

transport all the material necessary for the establishment of a far advanced station in the interior, whence further explorations could be made. Scientifically this station near the south pole would add very much, by its observations, to the *data* collected by the several expeditions which would be sent out in accordance with the plan of the Association of Polar Explorers.

THE London *Times* says that in view of the suggested transmission of disease by telephone mouthpieces, the General Electric Company has brought out an instrument in which any danger of the sort is avoided by the simple expedient of abolishing the mouthpiece altogether. The receiving and transmitting apparatus is combined in a small metal case, shaped like a watch, which is held continuously to the ear both in speaking and in listening, the transmitting microphone being made so sensitive that it becomes unnecessary to concentrate the sound waves on it by the aid of any mouthpiece such as is ordinarily used. Mounted on a handle, with a speaking key, the new arrangement is exactly similar to the common combined receiver and transmitter, except that there is no mouthpiece, and the speaker, as it were, addresses himself to the world at large, instead of talking into a trumpet-shaped orifice.

A REPORT on the production of natural gas in this country during 1904 will soon be published by the United States Geological Survey. This paper, of which Mr. F. H. Oliphant is the author, contains much information about the composition, production, consumption and uses of this ideal household fuel. The United States is fortunate in its possession, as it produced 98 per cent. of the entire known world's production of natural gas in 1904. This production amounted approximately to 256,645,000,000 cubic feet, or 6,159,480 tons of 2,000 pounds. The value of this production was \$38,496,760, which was an increase of \$2,688,900 over the value of the 1903 production. There was much active work in 1904 in the new fields of central Ohio and southeastern Kansas. In Kansas a number of remarkably large wells were developed. A

large amount was expended in drilling wells, extending many pipe lines, and piping cities and villages in these states. In West Virginia a considerable number of new wells of large capacity were drilled and connected to the main lines. Four states, Pennsylvania, West Virginia, Indiana and Ohio produced 93.3 per cent. of the entire value of natural gas produced in the United States in 1904. The output of Pennsylvania alone represented 47 per cent. of the entire value. This is interesting when it is remembered that Pennsylvania is the oldest state producing natural gas in large quantity.

PROFESSOR SILVANUS P. THOMPSON writes, according to the London *Times*, "No one seems to have recalled, in connection with the commemoration of Sir Thomas Browne, at Norwich, that he was the first person to use the word 'electricity' as a noun. Gilbert and others who followed him had adopted the term 'electrics' to denote substance which, like amber, became attractive when rubbed; but they had used no name for the unseen itself. The first occurrence of the substantive in English (or, for that matter, in any language) occurs on page 79 of the 'Pseudodoxia Epidemica' (1646) in the following passage: 'Glasse attracts but weakly though cleere, som slick stones and thick glasses indifferently; Arsenic not at all; Saltes generally but weakly, as Sal Gemma, Alum, and also Talke; nor very discoverably by any friction: but if gently warmed at the fire, and wiped with a dry cloth, they will better discover their Electricities.' Sir Thomas Browne also claims the gratitude of posterity for the narration on page 76 of his own experiments to expose the fable of the wireless telegraphing by sympathy between two magnets."

UNIVERSITY AND EDUCATIONAL NEWS.

MR. JAMES SPEYER has given to Columbia University \$50,000 to endow the Theodore Roosevelt professorship of American history and institutions at the University of Berlin. Dr. J. W. Burgess, professor of political science and constitutional law and dean of the faculty of political science at Columbia Uni-

versity, has been nominated as the first incumbent of the chair.

A TECHNICAL high school with accommodations for 1,200 people will be erected in Newark, N. J.

AN anonymous gift of £50,000 has been made to the University of Birmingham toward the completion of the new building. The present donation makes the fourth of £50,000 which has been received. The other donors were Mr. Carnegie, Sir James Timmins Chance, and 'Anonymously.' Up to the present the council have authorized an expenditure on the new University at Bournbrook of £250,000 on buildings and £100,000 on equipment. By the latest donation the total fund in the possession of the council is increased to £450,000. In addition the city council have given a half-penny rate, which is equivalent to £6,000 a year, and the county councils of Staffordshire and Worcestershire are subsidizing the university to the amount of £500 a year each. The Guardians of the Standard of Wrought Plate have decided to make a grant of from £200 to £300 a year.

THE new zoological department of the University of Liverpool, including the museum and laboratories of zoology and of the practical applications of zoology, will be opened on November 18 by the Earl of Onslow.

ON October 16 Bellevue College, at Bellevue, Nebr., celebrated the twenty-fifth anniversary of its founding with appropriate ceremonies, including an historical address by Rev. D. R. Kerr, D.D., former president of the college and now president of Westminster College, Fulton, Mo. On the same occasion occurred the inauguration of the new president, Rev. G. W. Wadsworth, D.D., for some years president of Occidental College, Los Angeles, Cal. The faculty of the college has been strengthened this year by the addition of Mr. A. S. McDaniel, A.B. (Wabash), A.M. (Wisconsin), late fellow in chemistry at the University of Wisconsin, as assistant professor of physical science. A. A. Taylor, Ph.D., continues in charge of the natural sciences.

DR. OWEN L. SHINN and Dr. Walter T. Taggart have been promoted to assistant professorships in chemistry at the University of Pennsylvania, and Dr. Roger C. Wells (Harvard) has been appointed instructor in physical chemistry.

THE following appointments in chemistry have recently been made of graduates of the University of Pennsylvania: R. D. Hall, Ph.D., and R. O. Smith, Ph.D., instructors at the University of Wisconsin; Jas. R. Withrow, Ph.D., instructor in the University of Illinois; Hume Bedford, Ph.D., instructor in the University of Maine; Miss Alice L. Davison, teacher in the College for Women, Columbia, S. C.

MR. CHARLES J. C. BENNETT, who received this year the doctor's degree in education and psychology at Columbia University, has been appointed professor of education in the Louisiana State University.

DR. W. A. P. MARTIN, who has been for the past three years associated with the Viceroy Chang Chih Tung in the cause of western education, is about to assist in the formation of a great union college in Peking, an institution which will be supported jointly by the missionary societies of the methodist, the congregational and the presbyterian churches. This enterprise is planned as a model for the guidance of the Chinese government schools.

MR. F. S. PINKERTON has been appointed professor of applied mathematics at Cardiff.

THE following appointments have been made at the University of Liverpool: Dr. A. W. Titherley, lecturer in organic chemistry; Dr. W. G. Smith, lecturer in experimental psychology; Dr. H. Bassett, assistant lecturer and demonstrator in chemistry; W. Mason, assistant lecturer in engineering; G. E. Scholes, assistant lecturer and demonstrator in engineering; C. A. Sadler, assistant demonstrator in physics.

Erratum: The review of 'The Educative Process,' by William Chandler Bagley, printed in the issue of SCIENCE for November 3, was written by Professor E. A. Kirkpatrick, State Normal School, Fitchburg, Mass. We much regret that through an error it was assigned to Professor Wilbur S. Jackman.