

Nebraska .....	48	52
New Haven .....	70	82
New York .....	1,594	1,799
North Carolina .....	40	43
Northeastern .....	633	664
Northern-Intermountain .....	17	23
Oregon .....	35	33
Philadelphia .....	737	716
Pittsburgh .....	401	441
Puget Sound .....	76	91
Rhode Island .....	85	92
Rochester .....	56	52
St. Louis .....	149	160
Southeast Texas .....	43	38
Southern California .....	157	183
South Carolina .....	24	26
South Dakota .....	29	21
Syracuse .....	149	127
Toledo .....	43	46
University of Illinois .....	115	106
University of Michigan .....	47	34
University of Missouri .....	14	12
Vermont .....	28	18
Virginia .....	97	111
Washington, D. C. ....	402	578
Western New York .....	181	202
Wisconsin .....	93	95
	8,423	9,166

### SCIENTIFIC NOTES AND NEWS

THE gold medal of the National Institute of Social Sciences has been awarded to Dr. Wm. H. Welch, of the Johns Hopkins Medical School.

DR. HENRY A. BUMSTEAD, professor of physics at Yale University, has returned from France, having been engaged in war work abroad since 1917.

DR. LAFAYETTE B. MENDEL, professor of physiological chemistry in Yale University, who has been overseas as a representative of the U. S. Food Administration on the Inter-Allied Scientific Food Commission, has returned to the United States.

MAJOR GENERAL WILLIAM C. GORGAS, U. S. Army, retired, will return from Guatemala to Washington, D. C., in February, and on his return to South America in the spring will be accompanied by Mrs. Gorgas.

COLONEL G. A. BURRELL, of the Chemical Warfare Service, returned to private chemical engineering work at Pittsburgh in January. He was called to Washington by the Bureau of Mines early in the war, to take charge of the research organization that later became the American University Experiment Station of the Chemical Warfare Service.

At the recent meeting of the Mathematical Association of America Professor Herbert Ellsworth Slaught, of the University of Chicago, was elected president.

FRED RASMUSSEN, professor of dairy husbandry, The Pennsylvania State College, State College, Pa., was, on January 21, 1919, appointed secretary of agriculture for the state of Pennsylvania and left immediately to take up his new duties at Harrisburg.

CARL N. AUSTIN, who went from the Sears-Roebuck laboratories with a commission as first lieutenant in Gas Defense, has recently been appointed director of the First Corps Gas School located at Gondrecourt, Meuse, France.

LIEUTENANT JOHN P. TRICKEY, a member of the Chicago Section of the American Chemical Society, has been promoted to a captaincy in the Chemical Warfare Service, and is on duty in France.

DR. KEVIN BURNS, of the division of optics, Bureau of Standards, is absent on an extended trip abroad in connection with his scientific work.

THE Geological Society, London, has made its awards as follows: Wollaston medal, Sir Aubrey Strahan, director of the British Geological Survey; Murchison medal, Miss Gertrude L. Elles, Newnham College, Cambridge; Lyell medal, Dr. W. F. Hume, director of the Geological Survey of Egypt; Bigsby medal, Sir Douglas Mawson; Wollaston fund, Dr. Alexander Logie Du Toit, Geological Survey of South Africa; Murchison fund, Mrs. Eleanor M. Reid; Lyell fund, Mr. John Pringle, Geological Survey of England and Wales, and Dr. Stanley Smith, University College, Aberystwyth.

THE following committees have been named by the president of the American Chemical Society:

1. Committee to Cooperate with the Society for the Promotion of Engineering Education on Educational Problems: H. P. Talbot, R. H. McKee, S. W. Parr.
2. Committee on Publication of Compendia of Chemical Literature: Julius Stieglitz, John Johnston, E. C. Franklin, J. C. Olsen, James Kendall.
3. Committee to Consider Allocation of Federal Grants for Scientific and Industrial Research: W. R. Whitney, C. L. Alsberg, John Johnston, W. D. Bigelow, Wm. McPherson.
4. Committee to Formulate a Method of Coopération with the National Research Council: W. D. Bancroft, Atherton Seidell, W. F. Hillebrand, F. G. Cottrell, C. L. Parsons.
5. Committee on Coordination of Chemical Work within the War Department: C. H. Herty, E. P. Kohler, H. P. Talbot, John Johnston.
6. Omnibus Committee for Spring Meeting: A. D. Little, B. C. Hesse, F. M. Dorsey, T. B. Wagner, R. F. Bacon, C. G. Derick, L. C. Drefahl.

WE learn from the *Journal* of the American Medical Association that a health commission of the Allies has been formed containing representatives of most of the large nations allied against Germany. A subcommission was recently appointed by Professor Santoliquido, delegate from Italy, and president of the commission. The subcommission will meet in Paris on the first or fifteenth of each month to consider the most important sanitary problems regarding demobilization, the occupation of territory formerly invaded, the military occupation of enemy territory as related not only to the health of the troops, but also to the civilians concerned. The personnel of the subcommission is: president M. le Professeur Santoliquido, Conseiller d'Etat Délégué de l'Italie dans le Comité de l'Office International d'Hygiène publique; M. le Médecin Principal de première Class Maitre-trieu, Commandant du Groupement Régional du Service de Santé à Rouen; M. le Médecin Général Jan; M. le Col. Richard P. Strong, Director Department of Medical Research and Intelligence, A. R. C., M. le Col. W. W. O. Beveridge, C.B., D.S.O., Assistant Director

of Medical Services for Sanitation, Professor of Hygiene Royal Army Medical College; M. le Médecin Major Levi; M. Coussol; M. de Lieutenant Colonel Médecin Professeur A. Castellani; M. de Cazotte, Ministre Plénipotentiaire, Directeur de l'Office International d'Hygiène publique; M. le Docteur Pottevin, Directeur Adjoint.

PROMOTIONS in, and appointments to, the Civil Division of the Order of the British Empire for services in connection with the war were published on January 9. The list includes five Knights Grand Cross of the Order (G.B.E.), six Dames Grand Cross (G.B.E.), forty-nine Knights Commanders (K.B.E.), one hundred and seventy-eight Commanders (C.B.E.), and five hundred and thirty Officers (O.B.E.). *Nature* selects the following names of men known in scientific circles: *K.B.E.*: W. J. Pope, F.R.S., professor of chemistry, University of Cambridge; Aubrey Strahan, F.R.S., director of the Geological Survey of Great Britain; Cecil L. Budd, Non-ferrous Metals Department, Ministry of Munitions; and W. J. Jones, Iron and Steel Production Department, Ministry of Munitions. *C.B.E.*: J. W. Cobb, Livesey professor of coal, gas and fuel industries, University of Leeds; H. H. Dale, F.R.S., director of pharmacology and chemotherapy under the Medical Research Committee; A. Eichholz, senior assistant medical officer, Board of Education; J. C. M. Garnett, principal, Municipal College of Technology, Manchester; Lieutenant Colonel R. J. Harvey-Gibson, professor of botany, University of Liverpool; and P. Chalmers Mitchell, F.R.S., secretary of the Zoological Society of London. *O.B.E.*: J. B. Bailie, professor of philosophy, University of Aberdeen; W. Foord-Kelcey, professor of mathematics and mechanics, Royal Military Academy; and W. E. S. Turner, head of the department of glass technology, University of Sheffield.

IN the course of lectures of the Chicago Academy of Sciences dealing with problems of reconstruction, one on "Scientific Leadership of the World" was given by Professor

Henry Crew, Northwestern University, on February 14. On March 21 in the series of lectures on Swedish Contributions to Science which are to be given under the auspices of the Swedish Study League in cooperation with the Chicago Academy of Sciences, Professor Crew will speak on "Swedish Contributions to the Science of Physics."

A COURSE of nine lectures on dynamical meteorology is being given at the Meteorological Office, London, by Sir Napier Shaw, reader in meteorology in the University of London. Each lecture is followed by a conversational class. The informal meetings at the Meteorological Office for the discussion of important current contributions to meteorology, chiefly in colonial or foreign journals, will be resumed on April 28.

ON January 15, Dr. George T. Moore, director of the Missouri Botanical Garden, spoke before the St. Louis Natural History Museum Association at the Public Library, on "The Educational Value of the Missouri Botanical Garden."

EFFORTS are being made to establish a chair of mathematical physics at the University of Edinburgh in memory of the late Professor Tait.

DR. CLARENCE JOHN BLAKE, Walter Augustus Lecompte professor of otology, emeritus, in the Harvard Medical School, died at his home in Boston on January 29, in the seventy-sixth year of his age.

WE learn from the *Journal* of the Washington Academy of Sciences of the death of Captain Howard E. Ames, medical director, U. S. N., retired, who died on December 27, 1918. Dr. Ames had been an officer in the Navy since 1875, and had been on the retired list since 1912. He served as medical officer on board the *Bear*, which rescued General Greely and his party in the Arctic regions. He was a member of the Biological Society.

WE learn from *Nature* that Casimir De Candolle, died on October 3, 1918, at Geneva, where he was born in 1836, and where the greater part of his life had been spent. Casimir De Candolle made valuable additions to the sum

of botanical knowledge, though his work was not of such fundamental importance as that of his father, Alphonse, and grandfather, Augustin.

MR. ANDREW BRAID, hydrographic and geodetic engineer of the U. S. Coast and Geodetic Survey, and chairman of the U. S. Geographic Board, has died in his seventy-third year.

DR. GABRIEL MARCUS GREEN, instructor in mathematics in Harvard University, died in Cambridge on January 24, in the twenty-eighth year of his age.

DR. W. MARSHALL WATTS, who while engaged as a science teacher in an English school carried on valuable work on spectroscopy, died on January 13, at the age of seventy-four years.

THE *Journal* of the American Medical Association reports the following deaths from influenza in Brazil: Dr. T. Bayma, the distinguished physician and bacteriologist of S. Paulo, director of the bacteriologic and the vaccine institutes there, aged fifty-five; Dr. Santos Moreira, a leading pediatricist of Rio de Janeiro, director of the *Medicina Clinica*, and Dr. Paulo Silva Araujo, a leading microbiologist, who published in 1915 his "Vaccine Therapy of Bronchial Asthma."

THE American Chemical Society will hold its spring meeting at Buffalo beginning on the morning of April 8.

It is announced that Genera Insectorum, the great work describing all the genera of insects, published at Brussels, is to be continued. When the country was invaded in 1914, several parts were about to be published; these are to appear in 1919. The stock of the previously published parts was saved, and is now available.

THE laboratory of forest pathology of the Bureau of Plant Industry, U. S. D. A., Dr. James R. Weir in charge, has been removed from Missoula, Montana, to Spokane, Washington, where it will be permanently installed in a fireproof building. The most intensive work of this laboratory is centered in the great white pine forests of Idaho. To promote pathological investigation in this region, a

permanent field station will be established; also a forest pathological museum. All future communications should be addressed to Laboratory of Forest Pathology, Spokane, Washington.

REASONS for continuing the Chemical Warfare Service as a permanent branch of the War Department were presented to the House Committee on Appropriations by General Wm. L. Sibert. In part, he said: "An organization of this kind would have as its biggest element a research branch, the function of which branch would be to keep abreast of the times in all of the chemical appliances or substances necessary or useful in war and, if the use of gas is continued or authorized, the training of troops in the use of gas masks and things of that sort. That would be a part of its functions, but whether gas is used or not there are other chemical substances, such as smokes, that have a tactical use in warfare and the use of which is growing. I refer to the making of screens behind which troops can advance. We would also have a proving ground force in connection with our research force to try out appliances that were developed either in our own laboratories or found abroad."

THE American Museum will continue its Second Asiatic Zoological Expedition for another year. The first expedition sailed from the United States in March, 1916, and the second in June, 1918, both under the leadership of Mr. Roy C. Andrews, of the department of mammalogy. So far Mr. Andrews has canvassed especially the Chino-Tibetan border and western tropical China as far as Burma. He is at present in Peking and proposes, as soon as the spring weather arrives, to proceed to Urga in northern Mongolia. This town is situated near the junction of two life zones, the Siberian and the Mongolian and Central Asian. In this region Mr. Andrews expects to take moose, elk, wild boar and other large game. After a four months' stay in northern Mongolia, he hopes to hunt big-horn sheep along the Chino-Mongolian frontier. The species of mountain sheep found here is large, with horns measuring sixty inches. In following out the present program the expedition

plans to be back in New York some time in February, 1920.

FIRST LIEUTENANT TRACY I. STORER, Sanitary Corps, has been discharged from military service and has returned to his former position at the museum of vertebrate zoology at the University of California after an absence of sixteen months.

MR. H. F. STALEY, formerly professor of ceramic engineering at Iowa State College, joined the staff of the Bureau of Standards in December as metallurgical ceramist.

THE bureau of economic geology and technology of the University of Texas will cooperate with the United States Geological Survey in making explorations for potash in the western part of the state. Orby C. Wheeler has been engaged to take charge of the work.

PROFESSOR FRED W. ASHTON has been granted a leave of absence by the University of the Philippines and has taken over new duties as carbonization supervisor with the Chemical Warfare Service at Manila, P. I.

MR. H. C. RAVEN, of the Smithsonian Institution, has returned to Washington from the island of Celebes, and has gone to Cornell University to continue his studies. Mr. Raven has collected in the East Indies during the last six years more than four thousand mammals and five thousand birds for the National Museum.

HENRY SCHMITZ, Rufus J. Lackland fellow in the Missouri Botanical Garden, who has been in the Naval Reserves since the beginning of the war, has returned to resume his work at the Garden.

*Nature* states that Sir Lazarus Fletcher will retire from the directorship of the Natural History Museum, under the age limit, on March 31. The office was made in 1856, under the style of superintendent of the Natural History Departments, so that the trustees of the British Museum might obtain the services of Sir Richard Owen, who supervised the planing of the new museum at South Kensington, and retired shortly after its com-

pletion in 1884. Under the style of director, Sir William Flower succeeded Sir Richard Owen, and he retired in 1898. For the next decade Sir E. Ray Lankester was director, and he was followed by Sir Lazarus Fletcher early in 1910.

DR. J. D. FALCONER, lecturer in geography in Glasgow University, has been granted further leave of absence in order that he may act at the first director of the Geological Survey of Nigeria.

#### UNIVERSITY AND EDUCATIONAL NEWS

A GIFT of \$50,000 from Lieutenant Howard H. Spaulding, has been made for the physiological laboratory building fund of Yale University. The principle of this fund may be used by the university at any time in its discretion for the construction of a physiological laboratory and meanwhile the income is to be used annually in meeting the expenses of the department of physiology.

MR. GEORGE BONAR, president of the Dundee Chamber of Commerce, has given £25,000 for commercial education in University College, Dundee.

THE Royal Edinburgh Asylum for the Insane has offered an endowment of £10,000 towards a chair of mental diseases in the University of Edinburgh.

PLANS for the introduction of a course on public health and industrial medicine in the college of medicine of the university of Cincinnati are being made by Dean C. R. Holmes. The course has the support of the United States Public Health Service and it is planned to conduct it on the cooperative basis somewhat like that used in the college of engineering.

PROFESSOR HAL W. MOSELEY has been promoted to be associate professor of chemistry in Tulane University, New Orleans, La.

PROFESSOR E. O. HEUSE, formerly instructor in physical chemistry at the University of Illinois, and later professor of chemistry at Monmouth College, Monmouth, Ill., has been

appointed professor of chemistry and head of the department at Southern Methodist University, Dallas, Texas.

#### DISCUSSION AND CORRESPONDENCE

##### APPLIED PSYCHOLOGY

TO THE EDITOR OF SCIENCE: At the close of his interesting address on "Scientific Personnel Work in the Army," Professor Thorndike remarks: "Making psychology for business or industry or the army is harder than making psychology for other psychologists, and intrinsically requires higher talents." It is well that a man should believe whole-heartedly in his own work and magnify it accordingly. But it is a pity to draw comparisons of this sort.

Reduced to its lowest terms, Professor Thorndike's question is: Which is the harder taskmaster, one's employer or one's conscience? And he decides unequivocally in favor of the employer. I should rather say: It depends! For Professor Thorndike, the employer is a creature of iron, who demands an adequate solution of a given problem by a fixed and early date, and who has no grain of sympathy with unsuccessful work and the unsuccessful worker. It is possible, however, that the employer might extend the date: even if he had not the good will, he might be obliged to. It is possible also that he might sympathize with the unsuccessful work, enter into it, and find in it something worthy of commendation and even of publication. Conscience, on the other hand, is for Professor Thorndike an easy mistress; she allows you yourself to ask the questions for which you proceed to find answers. That sort of conscience seems to me to pertain to the dilettante rather than to the man of science. To the scientific investigator the whole front of his science is one great problem, and he plunges in where the obscurity is thickest. He may hesitate between two or three calls: experimental psychologists have, in recent years, been divided on the question whether the problem of perception or the problem of thought is the more insistent: but Professor Thorn-