amount of ground, with the result that most subjects are treated very superficially. There are also a great many inaccuracies. The chapters on weather maps and on weather forecasting are on the whole the best. In no way does 'The Weather' rank with the meteorologies of Hann, Davis, Angot, van Bebber, Mohn, Waldo and others.

NOTES.

THERE has recently been published a 'Catalog der in Norwegen bis Juni 1878 beobachteten Nordlichter, zusammengestellt von Sophus Tromholt' (Christiania, 1902. 4to, pp. 422). This catalogue was prepared for publication by J. Fr. Schroeter, of the University Observatory, Christiania, Tromholt having died on April 17, 1896.

The volume on Meteorology of the 'International Catalogue of Scientific Literature,' published for the International Council of the Royal Society, is now on sale. It numbers about 200 pages, and costs 15 shillings.

R. DEC. WARD.

GENERAL JAMES T. STRATTON.

After fifty years of professional activity in California, General James T. Stratton, the well-known surveyor, died at his home in Oakland on March 15. General Stratton was born in the state of New York in 1830, and came to California in 1850. After mining for a few years he resumed his professional work in 1853 and made the first official survey of the Alameda Encinal, at that time an un-In 1858 he was elected inhabited region. county surveyor of Alameda County and was subsequently identified with the surveys of the large land grants made by the Spanish and Mexican authorities; through the knowledge acquired in this connection, he became a recognized expert on such land grants, their titles and boundary lines. He subdivided more of these, in many cases, immense areas, than any other surveyor in California. He also made the first survey for a railway out of Oakland by the way of Niles and the Livermore Pass to Stockton; these surveys extended to Folsom, Placerville being the objective point.

This work was done for an English syndicate; the project was, however, abandoned because of the civil war. Later the rails were laid on these lines by Stanford and his associates, as the Western Pacific Railroad Company, later merged into the Central Pacific Railroad Company.

In 1873 he was appointed United States Surveyor General for California by President Grant, resigning in 1876 on account of ill health. From 1880 to 1883 he was connected with the State survey general's office, and from the latter date was engaged as a land attorney till 1899. To General Stratton belongs the credit of being the first to make an artificial forest west of the Rocky Mountains, he having in 1869 planted some forty-five acres with Eucalpytus trees of the species *E. globulus* and *E. viminalis*. He was a public-spirited citizen and quiet, unassuming gentleman,

ROB'T E. C. STEARNS.

Los Angeles, April 24, 1903.

SCIENTIFIC NOTES AND NEWS.

Mr. Andrew Carnegie has offered to give \$1,000,000 for a building for the engineering societies. It is to be situated in New York City, and will provide an auditorium, a library and headquarters for five engineering societies, namely, the American Society of Civil Engineers, the American Society of Mechanical Engineers, the American Society of Electrical Engineers, the American Institute of Mining Engineers and the Engineers' Club.

Final contracts have been signed for the purchase from the Schermerhorn estate of the site in New York City for the Rockefeller Institute. The property acquired extends from Sixty-fourth street to a line 50 feet north of Sixty-seventh street from Avenue A to the East River. The price was about \$700,000. The work of construction on the main building will begin about August 1.

By vote of its council the Astronomical and Astrophysical Society of America will hold its next meeting in affiliation with the American Association for the Advancement of Science at St. Louis during convocation week, 1903–1904.

THE Walker Grand Prize, which is bestowed once in five years by the Boston Society of Natural History, has just been awarded to J. A. Allen of the American Museum of Natural History 'for his able and long continued contributions to American ornithology and mammalogy.' The amount of the prize is \$500, but in view of the high character of Mr. Allen's investigations, it was voted to increase the amount to one thousand dollars. Among the chief of Mr. Allen's investigations are his 'Birds of Florida,' 'A Monograph of the Pinnepeds,' 'Monographs of North American Rodentia' and 'The Geographical Distribution of North American Mammals.' The prize was last given (1898) to Samuel H. Scudder, of Cambridge, Mass., in recognition of his entomological work.

Dr. John H. Musser, of Philadelphia, has been elected president of the American Medical Association.

A BRANCH of the American Institute of Electrical Engineers has been organized at Washington, with Dr. Frank A. Wolff, Jr., as chairman.

SIR FREDERICK TREVES, the well-known English surgeon, has been given the LL.D. degree by the University of Aberdeen.

THE Geographical Society of Paris has conferred the La Roquette gold medal on Captain Sverdrup, the Arctic explorer.

About fifty German students of agriculture are at present in the United States and will remain here about three months investigating agricultural methods.

Dr. Edmund Otis Hovey returned on May 8 from a three months' trip to the Caribbean Islands. He was sent out by the American Museum of Natural History to continue and extend the observations on the West Indian volcanoes which he began directly after the great eruptions of a year ago. During the present trip, Dr. Hovey visited all the volcanoes from Saba to St. Vincent, devoting most of his time to Martinique and St. Vincent. Many fine specimens and photographs were obtained for the museum.

Professor Henry S. Graves, director of the Yale School of Forestry, has gone abroad, and will spend the summer on the continent studying schools and methods of forestry.

Dr. F. S. Earle, assistant curator at the New York Botanical Garden, sailed for Porto Rico on May 9 to make an investigation of the diseases which affect the vegetable products of the island.

Professor J. C. Merriam, of the department of geology, University of California, will go to the southeastern part of Idaho this summer to search for reptilian remains in a portion of the Triassic formation lower than those in which such remains have been found.

Professor A. A. Veblen, of the department of physics at the State University of Iowa, will spend his summer vacation in making a visit to Norway. While absent he will study the history and development of ancient ship building as evidenced by the remains of old vessels preserved in the museums of that country.

THE board of regents of the University of Michigan at their April meeting granted leave of absence for the year 1903-04 to Dr. Herbert S. Jennings, assistant professor of zoology. Dr. Jennings will spend the year at the Zoological Station at Naples, Italy, in prosecuting investigations on the behavior of the lower organisms, continuing researches on which he has been engaged for some years. For the furtherance of this work the Carnegie Institution has made a grant of \$1,000, in addition to the sum of \$250 granted last fall, together with the use for the year of one of the tables maintained by the institution at the Naples Zoological Station. Dr. Jennings expects to leave for Italy at the close of the summer session in August.

THE large number of fossil fishes collected during the excavations at Boonton and elsewhere in the Triassic area of New Jersey during the last year or two are being studied by Dr. Charles R. Eastman, of the Museum of Comparative Zoology, Cambridge, Mass.

THE first link, Vancouver to Fanning Island, of the transpacific longitude, of which Mr.

Otto Klotz has charge, has been successfully established.

A REUTER telegram from Cape Town states that Dr. Rubin has left for Chinde, with an expedition numbering 280 persons, for the purpose of measuring an arc of meridian into northeastern Rhodesia, from the Zambesi to Lake Tanganyika. The expedition will be away three years, and is expected to yield important data in connection with the determination of the earth's dimensions.

It is reported from Berlin that Mr. Walker, who is scheduled as the successor of John Eliot as superintendent of the German Indian Meteorological Service, recently spent a week at the aeronautical observatory with a view to establishing experimental stations in India for the observation of monsoon conditions by means of kites and kite balloons. The first station will be in the Himalayas at Simla, seven thousand feet above the level of the sea.

A PORTRAIT of Dr. James H. Richardson, for many years professor of anatomy in the Medical Department of Toronto University, has been presented to the university by his former students.

At the British National Physical Laboratory, Mr. C. C. Paterson has been appointed to take charge of the electro-technical and photometric work, and Mr. F. J. Selby has been appointed to prepare certain tide tables for Indian ports and to act as librarian.

THE centennial of the birth of Justus Liebig was celebrated on May 12 at the Chemists' Club, New York City. Dr. Ira Remsen, president of the Johns Hopkins University, and Professor William H. Brewer, of Yale University, were expected to make the principal addresses.

Mr. Arthur E. Sweetland, the youngest member of the staff of the Blue Hill Meteorological Observatory, died on May 8. Mr. Sweetland had been connected with the Observatory since 1896, and several of his investigations, notably a study of cloud forms which had long occupied his attention, were published in the *Annals* of the Harvard College Observatory. He also aided the director, Mr. Rotch, to obtain the first meteorological

records high above the Atlantic Ocean, as was described in Science in 1901.

The daily papers state that Dr. R. N. Hartman, professor of analytical chemistry at the School of Mines at Golden, Colo., was killed by escaping gas in his laboratory on May 8.

WE regret also to record the death of Professor Carl Anton Bjerknes, professor of pure mathematics at the University of Christiania, at the age of seventy-eight years, and of Dr. G. C. Dibbits, formerly professor of chemistry at Utrecht, at the age of sixty-four years.

UNIVERSITY AND EDUCATIONAL NEWS.

The enlargement of the Silliman Laboratory of the Mount Hermon School is rapidly approaching completion. This enlargement was made possible through a gift of \$13,000 from Hon. H. B. Silliman, who erected and equipped the original building in 1892. The laboratory when completed in June will represent the expenditure of nearly \$40,000 by Dr. Silliman for scientific purposes. Professor C. E. Dickerson, who is in charge of the laboratory, has directed the work of enlargement.

THE late Walter D. Pitkins has bequeathed \$10,000 to Yale University, one half to be used for a scholarship and one half for a prize in mathematics.

THE Harvard Club of Chicago has given \$5,000 to found a scholarship in memory of Dunlop Smith.

Mr. Francis L. Stetson, of New York, has given \$25,000 to Williams College. Mr. Robert C. Billings has given the same sum to Wellesley College.

Dr. George M. Tuttle, professor of gynecology; Dr. George L. Peabody, professor of materia medica and therapeutics, and Dr. Robert F. Weir, professor of surgery, have resigned their chairs in the College of Physicians and Surgeons, Columbia University. Dr. Weir was appointed professor of clinical surgery, and Drs. J. A. Blake and G. E. Brewer were made lecturers in surgery. Dr. Christian A. Herter was elected professor of pharmacology and therapeutics. Dr. Edward B. Cragin succeeds Dr. Tuttle in the department of gynecology.