Returning to America in 1891, he established an incandescent lamp factory in Massachusetts. As a result of patent difficulties, the plant was closed after about a year of operation. Deprived of practically all he possessed, he came west, spending about a year at Purdue University. In the middle nineties he located at Chicago. During the next twenty years he was associated with various firms and institutions, among them the Western Electric Company, Wm. Gaertner and Company, Armour Institute of Technology and the University of Chicago. Many physicists and chemists who obtained their degrees from Chicago will affectionately recall "the Captain," as he was always known to his associates and acquaintances. He spent eight years with Professor Michelson at Ryerson Laboratory, designing and constructing research apparatus and ruling diffraction gratings, after which he spent some years in Kent Laboratory as research mechanician. In 1916 he joined the development staff of Central Scientific Company, where he remained until 1922. Here he developed miscellaneous constant temperature devices, including ovens, water baths and thermoregulators. His contributions to design and production methods of military instruments which the company manufactured for the government during the war were numerous.

In 1922 Professor Randall, of the University of Michigan, asked the writer to suggest some one who might undertake the design and construction of a dividing engine for ruling special diffraction gratings, to be used in researches in the region of the longer wave-lengths. No one seemed better qualified than Captain de Khotinsky. Although 72 years old at that time, he was happy for the opportunity of spending the next few years in the kind of work he loved and in most congenial and pleasant surroundings. In three years the ruling machine was completed and in operation. Not the smallest part of his achievement was the method of shaping the diamond ruling points to produce grooves of predetermined shape, by means of which intense spectra in selected wave-length regions could be obtained.

In 1926 Captain de Khotinsky retired to Pentwater, to spend his declining years.

His achievements are numerous. In engineering he has to his credit many inventions and patents on incandescent lamps, storage battery plates, and automatic gun-firing devices. He devised the first switchboard signal lamp. In physics he is best known for his de Khotinsky cement and his work in the production of diffraction gratings, while chemists and bacteriologists will remember him for his laboratory devices for the maintenance of constant temperatures.

PAUL E. KLOPSTEG

RECENT DEATHS

DR. JERMAIN GILDERSLEEVE PORTER, professor of astronomy at the University of Cincinnati and director of the Cincinnati Observatory from 1884 to 1931, died on April 15 at the age of eighty-one years.

MRS. ZELIA NUTTALL, honorary special assistant at the Peabody Museum of Harvard University and honorary professor of archeology at the National Museum of Mexico, died at her home in Mexico City on April 12, in her seventy-fifth year.

THE death is announced of Dr. Ernst Grossmann, professor of astronomy at Munich.

THE Duke of the Abruzzi, who conducted explorations in Africa, India and the far north, died on March 18, aged sixty years.

JULES PICCARD, for forty years professor of chemistry at Basle, died on April 11. Dr. Piccard was the father of Dr. Auguste Piccard, professor of physics and physical measurements and director of the laboratory of physics at the University of Brussels, who is now visiting the United States.

SCIENTIFIC EVENTS

THE EIGHTIETH ANNIVERSARY OF THE FOUNDING OF THE CALIFORNIA ACADEMY OF SCIENCES

ON April 4, the eightieth anniversary of its founding was celebrated by the California Academy of Sciences in its Simson African Hall, where a preview was arranged of the installations of habitat groups of African mammals which are now in a stage of particular interest. At this function, there was a brief address of welcome by Mr. William H. Crocker, the president of the Board of Trustees, who has held this position since 1897. Dr. C. E. Grunsky, president of the academy for over twenty-one years, referred briefly to the history of the academy as a scientific research and educational institution, whose activities since its inception have been made possible by generous contributions and endowments from private individuals, outstanding among which is that of James Lick some sixty years ago. The Lick endowment placed the academy in unrestricted ownership of downtown property in San Francisco, the improvements on which, made with borrowed money, yield most of the income which makes its activities possible.

When Mr. Leslie Simson some years ago made his offer to furnish to the academy, free of cost, specimens of African mammals which would be needed for

an African hall of habitat groups, provided that a house for the collection were provided, it was hoped that some one might come forward with an endowment for much needed new buildings. But this did not happen. Mr. Simson then offered to the academy property worth $150,000, but with the condition that income therefrom should be his during life. His proposition was accepted and the academy borrowed $255,000 and erected a new unit to its museum buildings in Golden Gate Park in which it has provided space for the departments of entomology and ichthyology, for the administrative offices, and for the Simson African Hall.

In this hall, under the direction and general planning of Mr. Frank Tose, the chief of exhibits, the habitat groups are being installed. There will be ten large groups, thirteen intermediate small size groups and one very large waterhole group at the end of the hall. Of these groups, only one is now under glass. The backgrounds of three small groups have been painted and the backgrounds of five other large groups are nearing completion. The lighting of the habitat groups will all be artificial. Their backgrounds are domed so that all structural work is concealed. The observer gets no impression of a painted wall. Glass fronts will be inclined so that reflections of opposite light areas will be thrown well up above the horizon where they will interfere least with a view of the mounted specimens. In the lion group, the preparator of which throughout is Mr. Tose, sunlight effect by a transparency behind a rugged foreground is startling and exceptionally realistic, made to merge perfectly into the surrounding well-lighted surface painting.

It is notable in connection with this installation that there are no lighting fixtures in the hall. Abundant indirect light radiates from the habitat groups, all of which are artificially illuminated.

The hope was expressed that sponsors would be found for the individual habitat groups, as has been the case in the academy's hall of California wild life.

THE NEW COMMISSIONER OF INDIAN AFFAIRS

JOHN COLLIER has been nominated by President Roosevelt to succeed Charles J. Rhoads as Commissioner of Indian Affairs. In making the announcement Harold L. Ickes, Secretary of the Interior, made the following statement:

John Collier will bring to the administration of the Bureau of Indian Affairs a wide knowledge of the subject based upon personal contacts and intensive study during the past several years. In my judgment, he is the best equipped man who has ever occupied that office.

Drafted by the government four years ago, Mr. Charles J. Rhoads has served as Commissioner of Indian Affairs with great distinction. His uprightness of character, his ability and his single-hearted desire to serve have impressed all who have known him and realized the difficult task he undertook. It has been my pleasure to know Mr. Rhoads and the fine work he has done. Respecting his repeated request to be permitted to retire to private life, a conscientious effort has been made to find an outstanding and experienced man to take over his burdensome duties. Such a man I believe Mr. Collier to be.

I am deeply concerned about the welfare of the American Indians. I am persuaded that they are entitled to every consideration that the government can give them. The Commissioner of Indian Affairs ought to be the representative of the Indians themselves in the Department of the Interior. He should be their advocate, fighting for their interests and pleading their cause. Those who seek to encroach upon the rights and privileges of these original Americans are amply able to look out for themselves. Unless the government selects the right kind of a man as Commissioner of Indian Affairs, the Indians themselves are, in effect, without a friend at court when substantial rights and interests of theirs are up for adjudication.

I have known John Collier for a number of years, and I have had opportunity to acquaint myself at first hand with the soundness of his views and his attitude toward the Indian question. In addition to safeguarding the property rights of the Indians, he will help them to help themselves toward a fuller and happier life. He will respect their customs, encourage them in their arts and assist them to maintain their rich and unique culture. He will try to interpret them sympathetically to their white fellow Americans. He realizes that on the purely material side, our American Indians possess possibilities in which the white people themselves may share, if those possibilities are realized and cultivated.

IN HONOR OF CHARLES E. MUNROE

AT the subscription dinner at the recent Washington meeting of the American Chemical Society Dr. Charles E. Munroe, past president of the society and its only surviving charter member, was the guest of honor. In testimony of the esteem of the society, Dr. Munroe was presented with a jeweled emblem of the society and a purse. In presenting these tokens, Dr. Arthur B. Lamb, professor of chemistry and director of the laboratory at Harvard University, president of the society, said, in part:

The American Chemical Society was definitely organized on April 20, 1876, in New York City. Of the one hundred and thirty-three charter members at that time the sole survivor to-day is Charles Edward Munroe.

The first general meeting of the society was held in Newport, Rhode Island, on August 6 and 7, 1890, at the suggestion and under the chairmanship of Dr. Munroe, who was at that time a member of the technical staff of the United States Navy Torpedo Station at that city. Dr. Munroe was president of the society in 1898 to 1899 and is honorary chairman of this, the eighty-fifth general