

### SEMICENTENNIAL MEETING OF THE AMERICAN ORNITHOLOGISTS' UNION

THE fiftieth anniversary meeting of the American Ornithologists' Union will be held from November 13 to 16 in New York, at the American Museum of Natural History, 77th Street and Central Park West, where the union was originally organized in 1883. The organization now has about 2,000 members, including 74 who have maintained their membership for 40 years or more.

The headquarters will be at the Hotel New Yorker, 8th Avenue and 34th Street, where the business meetings will be held on Monday.

The public meetings, beginning on Tuesday, November 14, will be held at the American Museum and will continue three days from 9 A. M. to 5 P. M. The program contains more than 60 papers, including the latest reports on work in the field and in the museum,

illustrated by specimens, lantern slides, direct color photographs and "sound pictures."

The award of the Brewster Medal, made biennially to the author of the leading work on the birds of America which has appeared during the last six years, will be announced at this meeting.

In honor of the occasion the union has prepared a special volume containing a series of papers showing "Fifty Years of Progress in American Ornithology" since the organization of the union.

The local committee on arrangements has brought together a carefully selected exhibit of bird art, including paintings, water colors, photographs, drawings and sculpture, which will remain on exhibition for some time after the meeting.

The annual dinner will be held at the Hotel New Yorker on Wednesday evening. Public sessions trips have been arranged on Friday and Saturday to the New York Zoological Park, to the Jones Beach Bird Sanctuary, Long Island, and to the Roosevelt Bird Sanctuary at Oyster Bay, Long Island.

## SCIENTIFIC NOTES AND NEWS

DR. HARVEY CUSHING, now John W. Sterling professor of neurology in the Yale School of Medicine, received the degree of doctor *honoris causa* on November 4 during ceremonies which attended the reopening of the University of Paris. Among those present were President Lebrun and Minister of Education de Monzie.

At the ceremonies in commemoration of the fiftieth anniversary of the founding of the Graduate School of the University of Pennsylvania, Dr. Joseph S. Ames, president of the Johns Hopkins University, received the degree of doctor of laws; Dr. Luther P. Eisenhart, dean of the Graduate School of Princeton University, the degree of doctor of science, and Dr. Frederick J. E. Woodbridge, Johnsonian professor of philosophy at Columbia University and formerly dean of its Graduate School, the degree of doctor of letters.

THE honorary degree of doctor of science was conferred on Dr. Charles A. Kraus, research professor of chemistry at Brown University; on Lemuel F. Smith, professor of chemistry at Kalamazoo College; on Vernor C. Finch, head of the department of geography at the University of Wisconsin, and on Leroy J. Buttolph, physicist with the General Electric Vapor Lamp Company of Hoboken, New Jersey, by Kalamazoo College in connection with its centennial celebration on October 13.

ACCORDING to *Industrial and Engineering Chemistry*, Henry Arnstein has been awarded first prize by the Uruguayan government for bids for designing, constructing and putting in operation an agricultural

distillery and an industrial alcohol plant manufacturing alcohol, recovering yeast, liquid and solid carbon dioxide, corn oil and cattle feed. Dr. Arnstein has recently sailed for Johannesburg, South Africa, to initiate a program for utilizing the surplus farm crops of that country.

DR. D. C. WARREN, poultry geneticist at the Kansas State College, has been awarded the 1933 \$100 prize of the Poultry Science Association for outstanding research on the domestic fowl during the year.

PROFESSOR VON LICHTENBERG, director of the urological department of the Hedwig Hospital, Berlin, has been awarded the gold medal of the International Society for Urology.

DR. MAX HEINRICH FISCHER, physiology, Berlin, has been elected a corresponding member of the Royal Academy of Medicine, Rome.

DR. ARNO B. LUCKHARDT, professor of physiology at the University of Chicago, gave the presidential address on "Biological Reaction to Ethylene Anesthesia" before the Associated Anesthetists of the United States and Canada, meeting in Chicago on October 17. He was also elected honorary president of the International Anesthesia Research Society.

DR. A. HAMILTON RICE has been elected president of the Museum of French Art, New York City.

F. A. SILCOX has been appointed as chief forester of the Forest Service to succeed the late Major R. Y. Stuart. Mr. Silcox has been engaged in handling labor problems in shipyards and as director of indus-

trial relations for the New York Employing Printers' Association. He was formerly in the Forest Service, entering as a ranger in Colorado.

HUGH H. BENNETT, formerly with the Bureau of Chemistry and Soils of the Department of Agriculture, has been named chief of a new bureau devoted to control of soil erosion in the Department of the Interior. The new unit, to be known as the Division of Erosion, will operate with a fund of \$5,000,000 allotted by the Public Works Administration. In addition to studying erosion, it will lend its efforts to bettering flood conditions.

DR. BENJAMIN WHITE, the director of the Division of Biologic Laboratories of the Massachusetts Department of Public Health, has retired because of ill health, and Dr. Elliott S. Robinson has been promoted to fill the vacancy. Dr. Roy F. Feemster, formerly of the Division of Communicable Diseases, has been made assistant director.

KNOWLES A. RYERSON has been appointed chief of the Bureau of Plant Industry, effective January 1. Mr. Ryerson will succeed Dr. W. A. Taylor, who retires the first of the year after forty-two years' service with the Department of Agriculture, twenty of which have been as head of the bureau. Dr. Taylor reached the retirement age on July 1, but the president granted an extension of six months at the urgent request of Secretary Wallace. Mr. Ryerson is now in charge of the Division of Foreign Plant Introduction. His promotion to the position of chief is announced now so that he may have an opportunity to work for the next few weeks with Dr. Taylor on budgetary and administrative problems before he assumes his new work.

H. R. TOLLEY, professor of agricultural economics and agricultural economist and director of the Gianini Foundation of the University of California, has been appointed chief of the section of special crops in the Agricultural Adjustment Administration. In this capacity he will organize the relief program for crops not listed as basic commodities under the act, a program centering largely around marketing agreements.

DR. HENRY H. PIXLEY, instructor in mathematics in the College of the City of Detroit, has been granted leave of absence to permit him to accept a position as mathematical economist in the Division of Economic Research and Planning of the National Recovery Administration.

DR. C. P. GILLETTE, for forty-three years head of the department of entomology of the Colorado Agricultural College and director of the Experiment Station from 1910 to 1932, terminated active connection with the college and station on July 1. It is expected that he will continue his research work at the

college. A. M. Binkley, associate professor of horticulture and associate horticulturist, has been appointed acting head of the department, with Dean E. P. Sandsten, director of the station, retaining the position of professor of horticulture and state horticulturist.

UNDER a reorganization program recently approved by the Board of Trustees of Clemson College and the South Carolina Agricultural Experiment Station, H. W. Barre, who has been director of the station for sixteen years, has also been appointed dean of the School of Agriculture. G. H. Aull, for twelve years assistant director of research, has been appointed agricultural economist and assistant director of the station.

H. H. KILDEE, head of the department of animal husbandry and vice-dean of the division of agriculture of the Iowa State College and Experiment Station, has been appointed dean of agriculture; M. D. Helser, head of the meat subsection of the station, has been appointed dean of the junior college, and Dr. R. E. Buchanan, head of the department of bacteriology and dean of the graduate school, director of the station. President R. M. Hughes is for the present continuing as acting director of the division of agriculture, with George Godfrey as assistant.

DR. HUNTINGTON WILLIAMS, Baltimore health commissioner, has been appointed professor of hygiene and public health at the University of Maryland School of Medicine.

DR. GEORGE H. HANSMANN, assistant professor of pathology at the State University of Iowa College of Medicine, has been appointed associate professor at Georgetown University School of Medicine, Washington. Dr. James A. Gannon has resigned as associate professor of surgery at Georgetown University, after twenty-five years' association with the department.

M. JEAN DUFAY, astronomer of the observatory at Lyons, has been appointed director to succeed M. Mascart.

DR. RICHARD BRAUER, formerly professor of mathematics at the University of Königsberg, has accepted an invitation extended to him by the University of Kentucky to hold a visiting professorship for the current academic year. He is expected to reach Lexington about November 15. The invitation was made possible by the Emergency Committee in Aid of Displaced German Scholars, and by the Jewish people of Lexington, who have contributed funds for Professor Brauer's salary.

DR. FRANZ BLUMENTHAL, professor of dermatology at the University of Berlin, has accepted a professorship offered to him by the faculty of medicine at Belgrade. Since 1917 he has been director of the Institute for Cancer Research in Berlin and general

secretary of the German Society for Cancer. He will continue his experimental work on cancer at the laboratories of the Institute of Pathology at Belgrade, which was formerly under the direction of the late Professor Georges Joannovič.

DR. J. R. KATZ, of the University of Amsterdam, has been spending his vacation in the United States. While in New York he lectured before the New York Section of the Cereal Chemists on "Starch, its Gelatinization and Retrogradation." He also delivered lectures at the Fleischmann Laboratories on "Chemical Changes in the Gluten during the Fermentation of the Dough" and "X-ray Spectrography of High Molecular Substances."

THE first Harry Burr Ferris lecture in anatomy at Yale University was delivered on the evening of October 27 by Dr. Bradley M. Patten, associate professor of embryology and histology at Western Reserve University. This lecture was the first annual lecture to commemorate forty-two successive years of teaching of anatomy by Dr. Ferris at Yale. The subject of the lecture was: "The First Heart Beat and the Beginning of the Circulation of the Blood of the Embryo—Studied with Micro-Moving Pictures."

DR. ARTURO CASTIGLIONI, professor of the history of medicine, University of Padua, Italy, gave the third course of lectures under the Hideyo Noguchi Lectureship of the Johns Hopkins University School of Medicine. The theme of the lectures was "The Renaissance of Medicine in Italy," and following are the individual titles: October 23, "The Dawn of Renaissance in the Life, Art and Science of Italy—The Thought of Leonardo." October 25, "The Flowering of Medical Studies at the Italian Universities, from Berengario to Cesalpino." October 27, "The Legacy of Scientific Renaissance and the Main Currents of Medical Thought from Fracastoro to Galileo." In 1929, Dr. Emanuel Libman, New York, gave \$10,000 to establish the lectureship in honor of Dr. Noguchi.

DR. J. C. DRUMMOND delivered a course of Harben lectures on vitamins at the Royal Institute of Public Health, London, on October 9, 10 and 11.

THE October lecture on the Smith-Reed-Russell series at the School of Medicine, George Washington University, was delivered by Professor W. W. Cort, of the School of Hygiene and Public Health of the Johns Hopkins University, who spoke on "Recent Developments in our Knowledge of Hook-Worm Disease." The November lecture on this series will be given by Professor James W. Jobling, College of Physicians and Surgeons, Columbia University. At the annual banquet of the society, which was held at the University Club on October 20, an address was delivered by Dr. William Charles White, chairman of the Committee on Research of the National Tuberculosis Associa-

tion. On this occasion new faculty and student members were inducted into the society.

ANNOUNCEMENT is made at Harvard University that the Board of Overseers has created a new visiting committee to visit the Stillman Infirmary and University Clinic. The new group brings to fifty-two the visiting committees selected by the Board of Overseers to keep divisions and departments of the university in active communication with interested authorities throughout the country. The chairman of the committee is Dr. Daniel F. Jones, '92, of Boston, surgeon-in-chief at the Palmer Memorial Hospital. The remaining members follow: Dr. George H. Bigelow, '13, of Boston, a member of the staff at the Massachusetts General Hospital; Dr. Eugene F. DuBois, '03, professor of medicine at the Cornell University Medical College; Dr. Channing Frothingham, '02, of Boston, physician-in-charge at the Faulkner Hospital; Henry S. Grew, of Boston; Dr. Edward B. Krumbhaar, professor of pathology at the University of Pennsylvania, and Dr. Ernest G. Stillman, of New York City.

At a recent meeting of the board of managers, the following were elected to constitute the editorial board of *The Journal of Nutrition*: Dr. Thorne M. Carpenter, Boston; Dr. Edward P. Cathcart, Glasgow; Dr. Eugene F. DuBois, New York; Dr. Ernest B. Forbes, State College, Pennsylvania; Dr. Elmer V. McCollum, Baltimore; Dr. Lafayette B. Mendel, New Haven; Dr. Harold H. Mitchell, Urbana; Dr. John R. Murlin, Rochester; Dr. Mary S. Rose, New York; Dr. Henry C. Sherman, New York; Dr. Harry Steenbock, Madison. The editorial board will select a managing editor from its own members and will determine the scientific policy of the journal. The journal will appear monthly in a new cover bearing a portrait of von Liebig on the first page. Two volumes a year will be issued at \$5.00 per volume. It will be the official organ of the American Institute of Nutrition, of which Dr. Lafayette B. Mendel, of Yale University, is president; Dr. Henry C. Sherman, of Columbia University, is vice-president, and Dr. John R. Murlin, of the University of Rochester, is secretary-treasurer. The board of trustees includes the above-named officers and Dr. Mary S. Rose, of Columbia University, and Dr. Eugene F. DuBois, of Cornell University Medical College.

WITH the November number, the editors of *Scripta Mathematica* announce that the policy begun in Volume I will be continued, of appealing to the laymen interested in the philosophy, history and exposition of mathematics, as well as to the trained mathematician. This journal, said to be unique in its treatment of mathematics, begins its second year with the publication of the autumn issue, under the editorship of Professor Jekuthiel Ginsburg, of Yeshiva

College and Columbia University. The editorial board is announced to be the same as last year, including Professors Cassius Jackson Keyser and David Eugene Smith, of Columbia University; Professor Raymond Clare Archibald, of Brown University; Professor Louis Charles Karpinski, of the Univer-

sity of Michigan; Professor Lao Genevra Simons, of Hunter College, and Professor Gino Loria, of the University of Genoa. "Notes and Queries" will again be edited by Professor Archibald. It is also expected to print hitherto unpublished manuscripts now in university and private libraries in this country.

## DISCUSSION

### AGE OF FITCHBURG GRANITE

WHEN the Tufts group visited the quarries at Fitchburg last spring they were particularly asked to keep an eye out for radio-active minerals which one can recognize by the cracks which radiate from them. A number of specimens were obtained, but they were mostly allanite.

One piece, however, the spinthariscopes showed to be much more radio-active and proved to be uraninite. It was only about four millimeters in diameter, but I was able to dig out about 30 milligrams and send to Dr. Friedrich Hecht, 38 Währingerstrasse, Vienna, Austria, who was able to make on 18 milligrams by micro-chemical methods the accompanying analysis. I am sending this to SCIENCE for a number of reasons.

#### MICROANALYSIS OF FITCHBURG URANINITE

Used for total analysis: 18 mg.

Used for determination of  $H_2O$ : 6 mg.

	Per cent.
Insoluble residue .....	27.39
(of which $SiO_2$ ) .....	(25.48)
PbO .....	2.72
(Pb) .....	(2.52)
$Fe_2O_3 + Al_2O_3$ .....	not determined
Rare earths .....	1.85
$ThO_2$ .....	3.86
(Th) .....	(3.39)
$U_3O_8$ .....	59.19
(U) .....	(50.20)
CaO .....	0.84
MgO .....	0.15
$H_2O$ ( $-110^\circ$ ) .....	0.27
$H_2O$ ( $110-300^\circ$ ) .....	2.90
Loss on ignition .....	.....
Alkalies .....	present, but not determined

$$Pb/U + 0.25.Th = 0.049,$$

Analysts: F. Hecht and Edith Kroupa.

There is so little Th that using the factor 0.36 instead of 0.25 will make no appreciable difference. Allowing for AcD and ThD we would get an age:  $15,600 \log(1 + (RaG = 2.37)/(U = 50)) = 366$  million years

In the first place, I should like to call attention to the fact that with micro-chemical methods a geologically useful analysis can be made on such small quantities, and I think Dr. Hecht would be glad to arrange for such analyses by coworkers for others, and by no means solely on radioactive minerals.

Methods have been developed for a variety of compounds.

In the second place the analysis indicates that this granite is much older than I had expected (360 million years) and akin to that at Branchville, Conn., from which a uraninite has been analyzed by Hillebrand (N.R.C. Bulletin 80, p. 341). This, however, agrees with what Professor Berkey had thought and shows what important help may be given by such research.

Finally, as one swallow does not make a summer it would be desirable to have analyses made of other such minerals, and I would like to call attention to the possibility of so doing even from such small quantities. It would be very interesting to have analyses from New Hampshire granites, and such minerals should be found in the quarries north of Keene.

ALFRED C. LANE,

*Chairman, N.R.C. Committee on the  
Measurement of Geological Time*

### "EXPANSION AND CONTRACTION" OF CHROMATOPHORES

SUMNER,<sup>1</sup> in a recent article in this journal, contends that a large majority of investigators interested in changes in color in vertebrates hold that the movement of pigment granules in the chromatophores is not due to "expansion or contraction" of the chromatophores, but that they continue to use this expression in spite of the fact that its meaning is not at all in accord with their view. To remedy this incongruous situation, he proposes to substitute "chromatosome" (pigment body) for "chromatophore." He says: "My suggestion is that we continue to employ the terms 'expansion' and 'contraction,' since something obviously does expand and contract, but that we credit these movements to the things that actually do expand and contract, namely, the pigment-masses within the cells."

It is well known that the colored substance in the chromatophores in the vertebrates is in the form of numerous discrete granules and that these granules move on definite paths through the cytoplasm out into the various branches of the chromatophores under certain conditions, and on the same paths back into

<sup>1</sup> F. B. Sumner, "Why Do We Persist in Talking about the 'Expansion' and 'Contraction' of Chromatophores?" SCIENCE, 78: 283-4, 1933.