

The following table, by the *British Medical Journal* compiled from the statements published for ten years, will be of interest. The figures (not standardized) of the death-rates do not disclose any very distinct movement; the deaths of infants appear to indicate a slight increase. The most disquieting set of figures are those showing a further marked decline in the birth-rate since 1914.

ENGLAND AND WALES

	Births per 1,000 Total Population	Deaths per 1,000	Deaths Under One Year per 1,000 Births
1908.....	26.5	14.7	121
1909.....	25.6	14.5	109
1910.....	24.8	13.4	106
1911.....	24.4	14.6	130
1912.....	23.8	13.3	95
1913.....	23.9	13.7	109
1914.....	23.6	13.9	105
1915.....	21.9	15.1	110
1916.....	21.6	14.0	91
1917.....	17.7	14.4	97

## CIVIL ENGINEERS AND THE ARMY

THE War Department states that two thousand engineers are needed immediately by the United States Army for commission as first lieutenants and captains. The chief of engineers has outlined a plan of campaign by which it is hoped to obtain the men needed without delay. A board of examiners will be sent out from Washington to visit about 33 principal cities.

Engineers, civil, mechanical, mining and electrical, will have an opportunity to go before the board and be examined. Those passing the examinations will be commissioned at once and sent to an engineer officers' training camp, either at Camp Lee, Petersburg, Va., or Camp Humphreys, Va., near Washington. They will be on officers' pay while training and at the completion of their courses will be assigned at once to duty with the engineer troops.

Engineering societies and institutes will be provided with application blanks to be distributed among their members and friends in the profession. Engineers who do not obtain blanks in this way should address the Chief of

Engineers, United States Army, Washington. These forms, when properly filled out, should be returned to Washington. After they have been scrutinized with a view to ascertaining the fitness of the applicants, word will be sent out telling the men when and where to appear for mental and physical examinations.

Following are the requirements that must be met:

*Age Limits.*—First lieutenants, 32 to 36 years; captains, 36 to 42 years. These limits may be extended in special cases, but no man of draft age will be considered.

*Citizenship.*—All applicants must be citizens of the United States.

*Qualifications.*—Applicants must be actively engaged in the practise of the engineering profession, and be in good physical condition. No set rules have been adopted as to professional qualifications and experience. The examining board will determine each applicant's case. Applicants must possess the requisite qualities of leadership and temperament to fit them for the command of troops.

It is the hope of the chief of engineers to have all men who pass the examinations commissioned within ten days or two weeks. Traveling expenses of 7 cents a mile to the training camp will be allowed to those who receive commissions.

## WAR WORK OF MINING ENGINEERS

HEADS of practically every "war-work" division of the government will discuss vital war problems with 200 of the country's leading mining engineers, representing the American Institute of Mining Engineers, at a dinner in the Food Administration Cafeteria on the evening of June 21. To learn new ways in which the mining engineer can contribute his services, already great, toward the winning of the war is the aim of the gathering, which has been planned in honor of the board of directors of the institute. There are some 700 of the institute's membership of 6,700 devoting their entire time to war service.

Those who will discuss future work for the institute in the war are practically all members of the institute. They include Herbert

C. Hoover, food administrator; Charles M. Schwab, director-general of the Emergency Fleet Corporation; John D. Ryan, director-general of the Aircraft Production Board; Vance McCormick, chairman of the War Trade Board; W. L. Saunders, chairman of the Naval Consulting Board; Mark L. Requa, head of the Oil Division of the Fuel Administration; Sidney J. Jennings, president of the American Institute of Mining Engineers; Benedict Crowell, Assistant Secretary of War, and Pope Yeatman, of the War Industries Board. Francis Peabody, chief, explosives section, Bureau of Mines, will be the toastmaster.

Members of the American Institute of Mining Engineers are active in a wide field of war work including the Engineer Officers' Reserve Corps, Ordnance and Signal Corps Branches of the Army and Navy, Aircraft Production, Food and Fuel Administrations, War Industries Board, War Trade Board, and the Department of the Interior. Several members of the institute have also joined the Royal Engineers of the British Army. The arrangements for the conference are in charge of Van H. Manning, director of the Bureau of Mines. In the afternoon the board of directors of the institute will hold a meeting at the Bureau of Mines.

At a meeting on June 20 a Washington section of the American Institute of Mining Engineers was formed. Although remote from the country's mining centers, Washington now contains more mining engineers than any other city.

#### SCIENTIFIC NOTES AND NEWS

DR. ALEXANDER LAMBERT, of the College of Physicians and Surgeons, Columbia University, was elected president of the American Medical Association at the Chicago meeting on June 13. Admiral W. C. Braisted, Surgeon-General of the Navy had a nearly equal number of votes. Dr. Lambert is medical director of the American Red Cross work in France, and president of the New York State Medical Association.

At the recent commencement of New York University, the degree of LL.D. was conferred

on Surgeon-General William C. Gorgas, and the degree of doctor of public health on Dr. Charles Edward Amory Winslow, professor of public health at Yale University.

At its commencement exercises held on June 12, St. Lawrence University conferred the degree of doctor of laws on Dr. Frederic S. Lee, professor of physiology in Columbia University.

SIR NAPIER SHAW, president of the International Meteorological Committee, has been appointed scientific adviser to the British government for the period of the war. Sir Napier has been director of the British meteorological office since 1905.

OLIVER HEAVISIDE, the distinguished English mathematical physicist, has been elected an honorary fellow of the American Institute of Electrical Engineers. The only other honorary fellows are: Marconi, Ferranti, Blondel and C. E. L. Brown.

PROFESSOR L. V. KING, of the Macdonald Physical Laboratories, McGill University, was elected president of Section III., Chemical and Physical Sciences, at the thirty-seventh meeting of the Royal Society of Canada, recently held in Ottawa, Canada. Professor King has been carrying on a series of practical researches for anti-submarine warfare and other work on behalf of the British Admiralty.

THE Franklin Institute has awarded the Howard N. Potts medal to Dr. Alexander Gray, of Ithaca, N. Y., for his paper, entitled "Modern dynamo electric machinery," which is "an exhaustive discussion of the design of dynamo electric machinery." The institute has awarded its Edward Longstreth medal of merit to Professor H. Jermain Creighton, of Swarthmore College, for his paper, entitled "The deteriorating action of salt and brine on reinforced concrete," which presents "the results of an original and scientific investigation in a matter of great practical importance. An Edward Longstreth medal of merit has also been awarded to Dr. J. B. Whitehead, of Baltimore, for his paper, entitled "The electric strength of air and methods of measuring high voltage," which gives "a clear exposition of