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LECTURES TO THE LAITY OF THE NEW YORK ACADEMY OF MEDICINE

THE sixth Series of Lectures to the Laity of the New York Academy of Medicine opened on November 14 with a lecture by Dr. Alan Gregg, director of the Medical Sciences of the Rockefeller Foundation, which was presided over by Dr. Malcolm Goodridge. Dr. Gregg pointed out that "the history of humanism shows that it began in protest at too much preoccupation with theology. The potential role of humanism to-day is to carry man, and especially the physician, beyond the limitations of natural science."

Other lectures in the series are as follows:

December 12, 8:15 P.M. Psychiatry and the Normal Life, by William Healy, M.D., director, Judge Baker Guidance Center, Boston. To what extent should the normal man be educated in psychiatric understandings for the sake of better management of himself and the advancement of civilization? *Presiding chairman*, Nolan D. C. Lewis, M.D.

January 23, 8:15 P.M. Paracelsus in the Light of Four Hundred Years, by Henry E. Sigerist, M.D., director of the Institute of History of Medicine, the Johns Hopkins University. Paracelsus was not only one of the greatest physicians of the Renaissance but also one of its great philosophers. His courageous and original approach to the problems of life and death, health and disease, physician and patient, gave him a unique position in the medical world and to-day, four hundred years after his death, he still brings us a significant message. *Presiding chairman*, Alfred E. Cohn, M.D.

February 27, 8:15 P.M. What We Do Know about Cancer, by Francis Carter Wood, M.D., director of Radio Therapeutic Department, St. Luke's Hospital, New York City. A review of the vast amount of research work on animals and of the clinical investigations of cancer, by the newer methods, which have yielded a large amount of knowledge, much of which is still unfamiliar to the layman. *Presiding chairman*, C. P. Rhoads, M.D.

March 27, 8:15 P.M. Philosophy as Therapy, by Irwin Edman, Ph.D., professor of philosophy, Columbia University. The possible union of empirical psychiatric investigation and the delicate insights of philosophical analysis. Philosophy may still have medicinal uses, and medicine itself may gain by the techniques and perspectives provided by philosophical discipline. *Presiding chairman*, Eugene H. Pool, M.D.

April 24, 8:15 P.M. The Promise of Endocrinology, by Oscar Riddle, Ph.D., Carnegie Institution of Washington, Department of Genetics, Cold Spring Harbor, N. Y. What is known about the regulation of body functions by hormones. The use of purified hormones in maintaining health and in combating disease. *Presiding chairman*, David Marine, M.D.

RECENT DEATHS AND MEMORIALS

DR. RAYMOND PEARL, professor of biology in the School of Medicine and in the School of Hygiene and Public Health of the Johns Hopkins University, died suddenly on November 17 at the age of sixty-one years.

DR. OLIVER THOMAS OSBORNE, emeritus professor of therapeutics at the Medical School of Yale University, died on November 11 at the age of seventy-eight years.

ELNATHAN KEMPER NELSON, senior chemist in the Food Research Division of the Bureau of Chemistry and Soils of the U. S. Department of Agriculture, with which he had been connected for thirty years, died on November 10 in his seventieth year.

DR. OTTO E. PLATH, entomologist and professor of biology at Boston University, died on November 5 at the age of fifty-five years.

GRACE A. SANDHOUSE, since 1926 a specialist in the identification of bees and wasps in the Bureau of Entomology and Plant Quarantine, died on November 9 at the age of forty-four years.

IN recording the death of Dr. Carl Alsberg, it was said that he was director since 1937 of the Giannini Foundation of Stanford University. It should have been said that since October, 1937, he was director of the Giannini Foundation of Agricultural Economics of the University of California at Berkeley. Previously, he was director of the Food Research Institute at Stanford University.

THE *Journal* of the American Medical Association states that a Mayo Memorial Commission has been appointed by Governor Harold E. Stassen, of Minnesota, to study a proposal for the establishment of a fund of \$250,000 through public subscription throughout the world for a memorial to the late Drs. William J. and Charles H. Mayo. State Senator William B. Richardson, of Rochester, is chairman of the commission, which is composed of seventeen representative citizens of Minnesota.

SCIENTIFIC NOTES AND NEWS

THE Rudolf Matas Medal for vascular surgery of the School of Medicine of Tulane University was presented on November 14 to Dr. Daniel Collier Elkin, professor of surgery at Emory University, Atlanta.

THE Collier Trophy, presented annually since 1911 for achievement in aviation, has been awarded to Dr. Walter Boothby and Dr. W. Randolph Lovelace, II, of the Mayo Clinic, Rochester, Minn., and to Captain

Harry Armstrong, of the Army Medical Corps, for their researches on the effect on the brain, nerves, blood and reflexes of an aviator when he ascends to the stratosphere.

At the sixtieth annual dinner on November 1 of the Associate Alumni of the College of the City of New York, which was given at the Hotel Biltmore, five Townsend Harris medals and four Alumni Service medals were presented to alumni of the college for "notable achievement." Among the recipients of the Harris medals were Dr. Alexander O. Gettler, professor of toxicology at the Medical College, and Dr. Louis I. Dublin, vice-president of the Metropolitan Insurance Company. Among the speakers at the dinner were Sir Norman Angell, the British economist, and Dr. Stephen Pierce Duggan, director of the Institute of International Education, New York.

THE gold medal of the Holland Society, awarded each year to "a man prominent in the arts, sciences or humanities," was presented at a dinner of the society on November 14 to Henry Ford in recognition of "his achievements in introducing and developing the art of mass production in industrial manufacture."

At a meeting of the trustees on November 19 the department of anatomy of the New York Medical College was named the "William Waldo Blackman Laboratory of Anatomy." Dr. Blackman is an alumnus, formerly professor of anatomy at the college, and at present vice-chairman of the Board of Trustees. Professor William K. Gregory, of the American Museum of Natural History, delivered the address of the evening on "Evolutional Causes of the Misery of Mankind." Dr. C. E. Tharaldsen, professor of anatomy, presided over the ceremonies at which President C. A. Burrett, Clifford Hemphill and Dr. Charles E. Birch, of the Board of Trustees, paid tribute to Dr. Blackman.

DR. JAMES FRANCK, professor of physics at the Johns Hopkins University, will give the Hitchcock lectures at the University of California at Berkeley during March. As already announced in *SCIENCE*, Dr. Walter B. Cannon, George Higginson professor of physiology at Harvard University, will lecture on the Hitchcock Foundation in February.

DR. RALPH IRVING LLOYD, Brooklyn, N. Y., has been named president-elect of the American Academy of Ophthalmology and Otolaryngology, which met at Cleveland from October 6 to 10. Vice-presidents elected are Drs. Everett L. Goar, Houston; James M. Robb, Detroit, and Ralph O. Rychener, Memphis. Dr. Frank R. Spencer, Boulder, Colo., will be president during the coming year.

OFFICERS of the Council on Dental Education of the American Dental Association for the coming year

are: *Chairman*, Dr. Minor J. Terry, secretary of the New York State Board of Dental Examiners, and *Vice-chairman*, Dr. J. Ben Robinson, of the Baltimore College of Dental Surgery.

THE list of officers of the Society of American Bacteriologists given in the issue of *SCIENCE* for November 8, p. 425, referred to the New York branch of the society, not to the national organization.

AT Harvard University, promotions to the rank of associate professor have been announced as follows: Dr. Edward S. Castle, physiology; Dr. George L. Clarke and Dr. John H. Welsh, Jr., zoology.

GERALD M. RIDENOUR, associate in water and sewage research at the New Jersey Agricultural Experiment Station and assistant professor in the Department of Water Supplies and Sewage Disposal at Rutgers University, has become associate professor of sanitary engineering at the Pennsylvania State College.

DR. JOHN A. CAMERON, assistant professor of zoology, has been appointed assistant professor of anatomy at the Medical School of the University of Missouri, to succeed Dr. L. J. Wells, who has been appointed associate professor of anatomy at the Medical School of the University of Minnesota.

DR. WILLIS L. TRESSLER, of the department of biology of the University of Buffalo, has been appointed assistant professor in the department of zoology of the University of Maryland, where he will be associated, also, with the Chesapeake Biological Laboratory as planktologist.

DR. DOROTHY DAY, professor of botany at Smith College, has leave of absence for a year, which she plans to spend at the New York Botanical Garden working in the laboratory of Dr. William J. Robbins, director of the garden.

THE Committee on Scientific Research of the American Medical Association has made grants as follows: to Dr. Arthur M. Lassek, professor and chairman of the department of anatomy at the Medical College of the State of South Carolina, for his investigation of the pyramidal tract in man and other higher primates; to Dr. Harry Beckman, of the School of Medicine of Marquette University, in partial support of the renewal for another year of his studies in the prophylaxis of avian malaria, and to Dr. Wesley W. Spink, assistant professor of medicine at the Medical School of the University of Minnesota, to support an investigation of antistaphylococcal immunity and the nutritional requirements of staphylococci. Dr. Spink has also received a grant from Merck and Company in support of a study of ascorbic acid.

DR. RAYMOND L. DITMARS, of the New York Zoolog-

ical Park, has been appointed curator of the department of insects which will be established at the garden in the spring. Permanent and seasonal exhibits are planned. Dr. Ditmars will relinquish the active curatorship of the department of mammals which he holds in addition to that of reptiles, in order that he may devote more attention to the new branch.

DR. JOSEPH W. BARKER, dean of the School of Engineering of Columbia University, has been named regional adviser for New York and Long Island in the Federal program to train men quickly for engineering work in the defense industries.

DEAN ALEXANDER S. LANGSDORF, of the Schools of Engineering and Architecture of Washington University, St. Louis, has been named regional adviser of the Engineering Defense Training program. He will visit industrial plants in Missouri, Kansas, Arkansas, Oklahoma and West Tennessee to determine what help is needed from engineering schools in obtaining men for work in connection with the defense program and will ascertain what courses in the schools are available and what the cost will be. The Government will bear tuition expenses. Dean R. A. Seaton, of the Kansas State College, who was succeeded as regional adviser by Dr. Langsdorf, has been made national chairman of the program.

DR. BOSTWICK H. KETCHUM, associate in marine biology at the Oceanographic Institution at Woods Hole, Mass., sailed on November 15 for Bermuda to study the effect of bacterial slime on the fouling of ships' bottoms.

DR. OLIVER S. ORMSBY will deliver the presidential address at the twenty-fifth annual meeting of the Institute of Medicine of Chicago to be held at the Palmer House on the evening of December 3. He will speak on "Pellagra." The annual dinner and business meeting of the fellows will be held preceding the lecture when citizen fellowships will be conferred.

DR. CHARLES H. BEST, professor of physiology at the University of Toronto, will deliver the second Harvey Society Lecture of the current series at the New York Academy of Medicine on November 28. Dr. Best will speak on "Thrombosis and the Action of Heparin."

PROFESSOR A. N. RICHARDS, chairman of the Local Committee of Arrangements of the recent meeting of the National Academy of Sciences at the University of Pennsylvania, writes: "I beg to request that you publish the fact that the communication entitled 'Artificial mixing of incompatible germ-plasms in *Drosophila*,' read by Dr. Hermann J. Muller before the National Academy of Sciences at its autumn meeting on October 28, published in abstract on page 418 of the issue of *SCIENCE* for November 8, 1940, was a joint

communication by Professor Muller and Dr. G. Pontecorvo. The omission of Dr. Pontecorvo's name from the final program was the result of a regrettable oversight."

THE United States Civil Service Commission, Washington, D. C., wishes to secure professional physicists to fill positions in connection with the national defense program of the Federal Government. These positions include the following grades: Physicist (any specialized branch), \$3,800 a year; also principal, \$5,600; senior, \$4,600; associate, \$3,200; assistant, \$2,600 a year. Applications must be filed with the Commission's Washington office not later than December 12. Applicants for all grades must have completed a 4-year college course; for the three higher grades they must have completed at least 24 semester hours in physics. In addition, for all grades, applicants must have had professional experience in physics. Substitution of graduate study in a specialized branch of physics may be allowed for part of the experience. Applicants for the two lower grades will be given a written test on general and professional questions. No written test is necessary for the higher grades. Candidates will be rated on their qualifications as shown in their applications and on corroborative evidence.

THE Committee on Scientific Research of the American Medical Association invites applications for grants of money to aid in research on problems bearing more or less directly on clinical medicine. Preference is given to requests for moderate amounts to meet specific needs. Application forms may be obtained from the Committee at 535 North Dearborn Street, Chicago, Illinois.

ORIGINAL unpublished essays on any subject in the field of plants useful to man are eligible for the Walker Prize competition for 1941. Further information may be had from the Secretary, 234 Berkeley Street, Boston. The closing date is May 1, 1941.

THE funds for a fellowship of \$2,000 to enable Latin American physicians to pursue graduate studies at Mount Sinai Hospital in any of the clinical or laboratory departments have been provided by the Dazian Foundation for Medical Research.

FACILITIES of the department of mathematics of the University of Cincinnati for research studies centering on special problems of aviation have been offered to the United States Army Air Corps staff at Wright Field, Dayton. The offer is an outgrowth of a survey of the research facilities and personnel of the university in the field of the physical sciences and mathematics which Professor Louis Brand conducted during the summer at the request of the National Research Council.

DR. RICHARD B. GOLDSCHMIDT, professor of zoology at the University of California at Berkeley, has presented to the university a collection of letters from eminent biologists of the twentieth century. The letters form part of correspondence with Dr. Goldschmidt. The collection does not contain complete sets of the correspondence, as a large part of Dr. Goldschmidt's files were destroyed when he left Germany in 1936.

THE exhibits, on science, agriculture and education, prepared by the University of California for the Golden Gate International Exposition in San Francisco, valued at \$80,000, have been presented to the university by the California Commission, a body created by the Governor to aid the Exposition. The exhibit "Science in the Service of Man" was prepared by the university with the cooperation of other educational institutions, and some of the exhibits from the Hall of Science will be presented to these institutions. President Sproul's committee to assist the commission will distribute the exhibits to the seven divi-

sions and the various departments of the university. They will be used primarily for teaching and research purposes.

AN expanded program of research in pulp, paper and related products is provided for in a new agreement entered into by the Federal Department of Mines and Resources with the Canadian Pulp and Paper Association and McGill University. According to *The New York Times*, under the terms of this agreement the association undertakes to provide greatly increased support for the extension of studies aimed at the improvement of production methods and the reduction of manufacturing costs. The first agreement for such cooperative activity was entered into twelve years ago, at which time the association erected a special research building on a site provided by McGill University. It is pointed out by the *Times* that McGill, as well as other Canadian universities, finds through the pulp and paper industries a broad field of employment for graduates in engineering, chemistry and related sciences.

DISCUSSION

PERCEPTUAL DISORIENTATION DURING LANDING OF AIRPLANE

IN October, 1937, when making a plane trip to Texas, I had a striking experience in disorientation. During the intervening three years, despite frequent recitals of the experience, I have found but one other plane passenger who has observed the phenomenon. The phenomenon, as occurring in the airplane setting, is unknown to several psychologists who have been approached. It is likewise new to several aeronautical experts who have been told of it—including the pioneer, William B. Stout.

An opportunity to check the experience came on October 6, 1940. It faithfully repeated. Only the second episode need be related here. This second experience took place while using a TWA plane from Cincinnati to Detroit—a daytime trip in clear, sunny weather. I sat alone, facing forward, in a front left-side seat, next to the window. There were no passengers across the aisle, and I thus had a clear view through the right-side windows also.

The plane came down to make the Dayton Airport stop. As it levelled off, the disorientation phenomenon faithfully repeated itself. That is, after the plane has come down to the edge of the field, and has started to skim along the runway, the phenomenon begins. Looking out of the left window (with my face against it) the level field appeared as it should appear—horizontal. Glancing quickly across the aisle to look at the field through the right windows, the field was not

as it should be: it appeared to slope down forward at an angle of about 15 degrees.

For the next 2,000 or 3,000 feet of travel, while the plane flew (or later rolled) along the runway, I rapidly looked back and forth eight or ten times. In spite of knowing perfectly well that the ground on one side was a continuation of that on the other, and in spite of these rapid and repeated opportunities to compare the ground on the two sides, the ground to the left remained horizontal, and that to the right persisted with its forward downhill slope.

When the plane, with a low remaining speed, wheeled through a short turn to taxi back, the phenomenon abruptly ceased.

The explanation offered below finds approval among the psychologists approached so far. With my face against my left window, the frame of my window is too far beyond my angle of vision to be allowed to act as a frame of reference. Thus, as long as the plane does not go into acrobatics, and sticks to minor lateral shifts or makes gentle glides to airports, I am given a full chance to reorient the ground and agree with myself that it is still horizontal.

But in looking across the aisle, a different story is presented. In level flight, the fuselage of the plane is for a long time approximately horizontal; also, the window frame lines are then horizontal and vertical. In particular, the eye has observed that the top and bottom window frame lines are parallel with the horizon.