$$x + ijw = \cos^{-1}(X + ijW)$$

where X, W take uniform increments.

A three-dimensional analogue to conformal transformation was briefly noticed.

By means of functions of complex quantities an infinite number of solutions of Laplace's equation can be obtained, as well as of other analogous partial differential equations. Moreover, each solution obtained by Taylor's theorem yields several other solutions, the number depending upon the nature of the complex used.

Mr. L. A. Bauer spoke informally of disturbances just recognized on the record sheets at Cheltenham (Md.) magnetic observatory, that so far can be explained only as due to electric railroad currents, although the nearest point of such a road is thirteen miles away. He also described the precautions taken to protect the German observatory at Potsdam from trolley currents.

Charles K. Wead,
Secretary.

THE OREGON STATE ACADEMY OF SCIENCES.

The following papers have been presented before the Oregon State Academy of Sciences:

December 16, 'The Development of the Mushrooms and other Fungi' (illustrated), Professor A. R. Sweetser, State University.

January 20, 'General Motions of the Atmosphere' (illustrated), Mr. Edw. A. Beals, U. S. Weather Bureau, Portland; 'Animals in Mt. Rainier National Park,' Alden Sampson, Washington, D. C.

The first annual meeting of the academy occurred on February 17. President Sheldon, in his annual address, spoke on 'The Past and Future Work of the Academy.' Following the reports of the retiring officers, officers were elected for the ensuing year as follows:

President—Edmund P. Sheldon.
First Vice-president—A. L. Knisley.
Second Vice-president—C. Lombardi.
Third Vice-president—E. A. Beals.
Recording Secretary—Ernest Barton.
Corresponding Secretary—G. E. Coghill.
Treasurer—M. W. Gorman.
Librarian and Curator—L. L. Hawkins.
Trustee (for three years)—President Campbell, State University.

G. E. Coghill,
Corresponding Secretary.

UNIVERSITY OF COLORADO SCIENTIFIC SOCIETY.

During January and February, 1906, the society held eight meetings. The papers presented were as follows:

Professor Joseph H. Bair: 'Recapitulation, and its Bearing on the Problems of Life.'

Professor John B. Ekeley: 'Important Compounds of Carbon.'

Dr. George H. Cattermole: 'Diseases of the Heart and Blood Vessels.'

Professor Frederic L. Paxson: 'The Influence of the West in American History.'

Mr. G. S. Dodds: 'Microscopic Plant and Animal Life of Ponds and Ditches.'

Dr. Martin E. Miles: 'Preventive Medicine.'

Dr. Saul Epsteen: 'The Cost of Life Insurance as viewed from a Mathematical Standpoint.'

Mr. George M. Chadwick: 'The Development of Musical Form.'

The meetings have been well attended, chiefly by members of the faculty and by citizens of Boulder. The attendance has been from fifty to one hundred.

Francis Ramaley,
Secretary.

Boulder, Colo.,

DISCUSSION AND CORRESPONDENCE.

METEORITE SHOWER AT MODOC, KANSAS.

Investigation has been made by the writer of the meteorite fall which took place at Modoc, Scott County, Kansas, about 9:30 P.M., September 2, 1905. Mention of the fall was made in the local paper at the time, and in Science of March 9. The phenomena of the fall were observed by a large number of the inhabitants of Scott and the adjoining counties. The course of the meteorite, as learned by the writer through inquiries in several counties, was nearly due east. The phenomena were a sudden lighting up of the sky by a swiftly moving fireball, 'as big as a washtub,' which quickly exploded with three successive and widening discharges. The ex-

plosion must have occurred not far from Tribune, Greeley County, Kansas, since the interval between light and sound there was but a few seconds. The fall of stones, however, occurred at Modoc, about forty miles further east, the interval between light and sound there being between two and three minutes. It would appear, therefore, that after the explosion the stones traveled about forty miles before reaching the earth, at a velocity of about one third of a mile per second. Up to date thirteen fragments and individuals have been found, the heaviest having weighed eleven pounds. The other individuals and fragments found range in weight from seven pounds to a few ounces. The area over which they were scattered is one of about seven miles in length by two miles in width, extending nearly due east and west, the larger stones being found at the east end of the area. The principle that the smaller stones would fall first is thus corroborated. The stones appear to be of the type of white or gray chondrites and to have the usual composition of meteorites of this character. They are coated, for the most part, with a thick, black crust, although considerable breaking up took place in the atmosphere, so that some fragments have only a secondary crust or none at all. The total weight of individuals thus far collected is thirty-two pounds.

Six distinct meteorite localities are already known in western Kansas. Of these, one, Saline, Sheridan County, is an observed fall which took place at 9:30 P.M., November 15, 1898. That another fall should occur so soon within an area previously so favored seems to indicate some combination of forces relative to the area.

OLIVER C. FARRINGTON.
FIELD MUSEUM OF NATURAL HISTORY.

CAPTURE OF THE WEST INDIAN SEAL (MONACHUS TROPICALIS) AT KEY WEST, FLORIDA.

ON February 25, 1906, a party of fisherman killed a West Indian seal about five miles from Key West, where the specimen is now on exhibition.

It is a female, nine feet long and apparently quite old. The teeth are worn flat, the canines being worn down to the same level as the other teeth.

When discovered the animal was promptly harpooned and then killed with a shotgun. No one in Key West had succeeded in identifying it, and the exhibitors called it a sea-lion, until my arrival. It is, I believe, about thirty years since *Monachus tropicalis* was last seen in the Florida region. Mr. H. L. Ward collected a few specimens on the Triangle Islands in the Bay of Campeachy just twenty years ago. It has practically disappeared from the West Indian region.

Two specimens have been exhibited alive at the New York Aquarium, one of them from 1897 to 1903. These were also captured at the Triangles.

The Key West specimen is for sale and although badly mounted, the skin is apparently in good condition for remounting. The skull is mounted in the skin.

The specimen is in the possession of Jonathan Cates, Jr., Virginia Avenue, near North Beach, Key West, Florida.

C. H. TOWNSEND.
NEW YORK AQUARIUM.

ON THE ORIGIN OF THE SMALL MOUNDS OF THE LOWER MISSISSIPPI VALLEY AND TEXAS.

IN SCIENCE for January 5, Vol. XXIII., p. 35, Mr. A. C. Veatch, of the U. S. Geological Survey, takes up the question of the origin of the small mounds of the lower Mississippi and Texas, referring to an article of Mr. D. I. Bushnell in Vol. XXII., p. 712, followed by a lengthy quotation from Foster's 'Prehistoric Races of the United States,' citing from the manuscript notes of Professor Forshy: "There is a class of mounds west of the Mississippi Delta and extending to the Arkansas and above, and westward to the Colorado in Texas, that are to me, after thirty years of familiarity with them, entirely inexplicable." He also quotes from the report of Colonel S. H. Lockett's topographical survey of Louisiana and from De Nadaillac's 'Prehistoric America,' and gives the result of his own observations.