

OBITUARY

HERBERT ELLSWORTH SLAUGHT

In the death of Herbert Ellsworth Slaughter on May 21, 1937, mathematics in America has lost one of its dominant figures. He was not a research scholar, but he wielded a remarkable influence in the organization and development of the leading American societies for the encouragement of mathematical research, and for the cultivation of inspiring associations among those interested in the study and teaching of mathematics.

His early life was difficult. He was born on a farm near Watkins, N. Y., on July 21, 1861. During his high-school and college years in Hamilton, N. Y., he helped to support his family and at the same time earned his way through Colgate Academy and Colgate University, from which he graduated in 1879 and 1883, respectively, both times as valedictorian of his class. He received his M.A. in 1886 and an honorary Sc.D. from Colgate in 1911.

His first teaching position was an instructorship in mathematics at Peddie Institute in Hightstown, N. J., where he effectively demonstrated his abilities as an instructor and an administrator. After his third year there he was made assistant principal in 1886 and principal in 1889. But his real interest was in his mathematics and his teaching, and in 1892 he accepted a fellowship in mathematics at the University of Chicago, which was just then opening its doors. After the expiration of his fellowship term he was successively appointed reader, associate, assistant and instructor at the University of Chicago during the years 1894-97, and he received his Ph.D. degree in the winter quarter of 1898. His thesis, entitled "The Cross-Ratio Group of 120 Quadratic Cremona Transformations of the Plane," appeared in the *American Journal of Mathematics* (Vol. 22, pp. 343-80, 1900). He was made assistant professor in 1900, associate professor in 1908, professor of mathematics in 1913 and professor emeritus in 1931.

In the early years of the University of Chicago Slaughter developed a wide acquaintance with teachers of mathematics in the central west as a result of his duties as representative of the university in its relations with affiliated secondary schools. His experience during these years undoubtedly had great influence in his decision, formed after a very conscientious debate with himself, to devote his life to the promotion and improvement of the teaching of mathematics rather than to a research career. He accordingly affiliated himself enthusiastically in 1903 with the newly formed Central Association of Teachers of Mathematics, and in 1907 was made co-editor of the *American Mathematical Monthly*. From that time on much of his energy was devoted to activities associated with the *Monthly*, and to the organization and development of

the Mathematical Association of America, devoted to the interests of collegiate mathematics, in contrast to the older American Mathematical Society, whose chief purpose is the promotion of research.

Many scientists have expressed surprise that there should be two distinct national mathematical societies. The older one will celebrate its semi-centennial next year. The younger one was founded in 1916, mainly on the initiative of Professor Slaughter, and its phenomenal growth and success has been due largely to his insight, judgment, energy and tenacity. The new association did not arise by secession from the older society. It arose from Slaughter's inspiration to grasp the best solution of the problem to finance permanently the *American Mathematical Monthly*, which had become largely his responsibility.

The *Monthly* was founded in 1894 by B. F. Finkel, of Drury College in Springfield, Missouri. In October, 1902, L. E. Dickson became co-editor in charge of articles. From 1905-1908 it was published under the auspices of the University of Chicago. Dickson (who withdrew at the end of 1908) persuaded Finkel to invite Slaughter to become an editor in 1907. During 1909-12, the *Monthly* was published with the cooperation of the Universities of Chicago and Illinois. During 1913-15, Slaughter secured the cooperation of fourteen leading western universities. But he found that this method of financing the *Monthly* could not be made permanent. Hence he and his associates proposed to the American Mathematical Society that, in addition to its publishing its *Transactions* and *Bulletin*, it should finance and edit the *Monthly*. The latter caters to collegiate mathematics, while the two journals of the society publish only original papers or critical reviews of them. The society decided against the proposal and thus reaffirmed that its sole object is the support of research.

Accordingly the Mathematical Association of America was founded in 1916 under the presidency of E. R. Hedrick, now provost of the University of California at Los Angeles. For twenty years, Slaughter has been the leader in the association and was its president in 1919. For thirty years, he was one of the editors of the *Monthly*. He was remarkably effective in these activities. He forecast the future with uncanny foresight, showed remarkable judgment in selecting his associates and secured their full friendly cooperation.

But Slaughter's activity did not end with his interest in the association. During the years 1916 to 1922 the association had a committee which, under the leadership of Professor J. W. Young, of Dartmouth College, investigated the teaching of mathematics in secondary schools and formulated for them a standard mathe-

mathematical curriculum. Its report, prepared with the aid of many groups of teachers in widely scattered communities, is one of the most valuable documents in its field. Slaught believed that the cooperative spirit and the associations stimulated by the work of this committee should be kept alive, and he proposed the organization of an association to be called the National Council of Teachers of Mathematics, whose membership should be drawn from the ranks of those interested in the teaching of mathematics in the secondary schools. The council began its existence in 1920. It now has an official journal called *The Mathematics Teacher*, a series of year-books containing valuable articles on the place of mathematics in modern education, and more than 5,000 members.

Slaught was also one of the first members of the Chicago Section of the American Mathematical Society and a most efficient secretary of the section from 1906 to 1916. He early recognized the value of cooperation between the society and the association, and his effective encouragement of such cooperation has constituted a most important service to mathematics in this country. He was at various times a member of the council of the society, trustee and president and honorary life president of the association, honorary life president of the National Council, and honorary life member of the Central Association. He has thus for many years been influential in the affairs of the most important of the mathematical associations of our country.

Slaught's connections with mathematical societies involved him in many editorial responsibilities. He was for many years managing editor of the *American Mathematical Monthly*, was an editor of the *Mathematics Teacher*, and he was one of the founders of the *Educational Screen*, a periodical devoted to the promotion of visual education. In 1923 he conceived the idea of a series of mathematical books, to be sponsored by the association, which would present in expository form the results of modern research in pure and applied mathematics. Five of the books have already appeared and a sixth is in preparation, under the auspices of a committee of which Slaught was chairman. The books are called "Carus Mathematical Monographs" after the late Mrs. Mary Hegler Carus, of LaSalle, Ill., who generously financed the early volumes.

Slaught was unsurpassed as a teacher of collegiate mathematics. He was on many occasions the ablest

representative of our department of mathematics at the University of Chicago in our relations with the university and our students. He was widely known and beloved by our alumni. We have lost an influential colleague whose cheerfully cooperative spirit and whose devotion to his university and to mathematics have been an inspiration to all of us.

L. E. DICKSON
G. A. BLISS

RECENT DEATHS

DR. PERCY EDGAR BROWN, head of the department of agronomy of the Iowa State College, died on July 8 at the age of fifty-one years. Dr. Brown had been secretary and this year became chairman of the Section on Agriculture of the American Association for the Advancement of Science. He was also editor-in-chief of the Iowa State College *Journal of Science*.

PROFESSOR ARTHUR E. SEAMAN, of the Michigan College of Mining and Technology, Houghton, died on July 9 at the age of seventy-nine years. He had been connected with the college department of geology since 1891, and retired in 1928 with the title of professor emeritus and curator of the college museum which bears his name.

DR. JOHN W. CHURCHMAN, professor of therapeutics at Cornell University Medical College, died on July 13 at the age of sixty years.

WINTER LINCOLN WILSON, formerly professor of railway engineering at Lehigh University, died on July 15 at the age of seventy years.

DR. HENRY EDWARD ARMSTRONG, emeritus professor of chemistry at the City and Guilds College at South Kensington, the oldest fellow of the Royal Society, died on July 13. He celebrated his eighty-ninth birthday on May 6.

DR. HENRY HOMAN JEFFCOTT, secretary of the British Institution of Civil Engineers for fifteen years, previously professor of engineering in the Royal College of Science, Dublin, died on June 29.

DR. F. H. HESSELINK VAN SUCHTELEN, who had published research in soil chemistry, died as a result of an accident at Apeldoorn, Holland, on June 23 at the age of fifty-three years. Dr. van Suchtelen was for some years connected with the New Jersey Agricultural Experiment Station, the Michigan State College and the Massachusetts Agricultural College.

SCIENTIFIC EVENTS

THE BRITISH TRUST FOR ORNITHOLOGY

THE British Trust for Ornithology, according to the *London Times*, has accepted responsibility for the future conduct of the principal scheme in Great Brit-

ain for the study of migration and other aspects of bird life by the ringing method. This scheme was instituted in 1909 by H. F. Witherby, editor of *British Birds*, and has been maintained with the cooperation of