appeared in *Poor Richard's Almanac* for 1753, must have been written not later than October, 1752, is proved correct by an advertisement in the *Gazette* of October 19, stating that this issue of the *Almanac* was in press and would be published shortly.

The collateral evidence here adduced favors the belief that Franklin performed his kite experiment some two months later than has been supposed, and proves conclusively that at the time when it was first described Franklin had already prepared for publication precise directions for placing lightning-rods upon all kinds of buildings.

A. Lawrence Rotch.

Blue Hill Meteorological Observatory,
November 15, 1906.

SPECIAL ARTICLES.

NOTICE OF A NEW MIOCENE RHINOCEROS, DICERATHERIUM ARIKARENSE.

The accompanying sketches represent the skull of a species of rhinoceros, *Diceratherium arikarense*, supposedly new, discovered by the geological expedition of 1905, sent from the University of Nebraska by the Hon. Charles H. Morrill to the Loup Fork beds at Agate, Nebraska, on the ranch of Mr. James Cook.

The genus *Diceratherium* was established by Marsh in 1875 on material from the Miocene beds near the John Day River in eastern Oregon, and two species, *armatum* and *nanum*, were recognized. A third species, *advenum*, was based on material from the Eocene (possibly Miocene) of Utah. Difference of horizon, and distance seem to warrant the specific name herein proposed. In comparing numerous individuals such variation was noted as to justify the belief that this group might legitimately enough be divided into several species.

The figures seem sufficiently explanatory, so descriptions will be brief. A pair of anterior protuberances or horn cores constitute the dis-

tinguishing feature of the genus. Many skulls were found, but unfortunately no single one was complete. They were found in a very limited area, and together with them were great numbers of rhinoceros bones, many of *Syndyoceras, Oxydactylus,* a species of horse, tapir, rhinoceros, etc., being associated constitute an interesting new fauna for the region.

Dental formula: I 1/?, C ?/0, P 4/3, M 3/3.

Measurements: Length of skull, 375 mm.

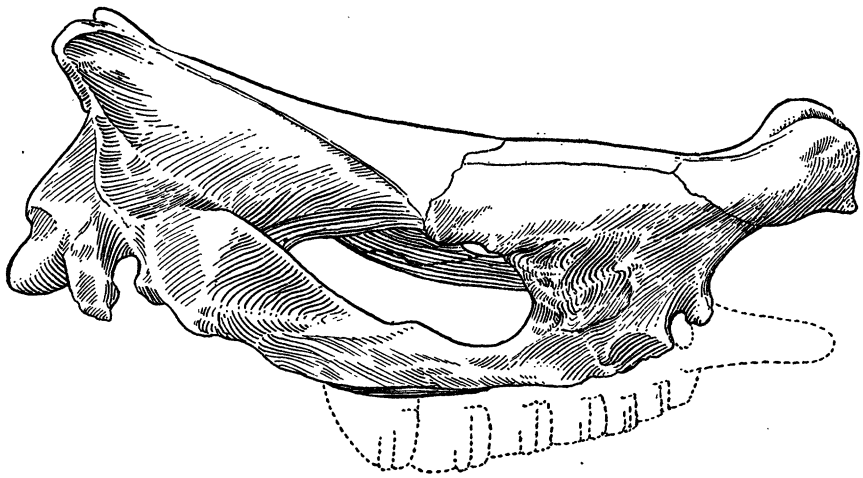

FIG. 1. Skull of *Diceratherium arikarense,* side view, drawn from a specimen in the collections of Hon. Charles H. Morrill.

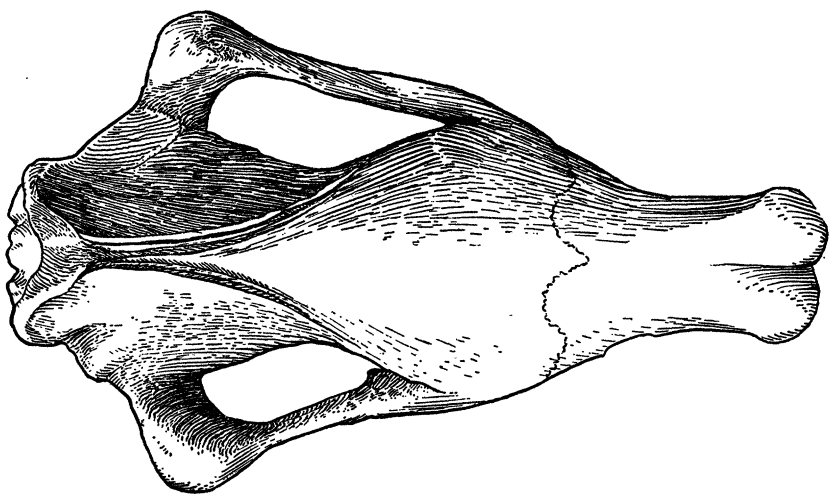

FIG. 2. Top view of the above.

which presumably belong to this genus, in which event a complete restoration is assured. The mandible is strong, and its angles are expanded and flare outward. Some crania are so short and saddle-shaped that they must belong properly to another species.

Diceratherium, Elotherium, Chalicotherium, (14.75 inches); extreme width across zygoma, 220 mm. (8.75 inches); distance between postorbital processes, 130 mm. (5 inches); width across horn cores, 68 mm. (2.75 inches).

ERWIN HINCKLEY BARBOUR.
THE UNIVERSITY OF NEBRASKA,
July 4, 1906.