## Samuel Beatty

**Samuel Beatty** was born near Owen Sound, Ontario in 1881, and died in Toronto 1970. Besides being a mathematician, he was a successful administrator becoming Head of the Mathematics Department in 1934 and Dean of the Faculty of Arts in 1936, which positions he held until he retired in 1952, only to be elected Chancellor of the University 1953–59. But it is with Samuel Beatty the mathematician with whom the Royal Society of Canada is chiefly concerned.

In a very real sense he guided Canadian mathematics from the isolation of the 19th century to a significant role in the 20th century. When he came to the University of Toronto in 1903 Alfred Baker was Head of the Department which consisted of M. A. Mackenzie, W. J. Loudon, A. T. DeLury, and J. C. Fields. All had been born in Canada and obtained their undergraduate degrees at the University of Toronto. Loudon obtained his M.A. at Johns Hopkins where research was just beginning to affect American academic life; Fields obtained his Ph.D. there also and later studied in Germany. Fields was elected a Fellow of the Royal Society of London and was responsible for bringing the International Mathematical Congress to Toronto in 1923. And Beatty was Fields' only pupil and the first Ph.D. in mathematics in Canada.

With the retirement of Baker in 1918, DeLury became Head of the Department which he greatly strengthened by bringing J. L. Synge from Dublin as professor of Applied Mathematics. This set the stage for much of what was to follow.

Through his presence on the staff for 45 years, Beatty was able to emphasize the role of creative intellectual achievement to all with whom he came in contact. He was elected a Fellow of the Royal Society of Canada in 1925 and in the same year his pupil Cecelia Krieger completed the requirements for her Ph.D. degree—the leaven was beginning to work!

Coming to the University in 1923, I had A. F. C. Stevenson, who with W. J. Webber had just arrived from England, lecture to me in Calculus, which course Beatty carried on in the second year. Webber gave the third year course on the Theory of Functions. Beatty went on sabbatical leave in 1926–27 to Wales, attracted by W. H. Young, so his course on Complex Variables was given by DeLury. Not till 1929–30 did I hear Beatty expound the theory of Algebraic Functions based on the Lagrange Interpolation Formula which had been his life work.

Perhaps Beatty's greatest contribution to mathematics in Canada was his

---

489

bringing Brauer and Coxeter to the Department in 1935–36. About the same time Synge brought Infeld to Applied Mathematics. Those were troubled years in Europe and Toronto provided a home from which ideas and many graduate students spread throughout the continent. One product of those days was our Mathematical Expositions for which Beatty wrote the paragraph appearing opposite the title page of early editions of volumes in the series:

> There are many books dealing in an individual way with elementary aspects of Algebra, Geometry, or Analysis. In recent years various advanced topics have been treated exhaustively, but there is need in English of books which emphasize fundamental principles while presenting the material in a less elaborate manner. A series of books, published under the auspices of the University of Toronto and bearing the title "Mathematical Expositions", represents an attempt to meet this need. It will be the first concern of each author to take into account the natural background of his subject and to present it in a readable manner.

The emphasis on clarity and the needs of the students were what endeared him to many generations of undergraduates. And his ability to remember their names was phenomenal!

Through his membership in the R.S.C., Beatty recognized the need for broader contacts amongst Canadian mathematicians. Thus he encouraged a fellow member of the Society, Lloyd Williams of McGill, to organize a gathering in Montreal in 1945 which led to the founding of the Canadian Mathematical Congress with Beatty as first President. That was a stimulating time. The war was not yet over but the end was in sight. Very few of us knew our colleagues at any university other than our own and the excitement of the contacts then established was to be felt in all the projects started later. In 1947 the Congress held its first biennial Seminar in Toronto where, with the strong encouragement of Brauer, the Canadian Journal of Mathematics was founded with Coxeter as first Editor. In 1949 the Congress met in Vancouver where Ralph Jeffery succeeded in gaining broad support for the Summer Research Institute which he was anxious to organize at Queen's University in Kingston. This has been one of our most successful projects, which, along with the biennial Seminars have been copied all over the world.

Beatty's term as President of the Congress ended in Vancouver and his retirement from teaching at the University of Toronto followed shortly after in 1952. But this was not the end, for the Alumni saw the opportunity of retaining his services as Chancellor of the University, and he was re-elected for a second three-year term in 1956–59.

Neither aspect of Beatty's complicated character was conventional in the usual sense, but in each role he accomplished great things and won the respect and affection of all who knew him.

G. DE B. ROBINSON