however, progressed far enough to warrant any one going into the business of growing or collecting goldenrod.

In experimenting with goldenrod many problems have arisen, which appear in almost every case when a plant is domesticated. Insect and fungous enemies may do little damage when the plant is wild, but once it is concentrated in cultivation these attacks become serious. Several root, stem and leaf diseases have been found in goldenrod plantings in Florida and South Carolina. Leaf diseases are especially disastrous because rubber is formed increasingly in the leaves as they mature, and it is necessary that they remain on the plant as long as possible.

Because of the uncertainty of reproducing desirable strains of goldenrod by seed, vegetative methods have been used. The underground stolons, which are produced freely, propagate readily. As many as five hundred new plants have been grown in a single year from the stolons of a single plant of Solidago leavenworthii, growing at Fort Myers, Florida. Plants grown from stolons produce a crop of rubber the first year.

There are two general processes for extracting rubber from plants. With the mechanical method, used with guayule in Mexico and California, the plants are ground up and macerated in a pebble mill. The rubber gathers into small lumps which can be separated from the powdered woody material by flotation in water. The other method is to dissolve the rubber out of the plants by chemical solvents. This is the method best adapted for use with goldenrod.

CONFERENCE ON THE BIOLOGY OF SEX

A CONFERENCE on the biology of sex was held from August 25 to 30 at the Marine Biological Laboratory at Woods Hole under the auspices of the Committee for Research in Problems of Sex of the National Research Council. The committee has been active since 1921. There is one annual meeting and from two to five other meetings a year as necessary.

Various aspects of the work of the committee and of cooperating investigators were discussed under the following subdivisions of the general topic:

- "The Status of Work in the General Biology of Sex" by Frank R. Lillie and Carl G. Hartman.
- "Endocrinological Problems of Sex" by Philip E. Smith and Charles R. Stockard.
- "Neurological Problems of Sex" by Philip Bard and Karl S. Lashley.
- "Psychobiological Studies of Sex" by Adolf Meyer and Calvin P. Stone.

Aspects of the physiology of sex and reproduction other than those previously considered were discussed by Edgar Allen and Frederick L. Hisaw.

Participating in the conference were the members of

the committee: Francis G. Blake, Yale School of Medicine; Walter B. Cannon, Harvard Medical School; Frank R. Lillie, University of Chicago; Adolf Meyer, the Johns Hopkins Hospital; Clark Wissler, the American Museum of Natural History; Robert M. Yerkes, Yale University, and the following invited guests: Edgar Allen, Yale School of Medicine; Philip Bard, the Johns Hopkins Medical School; George W. Corner, University of Rochester; Earl T. Engle, Columbia University; Carl G. Hartman, Carnegie Institution of Washington; Frederick L. Hisaw, University of Wisconsin; Fred C. Koch, Karl S. Lashley, Carl R. Moore and William F. Ogburn, University of Chicago; Philip E. Smith, Columbia University; Charles R. Stockard, Cornell University Medical College; Calvin P. Stone, Stanford University; George B. Wislocki, Harvard Medical School; Emil Witschi, University of

NEW YORK MEETING OF THE BIOLOGICAL PHOTOGRAPHIC ASSOCIATION

THE Biological Photographic Association, an organization embracing modern developments in photography, met on September 13, 14 and 15 for its fourth annual convention in New York University.

The convention was held in the biological laboratories of the Washington Square College, on the site where the first photograph of a human face by the light of the sun was made by Professor John W. Draper, nearly a hundred years ago. Louis Schmidt, of the illustration division of the Rockefeller Institute for Medical Research, was chairman of the convention committee.

Two exhibits were held in conjunction with the conference, one of color photography at the university and one at the Hotel Brevoort. The Brevoort exhibit included botanical and crystalline prints submitted by Dr. Silvestre Prat, a member of the association, and his associates of Prague, Czechoslovakia.

The convention opened on Thursday with the address of the president, Ralph P. Creer, of the Edward Hines, Jr. Center, Hines, Illinois. The annual banquet was held at the Hotel Brevoort. Speakers included Mr. Schmidt, Mr. Foster and W. H. Zieler, of E. Leitz, Inc., New York City, on "Photomicrography of Living Objects"; Leonard A. Julin, of the Mayo Clinic, Rochester, Minnesota, on "Some Notes on Photography at the Mayo Clinic," and F. R. Harding, of the Children's Hospital, Boston, on "The Importance of the Human Relations of the Biological Photographer with his Chief, his Client and his Patient." On Friday there was a discussion of infra-red photoggraphy in medicine by Leo C. Massopust, of Marquette University. L. V. Foster, of the Bausch and Lomb Optical Company, Rochester, New York, spoke on "Photomicrography with Ultraviolet Light," and Hi(cq) Williams, of New York, on "Illustrative Photography in Color," and Mr. Schmidt discussed the direction of light as the dominant factor in the photography of bacterial colonies. Other papers included C. E. Dunn, of George Murphy and Company, Inc., "A Practical Demonstration of Belcolor"; Dr. Francis Carter Wood, Institute for Cancer Research, Columbia University, "Lumiere Color Photomicrography"; Edward Mila, Metropolitan Museum of Art, "Color Subjects Rendered in Monochrome"; Heinz Rosenberger, of New York and Sandy Hook, Connecticut, "Additional Points in Cinema Technique"; C. G. Grand, Department of Biology, New York University, "Microcinematography"; Loren E. Tutell, Chicago Aquarium, "Marine Photography"; S. G. Dunton, New York Aquarium, "Some Motion Picture Technique in Aquatic Photography"; Arthur W. Fuchs, of the Medical Department, Eastman Kodak Company, "The Preparation of Illustrations for Half-tone and Line Engraving"; and one by Louis P. Flory, of the Boyce Thompson Institute.

Officers of the association are Ralph P. Creer, president; Louis Schmidt, vice-president; Anne Shiras, University of Pittsburgh, secretary, and Katharine W. Kingsbury, Columbia University, treasurer.

RECENT DEATHS AND MEMORIALS

Dr. Berthold Laufer, curator of anthropology at the Field Museum of Natural History, was killed on September 13 by a fall from the eighth floor of a hotel in Chicago. Dr. Laufer, who was born in Cologne, Germany, in 1874, was distinguished for his work in Oriental anthropology. He was a member of the National Academy of Sciences.

Dr. Paul G. Shipley, associate professor in pediatrics at the Johns Hopkins Medical School and assistant chief physician at the Harriet Lane Hos-

pital, died suddenly on September 12, at the age of forty-five years.

DEATH closed on August 18 the twenty-year service to the University of Illinois of Frank Lincoln Stevens, professor of plant pathology. Previously, he was for a number of years professor of botany at the North Carolina State College, and for two years dean of the College of Agriculture of the University of Porto Rico. He was internationally known for his contributions in the field of tropical fungi. He held honorary degrees from the University of San Marcos, Peru, and from the University of Glasgow. In 1930–31 he occupied the Baker memorial professorship at the University of the Philippines.

The Geological Magazine reports that the corporation of the Borough of Morecambe and Heysham has placed on the house where the late Professor J. E. Marr was born in 1857 a memorial tablet, which was unveiled on June 23 by Mrs. Walker-Jones, his last surviving sister. Professor Sir F. Gowland Hopkins, president of the Royal Society, spoke on the work of Professor Marr as a geologist.

The Paris correspondent of the Journal of the American Medical Association writes that "the municipal council of Paris recently gave the name of Dr. Carlos Finlay to a street of the fifteenth ward of the capital, an honor to a foreign scientist almost without precedent, Humboldt and Linné being further examples. Finlay, whose mother was French, studied in France, and on returning to his native country he announced the theory of transmission of yellow fever by mosquitoes. Last December the Academy of Medicine had celebrated the centenary of Finlay's birth at a special session attended by Professor Dominguez, who came to France to pronounce the eulogy of his compatriot."

SCIENTIFIC NOTES AND NEWS

Dr. WILLIAM WHITEHEAD WATTS, emeritus professor of geology in the Imperial College of Science and Technology, South Kensington, has been elected president of the British Association for the Advancement of Science.

Dr. Arthur H. Compton, professor of physics at the University of Chicago, was elected president of the International Congress of Electro Radio Biology, held in Venice from September 10 to 15.

THE American Astronomical Society has awarded the first Annie Jump Cannon Prize for distinguished work in astronomy by women to Dr. Cecilia Payne Gaposchkin, of the Harvard College Observatory. The prize, which was established by Miss Cannon, consists of a cash award and some other token, the nature of which has not yet been decided.

At the meeting of the Société Française de Photographie et de Cinematographie held on January 26, it was unanimously voted to award the silver medal of the society to Dr. Burt H. Carroll and Dr. Donald Hubbard in appreciation of their research on photographic emulsions at the National Bureau of Standards. An excerpt from the report recommending the award and appearing in the Bulletin of the society is as follows: "The budget retrenchments which the Government of the United States have made has forced the Bureau of Standards to close its laboratory devoted to the study of photographic emulsions, a lab-