

## OBITUARY

## THOMAS H. GRONWALL

THROUGH the death, on May 9, of Dr. Thomas H. Gronwall, of Columbia University, America has lost one of its outstanding mathematicians.

Dr. Gronwall was born at Axberg, Sweden, on January 16, 1877. He received his Ph.D. from Upsala in 1898. He then went to Berlin, where, until 1902, he studied engineering. Soon after taking his engineering degree, he came to this country. Here he held various technical positions and also filled academic posts at Princeton and at Columbia.

Gronwall's work covered a wide variety of subjects. He wrote on analytic functions, infinite series, nomography, the analytic theory of numbers, differential geometry, integral equations, ballistics, elasticity, electrical theory and relativity. Some years ago he was associated with Professor V. K. La Mer in a revision of the Debye-Hueckel theory.

In pure mathematics, Gronwall's best known papers are probably those on analytic functions of several variables and on the summability of Laplace series. In his dissertation, he extended the Weierstrass factorization theorem to functions of several variables. In later work, he did much to clear up the problem of the representation of a meromorphic function of several variables as a quotient of two analytic functions. He developed for Laplace series a summability theory analogous to that of Fejer for Fourier series.

Gronwall's knowledge was encyclopedic. He was a prodigious reader, quick in assimilating ideas and retentive in memory. He possessed analytic skill of a high order and great elegance of style.

While Gronwall was of a reserved nature, those who knew him intimately appreciated the depth of his culture and his wealth of intellectual interests. In his premature death, we have lost a great savant and a brilliant personality.

J. F. RITT

COLUMBIA UNIVERSITY

## ELLEN CHURCHILL SEMPLE—1863-1932

DEAN of American geographers, noted author, and one of the world's foremost educators, Miss Semple achieved a life marked by untiring devotion to duty. Louisville, Kentucky, was her birthplace in 1863, her parents being from two of the old families of the Blue Grass. In 1882, at nineteen, she became a bachelor of arts from Vassar College. Graduate work in history combined with extensive travels in Europe prepared her to take a master of arts degree at Vassar in 1891. Once more in Europe, she gave herself to work in anthropogeography under Ratzel, whose influence changed her interest from history to geog-

raphy. "American History and Its Geographic Conditions," published in 1913, was forerunner to a number of scholarly treatises including "Influences of Geographic Environment" and "The Geography of the Mediterranean Region."

Miss Semple was a truly great teacher. She set high standards, not only for us, but also for her successors. Although she was never trained specifically for the teaching profession, so outstanding were her accomplishments in the field of anthropogeography that she was called in succession to several European and American universities to lecture on geography.

Catholicity of interest and ability to select and apply facts and principles from an inexhaustible fund of knowledge lifted her lectures above the plane of ordinary instruction. She demonstrated to a marked degree how "nature and books belong to the eyes that see them." Her capacity for observation was enormous. Since her keen curiosity ever prompted her to seek and inquire, she derived the maximum benefit from her studies in the field. She knew "how wide was the far horizon of geography." Because of these qualities she vitalized her teaching by personal observations and incidents selected from her rich and varied experience. She told stories with true dramatic effect and with flashes of wit that enlivened her discussion and made it a real and dynamic exposition.

In 1914 she was awarded the gold medal of the American Geographic Society and in 1932 the gold medal of the Chicago Geographical Society. Upon establishing the Clark School of Geography, I called Miss Semple to be the first geographer of the new staff. Although she ceased university teaching two years ago, she continued on the faculty roll. As lecturer, writer and guide to students, Miss Semple had few her equal. She was a woman of exquisite personal charm and thorough scientific integrity. She exerted a compelling influence over all her friends and associates.

WALLACE W. ATWOOD

## MEMORIAL TO DR. JOHN BRIQUET

DR. JOHN BRIQUET, late director of the Botanical Garden, Geneva, Switzerland, died on October 26, 1931, at the age of sixty-one years, after a brief illness. Those botanists who attended the International Botanical Congresses in 1900, 1905, 1910, 1926 and 1930 will realize the great loss botany has suffered by his death. As stated in a recent appeal issued by a committee of distinguished Swiss botanists, Dr. Briquet was an outstanding figure in all discussions on nomenclature, and the rôle he played as recorder, by his tactful, sagacious and conciliatory nature, together

with his great knowledge of languages and absolute command of the matter in hand, left an indelible impression on the minds of all. Thus he contributed greatly to the unifying of botanical nomenclature, and his services at the memorable congress held at Cambridge, England, in 1930 will long be gratefully remembered.

The Committee of Swiss botanists consisting of Messrs. Christ, Hochreutiner, Oechsli, Rübel, Schinz, Schröter and Wilezek, plan to provide a bronze bust of Dr. Briquet to be placed in the Conservatoire botanique in Geneva, along with those of Vaucher, De Candolle, Boissier, Aescherson, Engler and others who

very materially advanced the interests of the institution to which Dr. Briquet himself contributed in so large a degree. It is estimated that approximately \$1,000 will be needed for this most worthy memorial. The committee fully realizes the difficulty it faces in raising the necessary amount at this time, and expresses the hope that American botanists will generally subscribe to the project, in order that the task of establishing the memorial may be consummated without delay. Subscriptions may be sent to M. le Prof. Wilezek, Palais de Rumine, Musée botanique, Lausanne, Switzerland.

E. D. MERRILL

NEW YORK BOTANICAL GARDEN

## SCIENTIFIC EVENTS

### BIRTH RATES AND DEATH RATES

THE Metropolitan Life Insurance Company has made public the following facts in regard to the decline of the birth rate:

In twenty-four out of forty-two of the world's large cities the birth rate declined more than 5 per cent. in 1931 as compared with 1930.

The ten large German cities all showed declines of more than 10 per cent. in live births in 1931 over 1930. In Berlin the birth rate last year reached the low figure of 8.7 per 1,000, the lowest figure for any of the German cities having a population of 500,000 and over and one of the lowest birth rates for any city in the world. The 1931 birth rate in Berlin was the lowest in the history of that city and may be compared with the rates of 11.2, 17.5 and 11.4 per 1,000 prevailing in Berlin in 1925, 1920 and 1915, respectively. In Dresden and Frankfurt the birth rate fell below 10 per 1,000 for the first time in the peace-time history of these two cities.

Every one of the fourteen large American cities recorded a drop in the birth rate during 1931. The decline was 22 per cent. in Boston and 17 per cent. in Detroit. The only large city in the United States with a birth rate over 20 per 1,000 was Pittsburgh, and there the rate declined more than 6 per cent. from the 1930 figure.

A favorable record was registered for mortality during 1931 in these world cities. All the German cities had either a substantially lower death rate in 1931 than in 1930 or else a stationary death rate. In Breslau and Frankfurt the decline in mortality during 1931 was greater than 10 per cent. Munich, Leipzig and Dresden had declines of between 5 and 10 per cent. The Berlin death rate was unchanged.

Among fourteen of our American cities slight increases in the death rate were observed for five cities and decreases for six, with Detroit and Milwaukee

leading in the latter classification. How much of the decline in mortality, as well as in the number of births, in Detroit was due to the emigration of persons by reason of the prevailing unemployment conditions is not known. The death rate in New York City showed a very small increase, less than 1 per cent. during 1931.

World economic conditions during 1931 affected chiefly the birth rate, and this may be a side effect of prevailing world conditions upon the marriage rate. The extent to which declining marriages in 1930 and 1931 affected first births, the crude birth rates and infant mortality rates in 1931 can not as yet be determined from the figures at hand. Death rates and infant mortality rates have not shown as yet any definite effect of the economic situation.

### INVESTIGATION OF THE WOODS OF THE WORLD

A SYSTEMATIC investigation of the woods of the entire world by the International Association of Wood Anatomists is now well advanced, according to a statement made public by the secretary-treasurer, Professor Samuel J. Record, of the Yale School of Forestry, who recently announced the results of a conference, held in New Haven, of representatives of the Bussey Institution and the biological laboratories of Harvard University, the botanical department of Cornell University, and the forestry department of Yale. The organization has a membership of fifty investigators in eighteen different countries under the direction of an executive council of eleven members of eight nationalities.

The largest and most comprehensive collection of woods in existence at present is at the Yale School of Forestry. It contains over 21,000 fully catalogued samples representing over 6,000 named species of about 2,000 different genera. Cuttings large enough