

## HERBERT ELLSWORTH SLAUGHT—IN MEMORIAM

Among the members of our mathematical community in America one of the men most widely known by teachers and students of mathematics was Herbert Ellsworth Slaughter. His lifelong devotion to his University and to the promotion of the study of mathematics, his skill as a teacher, his effective leadership in the mathematical organizations which he sponsored, and his influence with teachers of mathematics the country over, were remarkable. He was born July 21, 1861 and died on May 21, 1937 after a life of unusual success in the sequence of important undertakings to which he gave his enthusiastic support.

During his high school and college years Slaughter's life was a difficult one. When he was thirteen years old his family lost the farm on Seneca Lake near Watkins, New York, which up to that time had been their home. It seemed a catastrophe, but Slaughter himself has said that he would probably have spent his life working on the farm if it had not happened, and the farm apparently was not a very good one. At any rate in 1875 he and two older brothers of approximately college age found themselves in Hamilton, New York, with an older sister and an invalid mother to support, and with educations needing completion. The story of their success and of the cheerful cooperation of their family group would give encouragement to every young man who finds himself in similar circumstances. The two older boys became successful physicians, and Herbert graduated from Colgate Academy in 1879 and from Colgate University in 1883, each time as valedictorian of his class. He received his A.M. in 1886, and was honored with an Sc.D. in 1911, both from Colgate.

Soon after receiving his bachelor's degree Slaughter was recommended by one of his professors for an instructorship in mathematics at Peddie Institute in Hightstown, New Jersey. As an instructor he was unusually successful from the start, and his administrative ability was soon recognized by his appointment to be assistant principal in 1886 and principal in 1889. But his real interest was in his mathematics and his teaching. He had married Miss Mary L. Davis, the instructor in music at Peddie, in 1885, and she sympathized with and encouraged his desire to enter the field of university mathematical work, even though such a course meant a serious sacrifice for them for some time to come. So in 1892 Slaughter accepted a two-year appointment to one of the first three fellowships awarded by the Department of Mathematics at the University of Chicago, which was just then opening its doors. It was important both for the Department and for him that he had also a promise of summer quarter teaching to help out with his finances, since his performance in this teaching work early assured the Department of his skill as an instructor.

Thus began Slaughter's long career at our University. He was relatively unprepared for graduate work in mathematics, but with his usual thoroughness he supplemented his college training intensively during the summer of 1892, and in the autumn was ready to carry on as a graduate student with success. In 1894, after the expiration of his term as a fellow, the fine quality of his teaching was evident and he was successively appointed reader, associate, assistant, and instructor, during the years 1894-97. In the winter quarter of 1898 he re-

ceived his Ph.D. degree, delayed because of his teaching work. 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 Slaught was responsible for entrance examinations in mathematics and was an official visitor of affiliated secondary schools. He also had charge of the mathematical meetings of the conferences of teachers of secondary schools which were then held at the University each summer quarter. Thus his influence and acquaintance with teachers of mathematics in the central west became even at that time very wide. During a sojourn in European universities in the college year 1902-3, and after a very conscientious debate with himself, he decided to devote his life to the promotion and improvement of the teaching of mathematics rather than to a research career. Upon his return to Chicago he affiliated himself enthusiastically with the newly formed Central Association of Science and Mathematics Teachers, and in 1907, at the suggestion of Professor L. E. Dickson, was made co-editor of the American Mathematical Monthly. From then on much of his time and interest outside of his departmental work was devoted to activities associated with the Monthly and the organization of the Mathematical Association of America and the National Council of Teachers of Mathematics. Slaught was also one of the first group of members of the Chicago Section of the American Mathematical Society, and he was a most efficient secretary of the Section from 1906 to 1916. His early recognition of the value of cooperation between the Society and the Association, and his effective encouragement of such cooperation, have constituted a most valuable 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. A more detailed description of his important work in these organizations will appear in *The American Mathematical Monthly* in the near future.

Slaught had many contacts with the alumni of the University of Chicago and was much beloved by them. He was secretary of the Board of Recommendations of the University from 1903 to 1914, a period during which many of the policies now followed by its successor, the Board of Vocational Guidance and Placement, were formulated. He was secretary and unique guiding spirit of the Association of Doctors of Philosophy of the University for twenty-five years preceding his retirement in 1931. He was known everywhere among our alumni, so much so that wherever one went among graduates of our University one was sure to be called upon to answer the friendliest of inquiries concerning him.

But his interest in the welfare of others, and the community of those who had affectionate regard for him, extended beyond the University circle. In 1914 with a few of his associates in the Hyde Park Baptist Church he established the South Chicago Neighborhood House for the benefit of workers in neighboring steel mills and their families. The enterprise began with no asset except the enthusiasm of its sponsors, and now has the support of many interested individuals and organizations, a building of its own with trained workers, a membership of over 1000 persons, and an average monthly attendance of over 10,000 visitors and participants in its various activities. Slaught's devotion to this undertaking, through years of healthily increasing needs but

tardily growing resources, was typical of his determination and confidence in the things which he thought were good, and was the essential factor in its success. After the death of his wife he seemed to regard his work at the Neighborhood House as especially a memorial to her. The success and happiness of their partnership, which began with their marriage in 1885 and lasted until her death in 1919, could have no finer testimonial.

Slaught believed in the importance and the future of visual education. He was active in the organization of the periodical called the Educational Screen, and in 1922 made possible the publication of its first issue by his encouragement and financial support. Up to the time of his death his name appeared with the title "President" on the list of its Directorate and Staff.

Very few of Slaught's colleagues knew of his interest in the game called roque. On account of a physical infirmity dating from his boyhood he could not take part in more active forms of sport, but he and Mrs. Slaught played croquet often together in Hightstown before they were married, and when the game developed into roque they managed to have a court built on the grounds of Peddie Institute. In Chicago Slaught organized the Chicago Roque Club, with courts in Washington Park, and was its active president for twenty years and later honorary life president. Interest in the game grew in Chicago and elsewhere, and Slaught was a principal in the organization of the American Roque League which now controls the annual tournaments held in various sections of the country.

The preceding paragraphs have been concerned for the most part with Slaught's interests outside of his Department, but for us at Chicago his every day departmental activities were his most important ones. He was in many situations the ablest representative of our Department in our relations with the University and our students. His house was a common meeting place in which his friendly personality had a catalytic influence in promoting the happiest of relations between faculty and students. His classes, from freshman to beginning graduate grade, had a popularity which was notable and which withstood exceptionally the effects of the first two years of the depression up to the time of his retirement. Some of his colleagues who were enrolled in his courses in the early days testify as to their effectiveness, and I find in his correspondence letters from many former students which express appreciation of the clarity and friendliness of his teaching, letters which must have given him the greatest satisfaction. I should like to mention here the fact that one of the last things which he did for us, after his active work was over, was to increase greatly our collection of photographs of eminent mathematicians, now approaching one hundred in number, one of the best collections which I know. In the winter of 1935 he fell and broke his hip and was thereafter confined to his house, sometimes so ill as to be oblivious to affairs about him. But during many happier intervals his interest in the University and in mathematicians was as keen as ever, typical of his lifelong devotions. His was one of the careers which gave to our American mathematical circle a consciousness of its problems and a confidence in the importance of its work which have been essential to its development and success. We shall never again find quite such a colleague as Slaught, but his enthusiasm and devoted interest will long serve as ideals for us to emulate.

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