

viruses. These led to the discovery of Virus III and the development of methods of growing viruses in tissue cultures. A vaccine prepared from cultured virus is now available for the prevention of smallpox in human beings. He has worked on psittacosis and

has developed a safe method of diagnosing the disease by the use of white mice instead of birds. His most recent work has dealt with a new disease, lymphocytic choriomeningitis, that attacks the central nervous system of man.

SCIENTIFIC NOTES AND NEWS

FELLOWS of the Royal Society, London, were elected on May 6 as follows: John Desmond Bernal, lecturer in crystallography, University of Cambridge; Albert Charles Chibnall, assistant professor of biochemistry, Imperial College of Science and Technology; George Roger Clemo, professor of chemistry, Armstrong College, University of Durham; Alan Nigel Drury, M.D., lecturer in pathology, University of Cambridge; Harold Munro Fox, professor of zoology, University of Birmingham; William Edward Garner, professor of physical chemistry, University of Bristol; Sydney Goldstein, Ph.D., lecturer in mathematics, University of Cambridge; Percival Hartley, D.Sc., director of biological standards, National Institute for Medical Research; Herbert Leader Hawkins, professor of geology, University of Reading; the Rev. John Ernest Holloway, lecturer in botany, University of Otago; William Hume-Rothery, D.Sc., Warren research fellow of the Royal Society; Thomas Godfrey Mason, Sc.D., Cotton Research Station, Trinidad; James Reid Moir, archeologist; Marcus Laurence Elwin Oliphant, Ph.D., assistant director of research, Cavendish Laboratory, University of Cambridge; Carl Frederick Abel Pantin, Sc.D., lecturer in zoology, University of Cambridge; David Randall Pye, Sc.D., deputy director of scientific research, Air Ministry, and Edmund Clifton Stoner, Ph.D., reader in physics, University of Leeds.

PROFESSOR W. L. BRAGG, Langworthy professor of physics in the University of Manchester, has been appointed director of the British National Physical Laboratory. He will assume duty in the autumn.

DR. T. MADSEN, chief of the State Serum Institute in Copenhagen, has for the seventh time been elected president of the Health Committee of the League of Nations. Dr. Madsen recently gave the Abraham Flexner lectures at Vanderbilt University, where he was in residence during March and April.

THE council of the British Royal Institute of Public Health has awarded the Harben Gold Medal to Sir Frederick Gowland Hopkins, professor of biochemistry at the University of Cambridge. The medal is awarded triennially under a trust created by the late Sir Henry Harben "to the person, irrespective of nationality, who, in the opinion of the council, has rendered the most eminent services to public health."

THE Patrons' Medal of the Royal Geographic Society, London, has been awarded to Lincoln Ellsworth for his Antarctic flight of 1936.

THE Société Nationale d'Acclimatation de France has awarded its 1936 silver medal to Dr. George S. Myers, of Stanford University, in recognition of his researches on fishes, particularly the smaller tropical fresh-water species. The presentation was made on March 15 by M. Albert Lebrun, president of the French Republic.

DR. JAS. LEWIS HOWE, dean of the School of Applied Science and head of the department of chemistry of Washington and Lee University, has been awarded the Herty Medal of the Southern Division of the American Chemical Society "for outstanding work on chemistry in the south."

THE Army Ordnance Association has conferred its Medal of Merit upon Major General J. G. Harbord, chairman of the Board of the Radio Corporation of America. The ceremony of presentation took place on May 12 at the Mayflower Hotel, Washington, D. C.

DR. WILLIAM H. DOHERTY, of the Bell Telephone Laboratories, has been awarded by the Institute of Radio Engineers the Morris Liebman Memorial Prize for 1937, in recognition of his work in the field of radio-frequency power amplifiers. The presentation was made at the annual dinner of the institute in New York on May 12.

THE doctorate of science has been conferred by Clemson College on Dr. George W. Keitt, head of the department of plant pathology of the University of Wisconsin, in recognition of his contributions in the field of plant diseases. The degree was conferred on the occasion of the dedication of the new agricultural building on May 12.

THE degree of doctor of science will be conferred at the summer convocation of the University of Durham on Sir Henry Dale, director of the National Institute for Medical Research.

DR. DAVID RIESMAN, emeritus professor of clinical medicine at the School of Medicine of the University of Pennsylvania, professor of clinical medicine in the Graduate School of Medicine and professor of the history of medicine in the Graduate School of Arts

and Sciences, was the guest of honor at a testimonial dinner on his seventieth birthday, March 25. Dr. Russell S. Boles was toastmaster, and the speakers included: Dr. Josiah Penniman, provost of the University of Pennsylvania; Dr. William Gerry Morgan, Washington, D. C.; Dr. Henry A. Christian, Boston; Dr. Lewis A. Conner, New York; Dr. Alfred Stengel and Dr. Wilmer Krusen. A volume of his selected writings was presented to Dr. Riesman, in which is an engraved plate bearing the names of his former and present assistants.

DEAN EMERITUS FREDERICK J. WULLING, of the College of Pharmacy of the University of Minnesota, was the guest of honor at the fifty-third annual banquet of the Minnesota State Pharmaceutical Association in St. Paul. Dean Wulling, who retired in the spring of 1936 after a career that began at the university in 1892, was presented with a memorial plaque by members of the association "in honor of his distinguished service."

DR. ELMER K. BOLTON, chemical director of the E. I. du Pont de Nemours and Company, has been elected a director of the American Chemical Society. Dr. Bolton succeeds Dr. Frank C. Whitmore, of Pennsylvania State College, who will become president of the society on January 1.

PROFESSOR WILLIAM CARUTH MAC TAVISH, administrative chairman of the department of chemistry of Washington Square College, New York University, has been elected chairman of the New York Section of the American Chemical Society.

DR. WESLEY R. COE, for twenty-eight years professor of biology at Yale University, will retire after a year's leave of absence beginning at the close of the present academic year.

DR. LINUS PAULING, professor of chemistry at the California Institute of Technology, has been appointed George Fisher Baker lecturer in chemistry at Cornell University for the first term of the year 1937-38.

DR. HARALD M. WESTERGAARD, Gordon McKay professor of civil engineering at Harvard University, has been appointed dean of the Graduate School of Engineering.

DR. ERWIN E. NELSON, professor of pharmacology of the Medical School of the University of Michigan, has been made head of the department of pharmacology at the School of Medicine of Tulane University of Louisiana, New Orleans, succeeding Dr. John T. Halsey, who is retiring at the close of the present session.

DR. GEORGE E. WAKERLIN, professor of pharmacology and physiology at the School of Medicine of the

University of Louisville, has been appointed professor and head of the department of physiology at the College of Medicine of the University of Illinois. Dr. Wakerlin will succeed Dr. Maurice B. Visseher, who was recently appointed professor and head of the department of physiological chemistry at the School of Medicine of the University of Minnesota.

MISS MABEL HEREN, in honor of thirty years' service as a member of the department of mathematics of Knox College, has been appointed to the Henry M. Hitchcock chair of mathematics.

DR. JULIA M. SHIPMAN, assistant professor in the department of geography at Mount Holyoke College, has leave of absence for the academic year 1937-38 to teach at Ginling College, Nanking, China.

DR. GEORGE A. HARROP, of the Johns Hopkins Hospital, has become director of research on the staff of E. R. Squibb and Sons, of New York. A new research laboratory is in process of construction at New Brunswick, N. J. Investigation along scientific lines will be carried on without necessary regard to its immediate practical outcome. It is also planned, in the near future, to undertake active clinical investigation with which to supplement and give orientation to the laboratory studies.

CLARENCE L. FORSLING, director of the Appalachian Forest Experiment Station at Asheville, N. C., has been appointed assistant chief forester in charge of the research activities of the U. S. Forest Service. He will supervise the work of the Divisions of Silvics, Forest Influences, Range Research, Forest Products and Forest Economics, which are carrying on specialized investigations in the protection and management of forest and range lands, the utilization of wood and other phases of forestry.

ERNEST SEGESSEMAN, a member of the laboratory staff of the National Oil Products Company, Harrison, N. J., has been made chief chemist of the company's new plant at Cedartown, Ga.

DR. WILLIAM CROCKER, director of the Boyce Thompson Institute for Plant Research, has been elected president of the Board of Education of Yonkers, N. Y.

DR. ERNEST O. LAWRENCE, professor of physics and director of the radiation laboratory at the University of California, spoke on "Atoms, New and Old" at the St. Louis University Medical School on May 12.

DR. P. W. ZIMMERMAN, of the Boyce Thompson Institute, Yonkers, N. Y., spoke before the Sigma Xi Club of the University of Florida on April 22. His subject was "Plant Responses to Hormone-like Substances."

DR. FREDERICK C. LEONARD, chairman of the department of astronomy of the University of California at Los Angeles and president of the Society for Research on Meteorites, gave on April 7 an illustrated lecture entitled "Visitors from Cosmic Space," before the University Chapter of the Society of the Sigma Xi.

THE Linares Lecture of the University of Cambridge was delivered by Dr. A. V. Hill, Foulerton research professor of the Royal Society on May 10. His subject was "The Heat-Production of Muscle and Nerve: A Critical Survey."

IN the account of the presentation of the medals of the National Academy of Sciences printed in the issue of SCIENCE for May 7, the address on presenting the Henry Draper Medal to Dr. C. E. Kenneth Mees is in error attributed to Dr. Frank Schlesinger. The address was read by Dr. Schlesinger, but should have been signed by Dr. V. M. Slipher, director of the Lowell Observatory, who is chairman of the Draper committee.

THE annual meeting of the Royal Institution of Great Britain was held on May 1. The London *Times* states that it was reported at the meeting that the total membership of the institution, which has been increasing for several years, is now 1,055. The library reconstruction was completed in October last, at a cost, as the accounts showed, of upwards of £15,000. The amount the institution has received by the bequest of the late Mr. Harry Brown is now announced as £29,000. The account of the Davy Faraday Research Laboratory, which is attached to the institution, showed a deficit for the year of nearly £2,000; but the chairman was able to announce a promise by Sir Robert Mond, honorary secretary of the laboratory, to meet this deficit. The following were elected for the year 1937-38: *President*, Lord Eustace Percy; *Treasurer*, Sir Robert Robertson; *Secretary*, Major Charles E. S. Phillips.

THE College of Physicians of Philadelphia held on May 14 and 15 a celebration of the hundred and fiftieth anniversary of its founding in 1787, the year of the Constitutional Convention. The speakers were Roland S. Morris, president of the American Philosophical Society; Dr. David Riesman, professor of the history of medicine in the Graduate School of Arts and Sciences of the University of Pennsylvania; Sir Henry Dale, director of the British National Institute for Medical Research, and Dr. Hans Zinsser, professor of bacteriology in the Harvard Medical School.

AN international colloquium on the physiology of the sex hormones, under the presidency of Professor Pol Bouin, of the faculty of medicine of the University of Strasbourg, will be held in Paris this June under the auspices of the Singer-Dolignac Foundation. Twenty investigators particularly qualified by their work in the subject have been invited to attend, all expenses being defrayed by the foundation. Those in the United States who have received invitations are Dr. Frederick L. Hisaw, professor of zoology at Harvard University; Dr. Edgar Allen, professor of anatomy at Yale University; Dr. Philip Smith and Dr. Aura E. Severinghaus, of the College of Physicians and Surgeons, Columbia University, and Dr. Carl G. Hartman, of the department of embryology of the Carnegie Institution of Washington at Baltimore.

CONSTRUCTION work on the extension of the School of Medicine of Columbia University was begun on April 1. The plans, which will necessitate an expenditure of \$600,000, provide for the addition of ten stories to the present six-story extension of the west wing of the building at the Columbia Medical Center. The additional space will be used mainly to house the research laboratories of the five graduate departments— anatomy, pathology, biochemistry, physiology and bacteriology—which now are confined to the lower floors of the wing.

DISCUSSION

THE NEEDS OF THE MIMICRY THEORY

It seems inevitable that any adverse criticism of the theory of mimicry should bring forth more examples and arguments in its support, of the kinds which have long been on record. Professor Carpenter¹ has therefore done the expected in coming to the defense of the theory after the critical discussions in the author's recent book² on evolution.

No attempt will be made to refute his arguments or to show *individually* why the cited examples do not prove mimicry to be the thing it has been claimed to

be. The examples could not be proved meaningless without a very much closer study than is possible from the few facts known and recorded. It is likewise true, though not so pleasant a thing to say, that of the examples, new and old, few or none could be successfully advanced to prove the advantages and the origin of mimicry without a much closer study of them than has ever been made. If the same rigid requirements were insisted upon for proof as are currently demanded for disproof, the theory would hardly have gained prominence. We are called upon to accept mimicry until it has been clearly disproved, whereas it would be more logical to reject it until clearly estab-

¹ SCIENCE, 85: 356-359, 1937.

² A. F. Shull, "Evolution." New York: McGraw-Hill Book Co. 1936.