tion and the Evolution of Carbon Dioxid.' In this part he summarizes previous contributions to the subject and describes improved apparatus for respiration experiments, and an accurate method of titration, on which the somewhat surprising results to be set forth in the second instalment are based.-Professor Charles S. Sargent enumerates the species of 'The Genus Cratagus in Newcastle County, Delaware,' including notes on the old species, and the description of eight new species and two new varieties .- Mr. William H. Long, Jr., monographs 'The Ravenelias of the United States and Mexico.' From the genus Ravenelia, the species R. Holwayi, having æcidia without pseudoperidium, is separated to constitute the genus Neoravenelia, and the six species having the inner teleutospores twocelled are segregated as a new genus, Pleoravenelia. Three new species of Ravenelia and two of *Pleoravenelia* are described. Diagnostic structures of the various species are shown on the two double plates.-Frederick H. Billings has found chalazogamy in the pecan, whose close alliance with the walnut, in which this mode of tube entry was first described. makes the discovery seem quite natural. Mr. W. C. Coker contributes various brief notes; one on leaf variation in Liriodendron; another on the occurrence of two egg cells in the archegonium of Mnium, from each of which a ventral canal cell is cut off; another on the nucleus of the spore cavity in prothallia of Marsilia. This nucleus enlarges greatly as development of the prothallium proceeds, protrudes two or more arms and filaments toward the prothallium, and later fragments amitotically.-Mr. Westgate reviews Gerhart's book on dune work in Germany, and Mr. Howe the volume of Boppe and Joylet on the forests of France.-There are nine pages of notes on current literature and three pages of news items.

The Popular Science Monthly for March contains some 'Hitherto Unpublished Letters of Charles Darwin,' an account of 'The Vienna Academy of Science,' by Edward F. Williams, and the eighth paper by Frederick A. Woods on 'Mental and Moral Heredity in Royalty,' which considers the evidence from Lehr's Genealogy. Edwin G. Dexter considers 'High-Grade Men: In College and Out,' presenting some evidence to show that men who stand high in college retain their position in Raphael G. Zon discusses 'The after life. Source of Nitrogen in Forest Soil' and R. H. Thurston 'Education for Professions,' summing up that prerequisites for success are perfect training of body, brain and soul. John Quincy Adams considers 'Science versus Art-Appreciation,' but we believe he errs in stating that science has not only driven art into the background, but has misrepresented its character. The concluding article is by S. W. Williston, on 'The Fossil Man of Lansing, Kansas,' giving a good description of the conditions under which the remains were found and a careful consideration of the possible age of the specimen. 'The Progress of Science' contains critical articles on the Smithsonian Institution and Carnegie Institution.

The Plant World for February contains the third instalment of 'Extracts from the Note-Book of a Naturalist on the Island of Guam,' by W. E. Safford, 'Notes on the Flora of Central Chile,' by George T. Hastings, 'Conditions of Plant Growth on the Isle of Pines,' by W. W. Rowlee and other shorter articles.

The Museums Journal of Great Britain for February has 'A Design for the Tops of Table Cases,' by A. Jukes-Brown, and a consideration of 'The Use of Museums in Teaching,' by W. E. Hoyle, with special reference to the Manchester Museum. Among the notes is one entitled 'A Statesman's View of Museums,' showing the high value set on them by Mr. James Bryce, and the announcement of the completion of a large additional building for the Kew Herbarium.

SOCIETIES AND ACADEMIES.

NEW YORK ACADEMY OF SCIENCES. SECTION OF GEOLOGY.

A REGULAR meeting of the Section of Geology and Mineralogy was held on the evening of February 16, at the American Museum of Natural History, with Professor J. F. Kemp in the chair.

Professor William Hallock read the first

paper, on 'An Ascent of Mt. Whitney. California, with Notes on the Geology.' Mt. Whitney, with an altitude of 14.625 feet. claims the distinction of being the highest peak in the United States. It is a mountain of high relief in a rugged country. The easiest way to the summit is by a five-day journey skirting the canyons from the south-Sedimentary rocks are not met with west. in this part of the Sierras, near Mt. Whitney. The country rock is a deeply weathered granite, split up by countless joint planes. Mt. Whitney exhibits the effects of glacial sculpturing, and holds many small lakes in the cirgues, adjacent to its top, which have resulted from ice undercutting. Professor Hallock also described a lava flow with cinder cones on Volcano Creek, Cal. Lantern slides were used to bring out these features, and to illustrate the topography.

Professor Kemp read the second paper, on 'The Leucite Hills of Wyoming.' Before giving an account of his work in this region with Professor Wright, of Wyoming University, he described the mineralogical and petrographical features of the leucite rocks as they occur in America, and referred to their discovery in Wyoming by the members of the 40th Parallel Survey. These rocks were originally described by Dr. Zirkel. The speaker then called attention to Dr. Cross's more extended work in the district. His own contribution had to do with the general geology of the Leucite Hills. As many as seventeen separate mesas and buttes isolated by erosion have been mapped, representing in most cases single extrusive and intrusive flows of these rare rocks. They are found in sandstones near the top of the Cretaceous, and their distribution and field relations tend to confirm the view that they are volcanic outpourings at different times from a laccolithic reservoir of great extent, which is nowhere exposed at the surface. Lantern slides were used in illustrating the geology, and specimens of the rocks in question were exhibited.

> GEORGE I. FINLAY, Secretary pro tem.

COLUMBIA UNIVERSITY GEOLOGICAL JOURNAL CLUB.

February 13.—The concluding discussion of the new classification of the igneous rocks was opened by Professor Kemp. It was actively participated in by members of the club. The educational aspect of the subject was particularly considered.

Dr. Julien reviewed two short papers from a late number of the *Bulletin de la Société Geologique de France.*

February 20.—Mr. D. W. Johnson reviewed a paper by W. M. Davis on the 'Fresh-water Tertiary Formations of the Rocky Mountain Region,' and then gave a paper on the 'Fluviatile Origin of the Santa Fe Marls in New Mexico.' This paper aroused much discussion. Dr. A. F. Rogers exhibited some specimens of galena showing multiple twinning.

February 27.—Dr. Julien reviewed several papers in a late number of the Bulletin de la Société Geologique de France, especially an essay by H. Douvillé on the 'Revision and Distribution of Orbitolites and Orbitoides from the Chalk.' Professor Grabau reviewed a late paper by Mr. Schuchert on the 'Lower Devonic and Ontaric Formations of Maryland.'

H. W. SHIMER.

THE CONNECTICUT BOTANICAL SOCIETY.

THE society was organized in New Haven, January 24, 1903, and the following officers elected:

President-Professor Alexander W. Evans.

Vice-President-Dr. C. B. Graves.

Recording Secretary and Treasurer—Dr. E. H. Eames.

Corresponding Secretary-Mr. E. B. Harger, Oxford, Conn.

For the compilation of accurate information towards a catalogue of the flora of the state, a committee on the higher plants was appointed, while another on the lower cryptogams remains to be selected.

The former committee consists of Dr. C. B. Graves, New London; Dr. E. H. Eames, Bridgeport; Mr. C. H. Bissell, Southington; Mr. L. Andrews, Southington; Mr. E. B. Harger, Oxford, and Mr. J. N. Bishop, Plain-ville.

Several papers were heard with great interest, followed by much discussion on these and botanical matters in general. It was also decided to hold field meetings at intervals through each season, more thoroughly to study the flora of the state, and give additional stimulus to the prosecution of careful work in this direction.

Withal, the meeting was very enjoyable, and indicated a permanently active organization.

Thirty-one members were accepted as organizers of the society and the probability of greatly increased membership is already apparent.

E. H. EAMES, Secretary.

BIOLOGICAL SOCIETY OF WASHINGTON.

THE 368th meeting was held Saturday, March 7.

F. A. Lucas exhibited some lantern slides made from photographs taken by R. H. Beck, showing groups of several hundred specimens of *Conolophus cristatus*, one of the two large lizards found on the Galapagos Islands. Mr. Lucas stated that Mr. Beck had taken a large number of photographs showing the more striking features of the fauna and flora of those islands.

Frederick W. True spoke on the 'Attitudes and Movements of Living Whales,' illustrating his remarks by lantern slides showing whales as depicted in books and as they actually appear in life. The species discussed were the large whales pursued for commercial purposes, and the speaker showed that there was considerable discrepancy in the accounts of observers as to their behavior. Under this was included the form and height of the spout, the movements of tail and flippers, duration of stay beneath the surface and method of descending, or 'sounding.' Various observations were plotted on a large diagram, and attention was called to the fact that the closest agreement as to facts was found in observations made on the bowhead and sperm whales, the two species that had been longest hunted and were best known. It was suggested that with better knowledge of other species there would be better correspondence of the observations concerning them.

O. F. Cook presented 'Some Biological Aspects of Liberia,' exhibiting a number of views of the more characteristic features of the flora and describing in detail some of the more interesting trees and plants. It was stated that the oil palm was the only African palm not represented by some species in South America, and attention was called to the fact that this palm was not found in a wild state. Where it seemed to occur wild, observation showed that the spot had formerly been inhabited and the species was preserved and disseminated by the agency of man.

F. A. LUCAS.

DISCUSSION AND CORRESPONDENCE.

THE PUBLICATION OF REJECTED NAMES.

In the issue of Science for January 30, 1903, p. 189, Professor T. D. A. Cockerell, under the above caption, calls attention to what he regards as adequate publication of rejected manuscript names by Mr. Banks and my-As Professor Cockerell very well says, self. there is evidently a misconception or divergence of opinion among naturalists on this point that it is well worth while to discuss. I have taken the trouble to submit my particular case to some forty workers in systematic biology, and the 'various and sundry' ways that have been suggested for handling the question are certainly surprising, showing that the practice in such cases is by no means uniform. A large number, mainly zoologists, hold that my printing of Lesquereux's manuscript name Carya globulosa before the one I intended to give the organism was merely of the nature of narrative or explanation, and did not have the effect of validating the manuscript name. The intent of the author, it is said, is to be respected, and as it is perfectly clear that I intended to name it Cucumites Lesquereuxii and not globulosa, they hold that Cucumites Lesquereuxii stands. Others take an exactly opposite view, namely, that because I printed the manuscript name first and followed it by a description of the