Through the knowledge and experience which has been gained in the natural gas industry, it is now known how these wastes can be practically eliminated, but the main obstacles now to be overcome before these economies can be put into effect are economic rather than technical; that is modern engineering can control these wastes, but it is necessary that the saving be made worth while. There must be a thorough consideration of the broad, underlying economics of the gas business and its relations to the conservation and better utilization of natural gas. There is a necessity that the public more thoroughly understand the economics and technique of the gas business to the end that machinery be devised and put into operation whereby the interests of the public and the gas companies can be brought together in such a manner that the gas now being wasted can be saved and used.

It is the purpose of this committee to consider these broader questions of the relations between the consuming public and the gas companies, that a program may be drawn up looking forward to the application of those engineering principles which it is known minimize the waste of natural gas now taking place and prolong the supply of gas to the consumer.

THE STEINHART AQUARIUM

THE erection of an up-to-date aquarium in Golden Gate Park, San Francisco, is an event of some significance in the scientific world and the fact that it is to be under the direction and management of the California Academy of Sciences and supervised by Dr. Barton Warren Evermann, the ichthyologist, will insure it fulfilling its purpose of quickening interest in the fauna of the Pacific Ocean and the inland waters of the Pacific coast area.

Funds for the building of the aquarium amounting to \$250,000 have been provided through the munificence of the late Ignatz Steinhart who stipulated in his will that the management should vest in the California Academy of Sciences. By an amendment to the city charter the city of San Francisco has undertaken the maintenance of the aquarium. The aquarium will be built adjoining the Academy's Museum building and will be equipped with a full complement of glass exhibition tanks. Outdoor pools for the exhibition of aquatic mammals form an essential part of the building scheme. Dr. Evermann is now in the East and will visit the aquariums of Boston, New York, Detroit, Philadelphia and Washington to study carefully the most approved methods of installation.

RESIGNATION OF DEAN BAKER OF THE NEW YORK STATE COLLEGE OF FORESTRY

An appeal for better salaries for educators, particularly those in New York State and in the New York State College of Forestry, at Syracuse marks the letter of resignation filed by Dean Hugh P. Baker, who has resigned after eight years of service, to accept twice the salary he is rated as receiving at the State College of Forestry, by becoming secretary of the American Paper and Pulp Association.

Although he receives a big increase in pay, his letter of retirement specifies that the inducement which caused him to leave the College of Forestry was not the salary, but the opportunity to carry the profession of forestry into a great industry, that of paper manufacturing. His letter discloses that last year he refused an offer of \$7,500 to enter a business career, but that the trustees increased his salary from \$5,000 to \$6,000 to remain, and he declined the offer. Owing to the rigidity of the New York state budget system, however, even this raise would not take effect until July, 1920, and only then if approved by the legislature. In his letter of resignation, he says this of the salaries of teachers: "The public is apathetic, to say the least, as to the needs of education, with the result that our public schools and colleges and universities throughout the country are suffering for the lack of the right kind of men and women in the teaching profession."

Dean Baker's last work at the College of Forestry will include an effort to secure adequate salaries for the educators in the college, some of whom are paid smaller than men in the same relative positions at other state educational institutions.

SCIENTIFIC NOTES AND NEWS

DR. DAVID F. HOUSTON, formerly president of Washington University, secretary of agriculture, has been nominated by President Wilson to succeed Senator Carter Glass as secretary of the treasury. E. T. Meredith, of Iowa, publisher of *Successful Farming*, a director of the Chicago Federal Reserve Bank and democratic candidate for senator from Iowa in 1914, will succeed Mr. Houston as secretary of agriculture.

DR. HUGH S. CUMMINGS, of Hampton, Va., has been selected to succeed Dr. Rupert Blue as surgeon general of the Public Health Service. General Blue has served two terms as surgeon general. He was first appointed during the administration of President Taft and was reappointed by President Wilson. Dr. Blue will remain in the Public Health Service engaged in research work.

DR. HERMAN M. BIGGS, New York state commissioner of health, was reappointed by the governor for a term of six years, on January 12, and the appointment was unanimously confirmed by the senate on the same day.

PROFESSOR GRAHAM LUSK, of the Cornell University Medical College, has been elected associate member of the Société Royale des Sciences Médicales et Naturelles de Bruxelles.

DR. W. F. RUDD, of the department of chemistry of the Medical College of Virginia, Richmond, has been elected president of the American Conference of Pharmaceutical Faculties.

THE council of the Geological Society of London has made the following awards: Wollaston medal to Professor Baron Gerard Jakob de Geer (Stockholm); Murchison medal to Mrs. (Dr.) E. M. Shakespear; Lyell medal to Mr. E. Greenly; Wollaston fund to Mr. W. B. R. King; Murchison fund to Dr. D. Woolacott, and Lyell fund to Dr. J. D. Falconer and Mr. E. S. Pinfold.

At the recent meeting of the American Psychological Association at Harvard University, a committee was appointed to formulate standards for the qualifications and certification of practising psychologists for the United States. The committee consists of Professor Bird T. Baldwin, State University of Iowa, chairman; Professor Walter F. Dearborn, Harvard University; Professor Leta S. Hollingworth, Columbia University; Dr. Helen T. Wooley, Vocational Bureau, Cincinnati, and Dr. Beardsley Ruml, The Scott Company, Philadelphia. State departments of education contemplating the certification of psychologists should consult with a member of the committee. New York, Wisconsin, New Jersey and California recently legalized practising psychologists.

PROFESSOR HEBER W. YOUNGKEN, head of the department of botany and pharmacognosy of the Philadelphia College of Pharmacy, has accepted the invitation of the board of control of *Botanical Abstracts* to become editor for the section of pharmaceutical botany and pharmacognosy of this journal.

DR. R. E. RINDFUSZ, formerly an assistant in the chemistry department of Oberlin College, is now chief chemist in charge of research for the American Writing Paper Co., Holyoke, Mass.

PROFESSOR THOMAS L. HANKINSON has been named ichthyologist of the Roosevelt Wild Life Experiment Station of the New York State College of Forestry, at Syracuse University. For the past seventeen years Professor Hankinson has been engaged in the study of fish in Michigan and Illinois, and for five years has been cooperating with Dr. Adams in the study of the fish in Oneida Lake and the Palisades Interstate Park region; since 1902 he has been teaching biological sciences in the Eastern Illinois Normal School, Charleston, Illinois.

WORD has been received that the well-known Swedish geologist, Professor Gerard De Geer, of Stockholm, expects to visit America in the autumn of 1920, in order to study the glacial geology in the northeastern part of the United States and Canada.

DR. WILFRED H. OSGOOD, of the Field Museum of Natural History, accompanied by M. H. B. Conover, of Chicago, sailed January 28 for Venezuela where they will make general zoological collections and distributional studies in the Maracaibo Basin and the Sierra de Merida.

In the latter part of October, 1919, Carl D. La Rue, botanist for the Hollandsch-Amerikaansche Plantage Maatschappij, returned to the laboratory at Kisaran, Asahan, Sumatra, after a five-weeks stay in Java, where he represented the research department of his company at the First Scientific Congress of the Netherlands East Indies, and at the First Technical Meeting of the Personnel of the Experiment Stations for the Rubber Culture.

WE learn from *Nature* that Mr. Willoughby Lowe has recently started on a mission to the west coast of Africa for the purpose of collecting specimens for the South Kensington Natural History Museum. Captain Hubert Lynes, R.N., has just left England on an expedition to Darfur, where he intends to make a special survey of the avifauna of the Jeb-Maria Mountains for the bird department.

MR. D. FRANKLIN FISHER, formerly connected with the Bureau of Chemistry, U. S. Department of Agriculture, New York, N. Y., in the capacity of food and drug inspector, has recently resigned from that position to become research chemist in the laboratories of the Van Camp Packing Co., Indianapolis, Ind.

THE annual Darwin Lecture at New York University will be given on Friday, February 13, at 4 P.M., in the auditorium at University Heights by Robert Cushman Murphy, curator of natural science at the Brooklyn Museum. Mr. Murphy sailed for Peru last August to conduct the Brooklyn Museum Peruvian Littoral Expedition. He has made a comprehensive study of the avian marine fauna of the Humboldt Current and of the Coastal Islands. He has been successful in taking hundreds of pictures—still and moving—of birds and other animals.

DR. WILLIAM J. HUMPHREYS, of the U. S. Weather Bureau, gave the address of the retiring president before the Philosophical Society of Washington on January 31, on "A bundle of meteorological paradoxes."

DR. S. W. STRATTON delivered an address on the "Advantages of the general adoption of the metric system in Easton, Pa.," on January 16, under the auspices of the Lehigh Valley Section of the American Metric Association. Under the same auspices Dr. Harrison E. Howe lectured on December 12, on the work of the National Research Council.

ON the alumni lectureship in chemistry, Oberlin College has had Colonel W. D. Bancroft, chairman of the division of chemistry, National Research Council, lecturing on "Colloid chemistry," and Mr. Marsh, of the Hercules Powder Co., lecturing on "High explosives."

At the meeting of the Royal Society on February 5, by the council, the program consisted of a discussion on "The theory of relativity," opened by Mr. Jeans and continued by Professor Eddington, the Astronomer Royal, and others.

WE learn from *Nature* that active steps are now being taken in the government to establish a memorial to Lord Lister in Edinburgh. The university and the Royal Colleges of Physicians and Surgeons in Edinburgh, under the control of which the memorial will be established, have determined to provide an institute for research and teaching in medicine. A site has been secured, and a committee is now being formed to make an appeal to the public for a sum of £250,000. Mr. Balfour, chancellor of the university will be president of the committee.

THERE has been established at Case School of Applied Science, in memory of the late Professor Sabine, of Harvard University, the Wallace Clement Sabine Research Fellowship in Acoustics. Its purpose is the encouragement of investigation in the science of acoustics. The holder of the fellowship will pursue his studies and carry on original investigation under the direction of Professor Dayton C. Miller. The facilities afforded by his laboratory for research in any part of acoustics are unusual, and this is particularly true as regards the analysis and synthesis of sound. A candidate for this fellowship must be a college graduate and should have had at least one year of advanced study in physics. The stipend is \$1,000 a year.

REAR ADMIRAL JOHN ELLIOTT PILLSBURY, U. S. N., retired, president of the National Geographical Society, distinguished for his contributions to science, especially on the Gulf Stream, as well as for his services as an officer in the navy, has died at the age of seventythree years.

RICHARD BLISS, who died at Newport on January 7, was at one time an assistant in the Museum of Comparative Zoology, Cambridge, and bibliographer of the United States Geological Survey and the Northern Trans-continental Survey. For thirty-one years, until his retirement in 1914, he was librarian of the Redwood Library at Newport.

DR. S. MACKAY, professor of chemistry at Dalhousie University since 1896, died from pneumonia in Halifax, N. S., on January 6. Dr. Mackay was born in Nova Scotia in 1864. He was educated at Dalhousie and the Johns Hopkins Universities.

THE Senate has passed a joint resolution appropriating \$500,000 to be used by the Public Health Service in combating influenza. The resolution directs the Public Health Service to investigate influenza and allied diseases in order to discover their causes and prevent their spread. It requires the allotment of money to universities, colleges and other research institutions for scientific investigation. The Public Health Service is accorded the privilege of making selection of such institutions.

A MEETING of surgeons, representing the surgical staffs of all the great teaching hospitals of Britain, assembled in the theater of the Royal College of Surgeons of England on January 8, as we learn from Nature, under the chairmanship of Sir Rickman J. Godlee. and resolved to form an "Association of Surgeons of Great Britain and Ireland." British surgeons have thus followed the precedent set by their colleagues the physicians, who formed a similar association a number of years ago. The object of the newly formed association is to permit surgeons as the staffs of the hospitals to meet together from time to time at various centers in order to exchange observations and compare results. The association will stand as the representative body for British surgeons, and in that capacity will

represent British interests at international surgical congresses. Sir John Bland-Sutton was elected president of the new association.

THERE has been formed recently in Chicago a Scientific Laboratory Workers' Union, No. 16,986, American Federation of Labor. This includes fifteen members, physicians, chemists and bacteriologists of the Bureau of Laboratories of the Chicago Department of Health.

At the annual general meeting of the Inventors Union, held in London, the provisions of the Patents and Designs Bill were warmly discussed in view of the inadequate protection the bill provides to British inventors. A resolution was carried to the effect that the government should be approached to consider the creation of an all-empire patent to replace the present system which entailed an initial outlay of several hundred pounds to secure protection in Great Britain and the dominions and colonies for the simplest invention.

UNIVERSITY AND EDUCATIONAL NEWS

THE corporation of Yale University having requested Dr. Fred T. Murphy to make a survey and report as to the school of medicine and Dr. Murphy having presented his views and recommendations, the committee on educational policy unanimously recommended the following minutes which were adopted by the corporation:

1. That there is a clear and definite opportunity and obligation of the university to medical education.

2. That the Yale School of Medicine has a valuable nucleus of men and material and sound traditions, which richly justify the development of an institution for medical education of the highest type.

3. That the corporation accept as a policy the development of a medical school of the highest type to include the pre-clinical and clinical years of instruction upon such principles of medical education as may be approved by the corporation, after conference with the medical faculty.

4. That every effort be made to obtain at the earliest possible date the necessary funds with which to expand and develop the buildings, the