number of patents awarded in any state or region is at least one measure of the progress that is being made. Such a standard of measurement applied to the South now will indicate clearly how desperately we need research—pure research, which underlies all other types; industrial research, economic research, and relatively how little of these is being done among

Another evidence of the business man's interest is seen in the program that has been set up for this meeting. Please note the number of influential and successful non-pedagogues that are having a share in it. Personally, my own interest in the project would be greatly curtailed if this were not the case.

It is my profound hope that more and more of both groups—business men and professional men will look to the Southern Association for the Advancement of Science to help in their problems, and more and more will the organization be able to help in their solution.

Finally, it is my considered judgment that if we do no "covey shooting" at southern problems, but rather pick them singly and do a good job in getting our composite aim right down the barrel at them, our outlook for service to the region is genuinely heartening.

Quoting Dr. Pipkin again: "An empire awaits the philosophy generous enough to shape a great destiny,"

# **OBITUARY**

### HERBERT FOX

HERBERT Fox, son of Samuel Tucker Fox and Hannah Freas Fox, was born in Atlantic City on June 3, 1880. He received his A.B. from Central High School, Philadelphia, in 1897, his M.D. from the University of Pennsylvania in 1901. He served his interneship in the Philadelphia General Hospital and in the Presbyterian Hospital, Philadelphia. In 1903–04 he was a member of the Philadelphia Typhoid Commission; in 1904, pathologist to the Rush Hospital, Philadelphia; in 1905–06, second assistant in pathology under Heinrich Albrecht in Vienna.

In 1906 he became pathologist in comparative pathology for the Philadelphia Zoological Society, a position he held until his death. He at once took a leading part in the scientific studies emanating from the collection in their Zoological Gardens. He studied particularly the incidence and control of tuberculosis among the primates and in his last decade the pathology of arteriosclerosis in mammals and birds and of chronic arthritis. His large monograph on "Disease in Captive Wild Mammals and Birds" (1923) is based on the record of 6,000 autopsies performed under his supervision. It is a thorough and exhaustive treatise widely used as a reference work. Under his direction the Zoological Society's Penrose Research Laboratory, the pioneer institution of its kind, rose to its position of leadership. He became professor of comparative pathology, University of Pennsylvania, in 1927.

From 1906 to 1911 he was officer in charge of the laboratory of the Pennsylvania Department of Health.

In 1911 he succeeded Alfred Stengel as director of the William Pepper Laboratory of Clinical Medicine, University of Pennsylvania, which position also he held until his death. Here he guided the development of the laboratory facilities in the university's major teaching hospital through the period of rapid advance of the clinical laboratory. His own contribu-

tions were especially in relation to diseases of the lymphatic tissues.

He was co-author with Alfred Stengel of four editions of their "Textbook of Pathology."

In 1915 he was a member of the commission managing the outbreak of poliomyelitis at Erie, Pa. From 1915 to 1926 he was pathologist to the Children's Hospital, Philadelphia. In the World War he served from 1917 to 1919 as major, in charge of the cantonment laboratory at Camp Zachary Taylor, Louisville, Ky.

He was a fellow of the College of Physicians of Philadelphia and of the American Association for the Advancement of Science and a member of the American Philosophical Society, the Association of Pathologists and Bacteriologists, the American Society of Clinical Pathologists, the American Medical Association and the Academy of Natural Sciences of Philadelphia, as well as of several honorary fraternities.

He died on February 27, 1942, after several months of illness.

In 1904 he married Louise Carr Gaskell, who died in 1933. Of their three children, two survive, Margaret Fox Hentz and Samuel Tucker Fox, 3rd. In 1938 he married Mary Harlan Rhoads, who survives him.

In his work he was meticulous to secure perfection in the smallest details. An omnivorous reader, he was a connoisseur of many of the arts and a welcome companion at any gathering. His happiest hours were probably those in which he lightly dropped an almost invisible fly on the ripples of the streams in Pennsylvania or Nova Scotia.

J. HAROLD AUSTIN

### RECENT DEATHS AND MEMORIALS

THE death at the age of sixty years is announced of Charles Francis Harding, professor of electrical engineering and director of the electrical laboratory at Purdue University.

Dr. Carl Oscar Johns, chemical consultant, director of research, retired, of the Standard Oil Development Company, died on April 18, at the age of seventy-one years.

Dr. Shirley W. Wynne, from 1928 to 1933 health commissioner of New York City, died on April 19, at the age of fifty-nine years.

Dr. John Baldwin Walker, until his retirement in 1938 professor of clinical surgery at the College of Physicians and Surgeons, Columbia University, died on April 13, at the age of eighty-two years.

Dr. Maria M. Roberts died on April 12, at the age of seventy-four years. Among the offices held during her fifty years of service at the Iowa State College

were the positions of dean of the Junior College and professor and head of the department of mathematics.

Professor Jean Perrin, Nobel laureate in 1926, formerly president of the French Academy of Sciences, died on April 17 at the age of seventy-one years. Since Dr. Perrin came to the United States last December he has been dean of the faculty of sciences of the recently established Franco-Belgian Free School of Higher Studies.

It is planned to establish a library in the University Hospital, in Philadelphia, in honor of the late Dr. George E. de Schweinitz, professor emeritus of ophthalmology of the University of Pennsylvania School of Medicine. Friends of Dr. de Schweinitz have undertaken to finance the project.

## SCIENTIFIC EVENTS

### THE WILLIAM LOWELL PUTNAM MATHE-MATICAL COMPETITION

Professor W. D. Cairns, secretary-treasurer of the Mathematical Association of America, reports that the department of mathematics of the University of Toronto, Canada, won the first prize of \$400 in the fifth annual William Lowell Putnam Mathematical Competition held on March 7. This is the third year in five that the University of Toronto has taken first place in the competition made possible by the trustees of the William Lowell Putnam Intercollegiate Memorial Fund, left by Mrs. Putnam in memory of her husband, a member of the Harvard class of 1882, and sponsored by the Mathematical Association of America. The members of the Toronto team were K. S. Hoyle, H. V. Lyons, M. A. Preston.

The second prize of \$300 is awarded to the department of mathematics of Yale University, the members of whose team were F. H. Brownell, 3rd, A. M. Gleason, A. E. Roberts, Jr.

The third prize of \$200 is awarded to the department of mathematics of the Massachusetts Institute of Technology, with a team composed of E. D. Calabi, W. S. Loud, G. P. Wachtell.

The fourth prize of \$100 is awarded to the department of mathematics of the College of the City of New York, the members of whose team were Herman Chernoff, Harvey Cohn, Edward Gordon.

In addition to these prizes to the departments of mathematics with winning teams, a prize of \$50 each is awarded to the following five persons given in alphabetical order whose scores ranked highest in the six-hour examination: Harvey Cohn, College of the City of New York; A. M. Gleason, Yale University; W. S. Loud, Massachusetts Institute of Technology; H. V. Lyons, University of Toronto; M. A. Preston, University of Toronto. One of these five will later

be chosen to receive a \$1,000 a year scholarship at Harvard University.

The members of the four winning teams will receive individual cash awards according to the ranks of their teams, and all individuals receiving awards will also receive medals.

Honorable mention has been awarded this year to four teams and to five individuals. The teams are from the department of mathematics, Cooper Union Institute of Technology, New York, members of the team being Harold Grad, M. S. Klamkin, Kenneth Robinson; the department of mathematics, Harvard University, Cambridge, members of the team being R. M. Bloch, L. S. Shapley, J. A. Zilber; the department of mathematics, New York University, New York, members of the team being Melvin Lax, Harold Lewis, Henry Shenker; and the department of mathematics, Swarthmore College, Swarthmore, members of the team being N. B. Hannay, W. H. Mills, M. S. Raff. The five individuals receiving honorable mention are E. D. Calabi, Massachusetts Institute of Technology; C. P. Gadsden, Tulane University; K. S. Hoyle, University of Toronto; Melvin Lax, New York University; W. H. Mills, Swarthmore College.

## THE INTER-AMERICAN TREATY ON NA-TURE PROTECTION

The National Parks Association reports that seven countries have ratified the Inter-American Treaty on Nature Protection and Wildlife Preservation to date, three of them since the United States entered World War II on December 8, 1941. This is welcome evidence of the intention to continue permanent cooperation among the nations of the Western Hemisphere for the peaceful purposes of preserving unique natural features, historic objects and vanishing wildlife.

Haiti became the fifth country to deposit its ratifi-