Dr. John S. Coulter, associate professor of physical therapy, Northwestern University Medical School, has been appointed Regional Medical Officer of the Sixth Civilian Defense Region, with headquarters in Chicago.

Dr. Dudley A. Reekie, assistant director of health and chief medical officer of the Tennessee Valley Authority, has been appointed Regional Medical Officer of the First Civilian Defense Region, with headquarters in Boston. He succeeds Dr. Allan M. Butler, Boston, who resigned to become head of the department of pediatrics at the Massachusetts General Hospital, Boston. Dr. Reekie entered on active duty on January 31.

Dr. Leonard A. Scheele, passed assistant surgeon, U. S. Public Health Service, Bethesda, Md., was recently assigned to the Washington staff of the Medical Division, Office of Civilian Defense. Dr. Scheele graduated from Wayne University College of Medicine, Detroit, 1933, and was commissioned in the public health service following the completion of his internship. Dr. Scheele was assigned in 1938 to the National Cancer Institute, Bethesda, as consultant on cancer control. There he conducted studies of the epidemiology of cancer, efficacy of cancer therapy, radiation protection and cost of cancer therapy.

Dr. Harold Marks, passed assistant surgeon (Reserve), U. S. Public Health Service, recently on the staff of the National Institute of Health, Bethesda, joined the Medical Division staff in January. Before being assigned to the Office of Civilian Defense, he was stationed at the National Institute of Health and was engaged in making surveys of medical care in defense communities.

William H. Carey, Jr., recently associated with the Norman Boosey Manufacturing Company, Detroit, has been appointed Regional Sanitary Engineer for the Sixth and Seventh Civilian Defense Regions, plus Indiana and Kentucky, with headquarters in Chicago, effective February 4. He has been commissioned Sanitary Engineer (Reserve) in the U. S. Public Health Service.

APPOINTMENT OF CAPTAIN N. H. HECK

REAR ADMIRAL L. O. COLBERT, director of the U. S. Coast and Geodetic Survey, announces that Captain N. H. Heck, formerly chief of the Division of Geo-

magnetism and Seismology of the Survey, has been appointed assistant to the director on scientific and technical matters. Captain Heck is well known in scientific circles as one of the world's leading authorities on earthquakes and the earth's magnetic forces.

Captain Heck entered the survey in 1904. He served at sea for a number of years and at various times commanded the survey ships Hydrographer, Matchless and Explorer. He had a large share in the development of the wire drag, which has been responsible for the discovery and charting, or ultimate elimination, of countless menaces to navigation. He also contributed materially to the early development of the Radio Acoustic Ranging method of hydrographic surveying.

His interest turning to research in magnetism he became, in 1921, chief of the Division of Terrestrial Magnetism. When the study of earthquakes was transferred from the Weather Bureau to the Coast and Geodetic Survey in 1926, his title was changed to chief of the Division of Terrestrial Magnetism and Seismology, in which capacity he served until he assumed his new work.

He is author of numerous books and articles on scientific and technical subjects. Among his works are: "Earthquakes," published in 1936; "Compensation of the Magnetic Compass," 1923; "Velocity of Sound in Sea Water," 1924; and "Earthquake History of the United States," 1928 and 1938. He has been the recipient of several honorary degrees and is a member of a number of scientific and engineering societies. From 1935 to 1938 he was chairman of the American Geophysical Union, and from 1936 to 1939 president of the Seismological Association of the International Geodetic and Geophysical Union. He is a past president of the Philosophical Society of Washington and of the District of Columbia Chapter of Sigma Xi.

SCIENTIFIC NOTES AND NEWS

The William H. Nichols Medal of the New York Section of the American Chemical Society was presented to Dr. Duncan A. MacInnes, of the Rockefeller Institute for Medical Research, for "distinguished contributions to electrochemistry" at a dinner of the section in New York City on the evening of February 27. The presentation was made by Professor William C. MacTavish, head of the department of chemistry of New York University and chairman of the jury of award, which cited Dr. MacInnes for "outstanding investigations on electrolytes and the development of techniques which have immeasurably enriched both the theory and practice of modern electrochemistry." In his acceptance speech, Dr. MacInnes discussed "Gal-

vanic Cells as Instruments of Research." Professor Herbert S. Harned, of Yale University, spoke on "The Work of the Medalist," and Professor George Scatchard, of the Massachusetts Institute of Technology, on "Dr. MacInnes—The Man." Professor Ralph H. Müller, of New York University, chairman of the section, presided.

THE 1941 Lamme Medal of the American Institute of Electrical Engineers has been awarded to Forrest E. Ricketts, vice-president of the Consolidated Gas, Electric Light and Power Company, Baltimore, "for his contribution to the high reliability of power-supply systems, especially in the design of apparatus for selective relaying and circuit reclosure." The medal

and certificate will be presented to him at the annual summer convention of the institute, which will be held in Chicago from June 22 to 26.

THE award of the Wollaston Medal of the Geological Society of London to Dr. Reginald A. Daly was announced in Science last week. The following awards have also been made: The Murchison Medal to Professor H. H. Swinnerton, professor of geology at University College, Nottingham, for his "stimulating contributions to the philosophy of paleontology"; the Lyell Medal to W. S. Bisat, for "studies in the stratigraphical paleontology of Carboniferous rocks"; the Wollaston Fund to Dr. E. S. Hills, for "contributions to Australian paleontology and geology"; the Murchison Fund to Dr. K. C. Dunham, for "investigations into the mineral deposits of the North of England"; a moiety of the Luell Fund to Dr. S. R. Nockolds, for "mineralogical and petrological work and his contributions to the study of assimilation processes"; a second moiety of the Luell Fund to Dr. J. Shirley, for "researches in paleozoic paleontology and stratigraphy."

The William Mackenzie Medal of the University of Glasgow has been awarded to Dr. A. J. Ballantyne, formerly professor of ophthalmology, in recognition of his work in the ophthalmological branch of medicine and surgery. It is expected that Dr. Ballantyne will give in May the customary address before the section of ophthalmology of the Royal Society of Medicine.

Nature states that the Platinum Medal of the Institute of Metals for 1942 has been awarded to W. Murray Morrison, vice-chairman and managing director of the British Aluminium Company, "in recognition of his outstanding services to the non-ferrous metals industries."

The Journal of the American Medical Association reports that the New York Chapter of the National Gastroenterological Association held a special meeting on January 19 to mark the eightieth birthday of Dr. Max Einhorn, emeritus professor of medicine, New York Post-Graduate Medical School, Columbia University. The Rudolf Virchow Medical Society observed his birthday on January 5. He was given a testimonial dinner on January 10 by the staff of the Lenox Hill Hospital, with which he has been associated for more than fifty years.

Dr. S. A. Henry has been appointed by the Royal College of Physicians, London, to be Milroy lecturer for 1943. The subject of the lecture has been announced as "The Health of the Factory Worker in War Time."

ACCORDING to Nature, the following officers of the

Iron and Steel Institute have recently been elected: President, James Henderson; Vice-president, Dr. Andrew McCance; Hon. Treasurer, The Hon. R. G. Lyttelton; Members of Council, Professor J. H. Andrew and N. H. Rollason. Walter S. Tower, president of the American Iron and Steel Institute, has been nominated an honorary member of the institute, and the presidents of the Sheffield Society of Engineers and Metallurgists and of the Sheffield Metallurgical Association have been appointed honorary members of the council.

DR. EVERETT NEEDHAM CASE, Van Hornesville, N. Y., assistant dean of the Harvard Graduate School of Business Administration, has been elected the ninth president of Colgate University to succeed President George Barton Cutten, who is retiring after serving for twenty years. Mr. Case will take up his work at Colgate University on August 31.

Dr. W. W. Charters, since 1928 director of the Bureau of Educational Research of the Ohio State University, will retire from active work next August. He plans to devote his time to writing.

Dr. Lucius F. Badger, surgeon, U. S. Public Health Service, Washington, D. C., has become assistant director of the National Institute of Health, Bethesda, Md.

Dr. ROBERT R. WILLIAMS, chemical director of the Bell Telephone Laboratories of New York, has been elected a member of the board of directors of the American Bureau for Medical Aid to China.

Dr. George C. Dunham, director of the laboratories of the Army Medical School, Washington, and from 1931 to 1935 technical adviser to the Governor General of the Philippine Islands, has been appointed director of a new division of health and sanitation in the Bureau of Inter-American Affairs, of which Nelson A. Rockefeller is coordinator. Dr. Dunham will be placed at the head of a mission which is going to Ecuador to undertake malaria control, improvement of sewage disposal and other modern sanitation measures in cooperation with the Ecuadorean government. Members of the mission include Dr. Walter C. Earle, specialist on tropical medicine, of the International Health Division of the Rockefeller Foundation, and Wyman Stone, a sanitary engineer.

According to Chemical and Engineering News, Swift and Company, Chicago, has made a grant to be used under the direction of Dr. Ancel Keys, of the University of Minnesota, in a study of the relation of fatigue to diet. This work was originally sponsored by the National Research Council and is now operating under the Office of Scientific Research and Development in direct cooperation with the United

States Army Quartermaster Corps. Although much of this work is being directly applied to military and industrial needs during the present emergency, it will be possible to extend the findings to civilian nutrition.

An award of \$1,000 has been made by the Borden Company to Irvington House, Irvington, to assist in its study and treatment of rheumatic fever. The researches are under the direction of Dr. Ann G. Kuttner, Irvington, resident medical director, with the guidance of a medical advisory board, of which Dr. John Murray Steele, New York, is director.

Dr. B. E. Dahlgren, chief curator of the department of botany of Field Museum, Chicago, is spending several weeks in various parts of Cuba, making a survey of the palms of that island, in order to obtain specimens of important species required to fill out the exhibits of palms at the museum.

Dr. L. T. DeVore, assistant professor of physics at Pennsylvania State College, has leave of absence to accept a call from the War Department for service as a radio engineer at the Aircraft Laboratory, Wright Field.

DR. ALBERT R. BEHNKE, Lieutenant Commander, Medical Corps, U. S. Navy, instructor in charge of department of atmospheric hygiene, Navy Yard, will deliver the sixth Harvey Society Lecture of the current series at the New York Academy of Medicine on March 19. He will speak on "Physiologic Studies Pertaining to Aviation Medicine and Deep Sea Diving."

Dr. Joseph A. Pearce, director of the Dominion Astrophysical Observatory, Victoria, British Columbia, delivered an illustrated lecture entitled "The Rotation of the Galaxy," at the University of California at Los Angeles on March 2. The lecture was given under the auspices of the Department of Astronomy.

DAVID BRUCE DILL, director of the fatigue laboratory, Harvard University, and Dr. Arlie V. Bock, Henry K. Oliver professor of hygiene, will deliver the James M. Anders Lecture before the College of Physicians of Philadelphia on April 1.

The twenty-fifth annual meeting of the American Society of Ichthyologists and Herpetologists will be held in New York City from Tuesday, March 31, to Saturday, April 4. The business meeting and formal sessions will be at the American Museum of Natural History. Visits to the New York Zoological Park and to the Staten Island Zoological Park will be made. The annual banquet will be held at the American Museum of Natural History on Wednesday evening at 8 p.m. A joint smoker, with the American Society of Mammalogists, on the evening of Thursday is being

sponsored by the New York Academy of Sciences. Two symposia are planned. The first, for mammalogists and ornithologists, on "Criteria for Vertebrate Subspecies, Species and Genera," will be formally conducted as a joint meeting with the American Society of Mammalogists. The subject of the second symposium for ichthyologists and herpetologists will be "Vertical Distributions."

The American Association of Industrial Physicians and Surgeons and the American Industrial Hygiene Association will meet in Cincinnati from April 13 to 17. The meeting will open with medical and surgical clinics at the Cincinnati General Hospital together with a conference on skin affections, the most common cause of occupational disease claims in industry. The second day's session will give attention to the health of industrial executives, including a consideration of heart disorders. The third day will be devoted largely to a symposium on lead poisoning. Subjects scheduled for the fourth day include Solvent-Vapor Poisoning, Ventilation of Deep Tunnel Operations and Safe Handling of Magnesium Castings. The final sessions on April 17 will cover proper prevention of tellurium fumes and other health threats, like lead chromate, encountered in metal industries.

A MEETING, sponsored by the New York branch of the American Association of Scientific Workers, on "The Scientist's Role in Civilian Defense, War Research and Education" was held on March 11 at Columbia University. The meeting included discussion of a recent survey by the association to find the extent of participation in the war effort of scientific men. Representatives from the American Chemical Society, the Office of Scientific Research Development and other organizations attended and contributed to the discussions.

The Inter-American Chemists Congress, which was to be held at Santiago de Chile in January, 1942, probably will be held during the third week in September. The secretary of the organizing commission is Juan Hepp D., Casilla 3725, Santiago de Chile, from whom further information can be obtained.

Seven national library associations, working through their Joint Committee on Importations, have been engaged since October, 1939, on the problems involved in the importation of library materials in time of war. The committee has succeeded in completing negotiations which will make possible the importation during 1942 of a limited number of copies of scientific and technical periodicals and continuations from all countries of Europe, except Russia, Sweden, Switzerland, Spain and Portugal. Any responsible library may apply before March 30 for participation in the plan. Information may be obtained from the chairman of

the committee, Thomas P. Fleming, medical librarian, College of Physicians and Surgeons, New York, N. Y.

APPLICATIONS for grants from the Cyrus M. Warren Fund of the American Academy of Arts and Sciences should be received by the chairman of the committee, Professor Frederick G. Keyes, of the Massachusetts Institute of Technology, not later than April 15. Grants are made in aid of chemical research, generally for apparatus or supplies, or for the construction of special facilities needed for research in chemistry or in fields closely related to chemistry. Grants are not awarded for salaries, and on account of limited resources, the amount to an individual is seldom in excess of \$300. Application blanks may be obtained from the chairman upon request.

THE New York Hospital School of Nursing has become a part of Cornell University in an affiliation whereby qualified graduates will receive a university degree. Together with the New York Hospital and Cornell University Medical College, the School of

Nursing is a unit in the medical center at 68th Street. It will be known as the "Cornell University-New York Hospital School of Nursing." The curriculum includes classroom study and practical experience in the New York Hospital. Students entering with two or more years of college work acceptable to Cornell University will be eligible for a degree of bachelor of science in nursing upon satisfactory completion of the three-year course.

Among the public bequests of the late Sir Arthur William Hill, director of the Royal Botanic Gardens at Kew, are £1,000 to Bentham-Moxon Trustees of the Royal Botanic Gardens; his diaries of various journeys are left to the library of the gardens; £500 to Kew Guild; £1,000 to the Royal Society; £500 to the endowment fund of St. Luke's, Kew Gardens, and, after personal bequests, of the residue, one eighth to King's College, Cambridge, and one eighth to Marlborough College. The value of the estate is placed at £93,379.

DISCUSSION

ON THE READING OF SCIENTIFIC PAPERS. AUDIENCE ENEMIES NUMBERS I TO VI

A FEW years ago a large international congress was held in one of the most beautiful cities of Europe. The committee on arrangements had planned every detail to perfection. The university buildings were new, the lecture halls ample. Each platform was provided with a two-foot clock that not only pointed out the clapsed time but also turned on a red light at eight minutes and a big flashing light at ten minutes. When the meeting started, one could say "Every prospect pleases."

Only man was vile. One hour after the opening members realized that the distinguished chairmen of the sections were not holding the speakers to the tenminute limit so carefully stipulated in the programs. Therefore, every speaker counted on talking fifteen or twenty minutes. Of course he saved his most important slides until the end and they were shown in competition with the flashing light plus an obviously nervous chairman.

In addition, there were all the other minor and major human defects best calculated to torture an audience. Most of the speakers mumbled their words or else turned and lectured to the lantern screen. This was particularly annoying, since the papers were delivered in four different languages, each with its local variants. Most of the lantern slides were photographs of typewritten sheets crowded with data, and few speakers were content to show less than twenty. The main points were carefully concealed until the last

minutes, by which time the audience had lost all interest.

This meeting was perhaps an extreme example, and in our country most of the papers are carefully prepared and carefully delivered. There are, however, enough poorly delivered papers to warrant a discussion of what may be called "audience enemies":

- 1. The Mumbler, who drops his voice to emphasize important points or else talks to the lantern screen instead of to the audience.
- 2. The Slide Crowder, who packs his slides with typewritten data and shows too many slides.
- 3. The Time Ignorer, who talks beyond the limit specified in the program or justified by common courtesy.
 - 4. The Sloppy Arranger, who jumbles his material.
 - 5. The Lean Producer, who has poor material.
- 6. The Grasping Discussor, who when he gets talking stays talking.

Of course there are many other ways in which a speaker may cause discomfort, but the ones that I have selected are chosen because they can be remedied either by the head of the department or by strict self-examination.

Number 1, the Mumbler, is handicapped by poor habits of speech, an incorrectly placed voice or else an inherent nervousness. In other cases bad delivery is caused by lack of consideration in a man who is more interested in excreting words than in conveying information. When he turns to the screen and talks at the chart he is paying more attention to his own achievements than to the audience. This is particu-