all energy, almost, been directed toward the totally weak; too long have the strong been unaided—indeed, without consideration.

That the two great fields, the physical and the psychic, can not be sharply differentiated is obvious to every thinking person, especially, perhaps, to the physician who constantly is made conscious of the influence of physical illness on the psychic reaction of his patient. The more discerning recognize the contrary condition; they observe the influences of psychic disturbances, originating in social, economic and a vast number of other factors, upon the patient's physical reactions.

SCIENTIFIC NOTES AND NEWS

Dr. John Dewey, professor of philosophy at Columbia University, will be the first William James lecturer at Harvard University on the foundation provided by the late Edgar Pierce, of the class of 1892, who at one time held a position in psychology at Harvard. Professor Dewey will give during the second half of the next academic year a series of ten public lectures and will conduct a seminar for graduate students in philosophy.

Dr. RICHARD MILLS PEARCE, Jr., general director of the division of medical education at the Rockefeller Foundation, formerly professor of medical research in the University of Pennsylvania, died suddenly on February 16, at the age of fifty-five years.

Dr. William Royal Stokes, bacteriologist of Baltimore, who handled some of the first infected parrots, has given his life in the battle with parrot fever, as did Harry B. Anderson, laboratory assistant at the U. S. Hygienic Laboratory. Dr. Daniel S. Hatfield, of Baltimore, and Dr. Charles Armstrong, of the U. S. Public Health Service, are both suffering from the disease, but their recovery is expected.

THE William H. Nichols Medal of the New York section of the American Chemical Society for 1930 has been awarded to Dr. Samuel Edward Sheppard, assistant director of the research department of the Eastman Kodak Company, Rochester. The award, bestowed for outstanding achievement in the chemistry of photography, will be presented to Dr. Sheppard at a joint meeting of the American Chemical Society, the Society of Chemical Industry, the Société de Chimie Industrielle and the American Electrochemical Society to be held on March 14 at the Chemists' Club, New York City. Dr. Sheppard will deliver an address on "The Reactions of Photographic Material to Light." Dr. C. E. K. Mees, director of research of the Eastman Kodak Company, will speak on "The Accomplishments of the Medalist," and Dr. Wilder D. Bancroft, of Cornell University, on "A Futuristic Study of the Medalist."

The Lamme Medal of the American Institute of Electrical Engineers has been awarded to R. E. Hellmund, East Pittsburgh, Pennsylvania, "for his contributions to the design and development of rotating electrical machinery." It is expected that the medal

will be presented at the summer convention of the institute, which is to be held in Toronto, Canada, from June 23 to 27.

The Harrison Memorial Prize Selection Committee, consisting of the presidents of the Chemical Society, the Institute of Chemistry of Great Britain and Ireland, the Society of Chemical Industry and the Pharmaceutical Society has awarded the Harrison Memorial prize for 1929 to Dr. R. P. Linstead. The prize is given for conspicuously meritorious work in any branch of chemistry, pure or applied, and is to be regarded as an exceptional distinction to be conferred upon a chemist less than thirty years of age.

Dr. O. E. Jennings, head of the department of botany of the University of Pittsburgh and curator of botany and director of education at the Carnegie Museum, received the honorary degree of doctor of science at the convocation of the University of Pittsburgh in February.

Dr. P. S. Selwyn-Clarke has received the decoration of the Médaille d'Argent des Epidémies from the French government for services in connection with the outbreak of yellow fever in West Africa.

Dr. A. Fujinami, professor of pathology in the Kyoto Imperial University, became a member of the Imperial Japanese Academy of Science at a recent general meeting of the academy.

Dr. Donald F. Jones, geneticist, of the Connecticut Agricultural Experiment Station at New Haven, has been named chairman of the publications committee of the Sixth International Genetics Congress to be held at Cornell University in 1933.

Dr. O. L. Sponsler, professor of botany in the University of California at Los Angeles, has been chosen president of the Western Society of Naturalists.

As has been reported in Science, the meeting of the British Association this year will be held in Bristol, from September 3 to 10, when Sir Thomas Holland will be succeeded in the presidential chair by Professor F. O. Bower. The newly elected presidents of the sections are announced in *Nature* to be as follows: A—Mathematical and Physical Sciences, Dr. F. E. Smith; B—Chemistry, Professor G. T. Morgan; C—Geology, Professor O. T. Jones; D—Zoology, Dr.

W. T. Calman; E—Geography, Professor P. M. Roxby; F—Economics, Professor T. E. Gregory; G—Engineering, Sir Ernest Moir; H—Anthropology, Dr. H. S. Harrison; I—Physiology, Professor H. S. Raper; J—Psychology, Professor C. W. Valentine; K—Botany, Dr. A. W. Hill; L—Education, Right Honorable Lord Eustace Percy, P.C.; M—Agriculture, Dr. P. J. du Toit.

Professor Arthur E. Kennelly, since 1902 professor of electrical engineering at Harvard University, retires at the close of the academic year with the title of professor emeritus.

Dr. William B. Castle has been promoted to be assistant professor of medicine in the Harvard Medical School, not assistant professor of physiology as was stated in a recent number of Science.

THOMAS D. BURLEIGH, of Georgia, for the last nine years head of the division of forestry of the Georgia State College of Agriculture and previous to that time a technical field assistant in the U. S. Forest Service, has been appointed associate biologist in the Bureau of Biological Survey to carry on research work on the relation of wild life to forests authorized by the recently enacted McSweeney-McNary Forestry Research Act. He will be stationed at the Appalachian Forest Experiment Station at Asheville, North Carolina.

Dr. E. P. CLARK, research chemist of the Interstate Cottonseed Crushers' Association, and Dr. Herbert L. J. Haller, associate in the department of chemistry of the Rockefeller Institute for Medical Research, have accepted appointment in the insecticide division of the chemical and technological research unit of the Bureau of Chemistry and Soils.

ASSOCIATE STATE FORESTER WILLIS M. BAKER, of the New Jersey Department of Conservation, has been appointed director of the newly created Pennsylvania Forest Research Institute at Mont Alto. This is the first institute of its kind maintained by a state department of forestry in the United States.

ASSOCIATE DEAN COLLINS P. BLISS has been named dean of the college of engineering of New York University to succeed Dean Charles H. Snow, the retiring administrative head of the college.

Dr. SHIRLEY W. WYNNE, New York City health commissioner, has been appointed professor of preventive medicine at the New York Polyclinic Medical School and Hospital.

THE Royal Society has awarded a Foulerton research studentship to Dr. A. S. Parkes, who at present holds a Beit research fellowship. Dr. Parkes is working in the department of physiology and biochemistry at University College, London.

Dr. J. G. Dusser de Barenne, of the University of Utrecht, has been appointed professor of physiology at Yale University. Dr. Eugen Kahn, of the University of Munich, has been appointed professor of psychiatry.

K. Y. Wang, who graduated in agriculture at Purdue University in 1928 and obtained his master's degree in August, 1928, has been appointed president of Kiangai Agricultural College in Nanchang, Kiangai, China.

The following appointments, recently made by the British secretary of state for the colonies, are recorded in *Nature*: Mr. A. G. G. Hill, botanist, Nigeria, to be plant breeding officer (senior geneticist), Mauritius; Mr. N. Humphrey, to be agricultural officer, Kenya; Mr. L. R. Doughty, to be geneticist, East African Agricultural Research Station, Amani, Tanganyika Territory; Mr. J. P. Mead, personal assistant to the conservator of forests, Malaya, to be director of forestry, Malaya; Mr. J. N. Oliphant, conservator of forests, British Honduras, to be deputy director of forestry, Malaya.

Dr. D. L. Edsall, dean of the Harvard Medical School and dean of the School of Public Health, has a leave of absence from May 1 to commencement and for the first half of 1930-31. He will use his sabbatical leave in travel and research abroad. During his absence, Dr. C. K. Drinker has been appointed acting dean of the School of Public Health, and Dr. Worth Hale will serve as acting dean of the Medical School.

Dr. Konstantin Economo, professor of psychiatry and neurology in Vienna, has been invited to lecture at Columbia University on his researches on the brain.

Dr. L. W. Nordheim, of the University of Göttingen, has been appointed visiting professor of theoretical physics at the Ohio State University for the spring quarter. He will lecture on recent developments in wave mechanics.

Professor Ernest L. Scott, of the department of physiology of the College of Physicians and Surgeons, Columbia University, spent December and January at the School of Tropical Medicine at San Juan, Porto Rico. On January 14 he gave an address before the faculty and students on "Blood Sugar." Colonel Edward B. Vedder, U. S. Army School, arrived on January 20. Colonel Vedder was a visiting lecturer this year. He gave four lectures before the faculty and students.

Professor Bristow Adams, of the office of publication of the New York State College of Agriculture, who has leave of absence, left at the end of the term to spend the equivalent term at the University of Hawaii, Honolulu, to give two courses there, one on the conservation of natural resources and the other on journalistic writing. From Hawaii, which he will leave about the end of May, Professor Adams will visit Japan, China and the Philippines.

Dr. George D. Hubbard, head of the department of geology and geography in Oberlin College, will spend the coming college year in travel and study in Europe. His plans include visits to most of the countries of Europe and to Egypt, Syria and Palestine.

Professor C. T. Brues, of Harvard University, delivered a series of two lectures on "Insects and Human Welfare" at Coker College on January 27 and 28.

Professor Charles J. Chamberlain, of the botanical department of the University of Chicago, will conduct a lecture course at the University of California at Los Angeles during the coming spring semester.

Dr. E. P. Wightman, a member of the Research Laboratory of the Eastman Kodak Company, gave an illustrated popular lecture on "How, Why and What is a Photograph" on February 13 before the Brooklyn Institute of Arts and Sciences. The lecture included motion pictures, showing the development of a photographic negative, and motion-picture photomicrographs illustrating the action of various photographic developers on individual grains of silver helide.

Dr. H. H. Love, of Cornell University, gave the first series of lectures under the Frank Azor Spragg Memorial Fund from January 27 to 31 at the Michigan State College. The fund is in honor of Professor F. A. Spragg, who was one of the first men employed by an agricultural experiment station to devote his entire time to plant breeding. He began his work with the Michigan Experiment Station in 1906, and continued with that institution until his death in 1924. The most prominent varieties developed by him are: Hardigan alfalfa, Robust beans, Michigan Black Barbless barley, Wolverine and Worthy oats, Rosen rye and Red Rock wheat.

THE seventy-ninth meeting of the American Chemical Society will be held in Atlanta, Georgia, from April 7 to 11. A public address to the citizens of Atlanta entitled "Chemistry Comes South" will be

made by Dr. Harrison E. Howe. The division of industrial and engineering chemistry has arranged a series of papers dealing with industrial and chemical processes as practiced in the south. The division of physical and inorganic chemistry has arranged a symposium on analytical chemistry which includes the following speakers and subjects: G. L. Clark, "X-Ray Analysis"; C. C. Nitchie, "Spectrographic Analysis"; C. W. Mason, "Microscopic Methods"; V. K. LaMer, "Modern Theories of Solutions"; D. A. MacInnes, "Potentiometric Methods for H-Ion Concentration"; H. B. Weiser, "Colloid Chemistry in Analytical Chemistry."

THE American Institute of New York held its annual election on February 13, after a long contest concerning the policies of the institute. The progressive ticket won over the conservative by a majority of fifty-five votes, and the following officers were elected: President, Mr. A. Cressy Morrison, of the Union Carbide Company; Vice-president, Dr. Otis W. Caldwell, director of the institute of school experimentation, Columbia University; Secretary, Dr. William Crocker, director of the Boyce Thompson Institute for Plant Research; Treasurer, Alfred Knight, vicepresident of Standard Brands, Inc.; Trustees, Dr. Oscar Riddle, Dr. H. H. Sheldon, Dr. Charles H. Herty, Walter Kutzleb, Fred M. Becker, Maurice Holland, Justus Ruperti, H. T. Newcomb, Willis H. Carrier.

THE United States Civil Service Commission announces examinations for physicist, \$3,800 a year; associate physicist, \$3,200 a year and assistant physicist, \$2,600 a year in the Bureau of Standards. Applications for these positions must be on file with the Civil Service Commission, Washington, D. C., not later than August 14.

The museum of the American Indian, Heye Foundation, has asked the Government of Denmark, through the State Department, for permission to send an expedition to Scoresby Sound and its vicinity in East Greenland to collect ethnological material for a study of the coast Eskimo of that region, as well as archeological specimens. Should permission be granted the expedition will be led by Captain Robert A. Bartlett, who during thirty-three years has made more than forty voyages to the Arctic.

DISCUSSION

ETHER STRUCTURE

STUDIES in recent years of the dielectric properties of gases and electrolytes show that electrical forces and inductions in such media depend upon the polarized ions or "dipoles" of the medium. Why not extend the same concepts to electrical forces and inductions across a vacuum, that is, through the ether? We must then conceive of the ether as a medium with