sistent with proper conditions for health. In this connection the use of ozone has frequently been proposed and actually tried in a number of places. The ozone is supposed to deodorize and purify the air by the oxidation of organic matter and possibly by killing bacteria.

It is, however, a question as to whether ozone can be introduced in quantities large enough to kill bacteria without producing very serious irritation of the throat and lung tissues. It is also a question as to whether harmful oxides of nitrogen are not produced simultaneously with ozone. Definite information is needed on this subject. The first step in obtaining such information is to work out methods for accurately determining the percentage of ozone and oxides of nitrogen produced for different types of ozone machines and to develop suitable methods for determining the very small quantities of ozone and oxides of nitrogen that may be present in air treated with such machines. Analytical work of the highest precision is required. The gas laboratory of the Bureau of Mines Pittsburgh Experiment Station is now engaged on this problem, working in cooperation with the Research Bureau of the American Society of Heating and Ventilating Engineers which is housed in the same building.

After the chemists have worked out the methods of detecting and analysing these small quantities of ozone and oxides of nitrogen, the next problem will be undertaken in a like cooperation of the two agencies just named working with the United States Public Health Service. Surgeons from this service are detailed to the Bureau of Mines for working on health and sanitation problems. The work is being carried on under the joint general direction of A. C. Fieldner, supervising chemist and superintendent of the Pittsburgh Station of the Bureau of Mines, and Dr. R. R. Sayers, chief surgeon of the Bureau of Mines, by G. W. Jones, assistant gas chemist, W. P. Yant, assistant analytical chemist, and O. W. Armspach, engineer of the American Society of Heating and Ventilating Engineers.

THE PUEBLO BONITO EXPEDITION OF THE NATIONAL GEOGRAPHIC SOCIETY

Neil M. Judd, curator of American archeology in the U. S. National Museum, has returned to Washington from New Mexico where he has been engaged, during the past five months, as director of the National Geographic Society's Pueblo Bonito Expedition. This first summer's explorations in Pueblo Bonito—one of the largest and best preserved prehistoric ruins in the United States—is reported to have been entirely successful and to have prepared the way for more intensive research next season. Over forty dwellings and five large ceremonial rooms were excavated; a considerable collection of artifacts and much valuable data were recovered.

As a unique feature of the National Geographic Society's newest expedition it is proposed to hold an annual symposium at Pueblo Bonito—a conference to which will be invited leaders in various branches of science. The first of these meetings, held late in August, was attended by several archeologists and agriculturists; geologists, botanists and soil experts will be invited to the next conference. Through the willing cooperation of these specialists, each expert in his own branch of science, it is hoped to gain a deeper understanding of the conditions under which the ancient inhabitants of Pueblo Bonito carried on their numerous activities; *i.e.*, the geophysical conditions which obtained in their day, the source and extent of their water supply, their methods of agriculture, the character and variety of their foodstuffs, as well as an index as to their cultural attainments, through careful examination of the archeological data recovered. This is the first instance, it is believed, in which American men of widely differing fields of science have joined in solution of a common problem.

THE STEELE CHEMICAL LABORATORY OF DARTMOUTH COLLEGE

At the dedication of the Steele Chemical Laboratory, according to the account in the Boston *Transcript*, the assembly included Governor Albert A. Brown of New Hampshire, former Governor Pingree of Vermont, Dean

Henry P. Talbot of the Massachusetts Institute of Technology, Dr. William H. Nichols of New York City, members of the board of trustees of Dartmouth College, and a number of prominent chemists of New England. Addresses were made by Dr. Nichols, who spoke of the late Sanford H. Steele, a former associate in the General Chemical Company, and an alumnus of Dartmouth, whose bequest of $250,000 made the new building possible, and by Dean Talbot, who reviewed the outstanding achievements of the last fifty years in the study of chemistry.

The Steele chemistry building, which has just been completed at a cost of half a million dollars, embodies the best features of over a score of laboratories inspected by the architects and members of the Dartmouth chemistry department. Much of the apparatus of its equipment has been specially constructed according to designs of Dartmouth chemists.

Nine laboratory rooms are contained in the building, varying from the large laboratory for beginners which will accommodate 144 men working at one time to the laboratory for advanced organic chemistry which will accommodate about fifteen men. Laboratories for qualitative analysis, quantitative analysis, physiological chemistry, physical chemistry, organic chemistry and advanced courses in each of these studies are included. The new building also contains offices and laboratory suites for instructors and professors as well as a large library, lecture room, and conductivity rooms. Specially designed and constructed systems for ventilation, and distribution of gas, electricity, compressed air and distilled water have been installed. The building is Georgian in type, to harmonize with other Dartmouth buildings. It was designed by Larson & Wells of Hanover, and erected by the Cummings Construction of Ware, Mass.

Members of the Ouroborus Club, a society of chemists, holding its fall meeting at Hanover, were guests at the dedication exercises and included Professors Talbot, Norris, Moore, Williams, Smith and Lewis of the Massachusetts Institute of Technology; Kohler and Lamb, of Harvard; Jennings and Zinn, of Worcester; Hopkins, Doughty and Scatchard, of Amherst; Chamberlain and Morse of Massachusetts Agricultural College; Mears of Williams; Johnson of Yale; Hoover of Wesleyan; and Bartlett, Bolser and Richardson of Dartmouth.

LECTURES ON PUBLIC HYGIENE AT THE UNIVERSITY OF PENNSYLVANIA

A second series of ten lectures on "Public Hygiene" to be given under the auspices of the school of Hygiene and Public Health at the University of Pennsylvania is announced as follows: October 15. "The factors that determine disease and death." Professor D. H. Bergey, School of Hygiene and Public Health, University of Pennsylvania.

October 22. "The organization of community anti-tuberculosis work." G. T. Drolet, Statistician, N. Y. Tuberculosis Commission.

October 29. "The sanitary control of food and drink in Philadelphia." Professor Seneca Egbert, School of Hygiene and Public Health, University of Pennsylvania.

November 5. "The anti-venereal campaign." T. C. Funck, Pennsylvania Department of Health.

November 12. "Social service as a factor in public health activities." Dr. H. R. M. Landis, director of the Clinical and Sociological Department, Henry Phipps Institute.

November 19. "Infective diseases not caused by bacteria, their nature, spread and suppression." Professor A. J. Smith, professor of pathology, University of Pennsylvania.

November 26. "The administration of public health laboratories." Dr. John Laird, director of the laboratory of Pennsylvania State Department of Health.

December 3. "Medical examination and classification of workmen as complementing the sanitary supervision of workplace." Dr. Frank Craig, Henry Phipps Institute.

December 10. "The limitations of Eugenics." By Professor C. E. McClung, professor of zoology and director of the laboratory of zoology, University of Pennsylvania.

December 19. "On the training of public