following appointments and promotions on the scientific staff.

New Appointments: Assistants—J. Lionel Alloway, Albert J. Anthony, James V. Bickford, Laurie L. Burgess, Frank Cortese, Macdonald Dick, Robert C. Elderfield, Filip C. Forsbeck, Kenneth Goodner, Benjamin E. Hodge, Stephen S. Hudack, Lewis G. Longsworth, Margaret J. Pittman, Paul D. Rosahn, William B. Rose, Kenneth C. Smithburn, Douglas H. Sprunt, Radford C. Tanzer, Robert Thomas, Robert S. Tipson and G. Payling Wright. Fellow—Basile J. Luyet.

Promotions: Associate Member to Member—Peter K. Olitsky. Assistant to Associate—Mortimer L. Anson, Robert B. Corey, René J. Dubos, Rebecca C. Lancefield, Currier McEwen, Alfred E. Mirsky, Albert L. Raymond, Julius Sendroy, Jr., Richard E. Shope. Fellow to Assistant—Fred Smith.

Resignations: Charles A. Doan to become professor and chairman of the department of medical and surgical research of Ohio State University; Robert R. Hannon, associate professor of medicine, Peiping Union Medical College; James A. Hawkins, associate professor of applied biochemistry, department of ophthalmology, Washington University Medical School, St. Louis; Louis A. Julianelle, associate professor of applied bacteriology and immunology, Washington University Medical School; William S. Tillett, associate professor of medicine in charge of the department of biology, Johns Hopkins Medical School.

THE DEPARTMENT OF PHYSICS OF HARVARD UNIVERSITY

As reported in the *Harvard Alumni Bulletin*, members of the staff of the Harvard department of physics will spend the summer vacation in writing, travel and research as follows:

Professor P. W. Bridgman will be engaged in writing at his summer home in Randolph, New Hampshire. Preparation for his research on the properties of matter under high pressure at the Jefferson Physical Laboratory will be carried on during his absence by an assistant.

Professor William Duane will supervise his general X-ray research in connection with the work of the Harvard Cancer Commission, both at the Harvard physical laboratories and the bio-physical laboratories at the Huntington Hospital. He will also supervise the installation of a radium plant at the Palmer Memorial Hospital.

Professor F. A. Saunders, of the Jefferson Laboratory, will revise his "Laboratory Manual on General Physics" and will be occupied with the plans for the new physics laboratory.

Professor E. L. Chaffee, of the Cruft Laboratory, will spend the vacation at his summer home in Ludlow, Vermont, where he will complete the first volume of his textbook on radio vacuum tubes. Professor N. H. Black, of the Jefferson Physical Laboratory, will be on sabbatical leave during the academic year 1930-31. He will study the methods of teaching science at the English public schools—Eton, Harrow, etc. —and later will engage in research at the Cavendish Laboratory, University of Cambridge.

Professor E. C. Kemble, of the Jefferson Laboratory, will give courses on quantum mechanics and molecular spectra at the summer session at Cornell University.

Professor J. C. Slater, of the Jefferson Laboratory, will be engaged in writing a volume on the quantum theory of the structure of atoms, molecules and solids at his summer home near Rochester, New York.

Professor R. F. Field has resigned from the staff of the Cruft Laboratory and accepted a position as research engineer at the General Radio Company, Cambridge, Massachusetts.

F. H. Crawford, instructor in physics, will spend the first half of the summer vacation in research on band spectra at the Jefferson Laboratory.

Of the instructors in physics at the Cruft Laboratory, H. R. Mimno will continue his research on radio frequency amplifiers, F. V. Hunt will be engaged in the calibration of acoustic measuring devices, R. W. Hickman will continue his work on gas-filled vacuum tubes and W. N. Tuttle will travel in England, Holland and Germany, visiting the great physical laboratories of those countries.

HONORARY DEGREES FROM THE UNIVER-SITY OF NEW HAMPSHIRE

THOMAS A. WATSON, Boston; Wilton E. Britton, New Haven, and Ambrose Swasey, Cleveland, were among those receiving honorary degrees from the University of New Hampshire. The citations given were as follows:

WILTON EVERETT BRITTON-Entomologist of the Connecticut Experiment Station: Connecticut State Entomologist; graduate of this institution in the Class of 1893; horticulturist in Connecticut for six years; teacher in the Yale Forestry School; doctor of philosophy from Yale University. Your steady progress in the great science to which you have given your life-the science that protects the crops of the farmer and makes safe the food supply of the nation-has been rewarded during the years by many and marked honors. You have been the president of the American Association of Economic Entomologists and for twenty years the associate editor of the You have served one state for almost four Journal. decades, but your influence has gone far beyond its borders. Your devoted labors have won for you international reputation in your profession, a reputation of which your Alma Mater is justly proud.

THOMAS AUGUSTUS WATSON—On the last page of a delightful life story you have written these words— "mountains have always reminded me of my telephone days, probably because my first sight of them was so impressive on the notable day I spent in North Conway,

New Hampshire, in December, 1876, when I talked with Alexander Graham Bell in Boston over the first long line over which we tried the telephone." You were the first to hear human speech "by telegraph"-from Cambridge and Conway to Boston, and from San Francisco and London to New York. You, moreover, made with your own hands the first telephone, and besides many other contributions you invented the bell that drives so many busy men, and even women, to the woods. You probably have the distinction of making the greatest single contribution to the jangling distraction of this noisiest of worlds. During twenty-five arduous years you founded and created one of America's great shipyards; you have been a pioneer of organized kindergartens; joint author of the geology of the Boston Basin; president of the Boston Browning Society; producer of Browning's dramas and interpreter of them even to the city of culture. Your accomplishments have been indeed varied and extraordi-To-day New Hampshire claims you not because narv. of the love of her mountains which crept into your soul in '76 to abide forever, not because your father was a native of near-by Newmarket, neither because in these latter years you find the center of New Hampshire the one place for rest and worship in the summer season, but because of the splendid breadth of your achievements both in science and art, and the hunger for beauty and

truth which with the zest of youth still possesses and consumes you.

AMBROSE SWASEY-Native of beautiful Exeter and her constant friend and benefactor, manufacturer, captain of industry, inventor, scientist, philanthropist, founder of the Engineering Foundation, fellow of the Royal Astronomical Society, chevalier of the Legion of Honor and builder of the world's greatest telescopes including the Lick and the Yerkes. You have made it possible for mortals to peer into the near-by yet remote spaces of the illimitable universe, and to understand as never before the pregnant phrase, "What is man that thou art mindful of him and the son of man that thou visitest him?" You have combined the superlative practical achievements of creative business so delightfully with lofty idealism that those of us who know you are prompted to insist that institutions as well as individuals should hitch their wheels to ever nobler purposes. Recipient of honors too numerous to mention, you have been justly and fittingly decorated in many places and many lands. Your friends and neighbors view them all with sincere pride and joy. Yet, now, because you have been one of New Hampshire's most loyal, as well as one of her most distinguished sons, it seems fitting that we should here, to-day, place side by side with your other notable recognitions and rewards a simple wreath of home-grown bays.

SCIENTIFIC NOTES AND NEWS

ON the occasion of the installation of Mr. Stanley Baldwin as chancellor of the University of Cambridge on June 5 the recipients of honorary degrees included Professor Albert Einstein and Professor Max Planck, of Berlin; Sir John Rose Bradford, president of the Royal College of Physicians, and Sir James Colquhoun Irvine, principal of the University of St. Andrews.

THE dedication ceremonies of the new medical building of the University of Brussels were held on June 24. The buildings were erected jointly by funds provided by the Rockefeller Institute and the city of Brussels. The degree of *doctor honoris causa* was conferred on Dr. Simon Flexner, director of the Rockefeller Institute, and on Dr. Abraham Flexner, formerly of the Rockefeller Foundation, who was recently elected president of the newly established Institute for Graduate Study at Newark, New Jersey.

IN recognition of his contributions to electrical science, Thomas A. Edison received a gold medal on June 20 at his laboratory in West Orange from a delegation representing the Argentine Association of Electro-Technicians. The presentation was made by William Asher Reece, president of the General Electric Company of the Argentine. Supreme Court Justice Owen J. Roberts presented on June 26 the John Scott Medal and an accompanying award of \$1,000 to Mr. Edison at his laboratory, in recognition of "outstanding contributions to science."

THE Polytechnic Institute of Brooklyn held its seventy-fifth annual commencement on June 18, the speaker being Dr. Frank Pierrepont Graves, Commissioner of Education of the State of New York and alumnus of the institute. The honorary degree of doctor of engineering was bestowed upon President Karl T. Compton, of the Massachusetts Institute of Technology, and on Mr. Charles F. Kettering, president of the General Motors Research Corporation. The degree of Admiral Richard Byrd, who was delayed in returning to the United States, will be conferred upon him at a special convocation in the fall.

AT its seventy-fourth commencement Tufts College conferred the doctorate of science on Mr. Arthur D. Little, president of the Arthur D. Little Corporation.

CAPTAIN NICHOLAS HUNTER HECK, chief of the Division of Terrestrial Magnetism and Seismology of the U. S. Coast and Geodetic Survey, received from Lehigh University at its recent commencement the honorary degree of doctor of science.

DR. ZAY JEFFRIES, consulting metallurgist of Cleveland, delivered the address at the forty-third annual commencement of the South Dakota State School of