went up to apologize for the disturbance, only to realize that Watson had apparently been completely unconscious of anything untoward.

He did not like telephones and regarded them as "an invention of the devil". There was no Departmental Secretary during his time at Birmingham, and he carefully typed all examination papers from members of his staff himself, filling in the formulae most carefully with old-fashioned pen and nib. He preferred to discuss matters face to face with colleagues rather than write a letter and send it by internal post, and it may be that his long journeys on foot from one part of the University to another compensated for lack of other exercise, for he never seemed to suffer from ill-health.

Apart from his University work, and his research, most of which was done at his home, his chief interests were in railways, and particularly railway engines, on whose history and numbers he was an expert, and in postage stamps, of which he had a very large collection of particularly unusual issues. He was an assiduous reader of the Times, and never missed items referring to the activities of his contemporaries. He took little exercise, apart from his walk to and from the station at Leamington and across Birmingham to catch the tram. Incidentally his pace of walking was such as to stretch his younger colleagues considerably, and pedestrians and traffic in the city appeared to split before his progress rather as the bow wave of a ship. At one time he drove a car, but he was never too happy with this, and forsook this method of transport when four-wheel brakes came into fashion.

After he retired in 1951 he started to write a completely revised version of Modern Analysis, intended to comprise some two dozen chapters, and the earlier portions of the previous edition were to be considerably expanded. Unfortunately the work will never be completed, and mathematics will be the poorer for its loss. It was a fitting tribute to his memory that the University of Birmingham named the new mathematics building after him. He was somewhat reluctant that this should be done, but when the ceremony took place it was clear that it had given him great pleasure.

But he will be remembered most of all for his mathematical originality and his capability for simplifying and clarifying mathematical work, a goal not always reached by those who produce original papers.

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II

I first met Professor Watson when I became one of his students at Birmingham University How well I remember his shy and sensitive

manner and his quick movements. He was a man of very strong likes and dislikes and his reactions were sometimes a little unorthodox. Many a time, when something or someone annoyed him during a lecture his piece of chalk would come flying over the heads of us students and someone would duck to avoid it. Beneath all this he had a very genuine interest in, and desire to help, all his students.

In those early days he owned a small, open, three-wheeled car. The back seat was completely inaccessible unless you climbed over the car itself, and to be one of his passengers dashing across Birmingham was sometimes rather a hazardous affair, especially when he had to negotiate tram lines.

At one time I occasionally sent letters to number 43 instead of 46, for the simple reason that a friend of mine lived at 43. After a discussion on elliptic functions I received the following mnemonic for 46. "You doubtless remember that, with

$$q = e^{-\pi\sqrt{n}}$$

and

$$f(\sqrt{n}) = q^{-1/24}\prod_{m=1}^{\infty}(1+q^{2m-1}),\ f_1(\sqrt{n}) = q^{-1/24}\prod_{m=1}^{\infty}(1-q^{2m-1}),$$

one has $f(\sqrt{43})$ as the positive root of the cubic equation

$$x^3 - 2x^2 - 2 = 0,$$

while

$$f_1(\sqrt{46}) = +\sqrt[4]{(2x^2)} \text{ with } 2x = 3 + \sqrt{2} + \sqrt{(7+6\sqrt{2})},$$

and, in view of my passion for simplicity, I ought to be associated with quadratic irrationalities, rather than with cubic irrationalities; I hope that this will be of some help to you—though if I am to be associated with any type of algebraic equations it should probably be Abelian quintics, since I have solved some 120 of them, whereas I doubt whether anyone else, alive or dead, has got into double figures with the possible exception of a nineteenth century Canadian mathematician named J R. Young"

Again, the number of my car, 727, called forth the following:- "I trust that you are familiar with the result (which I have hitherto neglected to impress upon you) that the simplest class-invariant associated with the discriminant 727 (of Gaussian classification I 13) is the real root of the equation

$$x^{13} - 25x^{12} + 23x^{11} - 41x^{10} + 15x^9 - 30x^8 - 8x^7 - 4x^6 - 6x^4 + 5x^3 - 8x^2 + 4x - 1 = 0 \text{ (no term in } x^5).$$"

At the present time when so much is heard about "Modern" Mathematics it is good to remember that the theory of Matrices was part of the Honours course given to us students by Professor Watson

so many years ago. My own regret is that, although we were all very familiar with "Modern Analysis", we did not realize, at the time, how progressive he was and how fortunate we were. He had one device, however, which I certainly did appreciate as being modern, and that was his Brunsviga calculating machine which he so kindly taught me to use.

He was always very much aware of students' difficulties during their first year at the University and did much to make the transition as smooth as possible. He often remarked that he was eternally grateful that during his last three years at St. Paul's School, where he was educated, there was an insufficient number of staff to teach him mathematics and consequently he was forced to do much on his own and so became prepared for university style of teaching.

His concern for the well-being of the Mathematical Association was considerable and he did much, behind the scenes, during the difficult financial years to interest influential people in the activities of the Association. He was a regular attender at the Council meetings and frequently made helpful contributions to the discussions.

I am sure that there are many who, like me, owe a great debt of gratitude to Professor Watson for his never failing interest and help, and who will feel that the splendid new Watson Building at Birmingham University will stand as a fitting memorial to a great Mathematician.

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WILLIAM HOPE-JONES

Honorary Member and Vice-President
President 1938

It might be a delicate problem to name the most distinguished on the roll of the Association's Presidents: but the greatest personality, at least of the past 40 years, was surely Hope-Jones. In a drab age, personality is often equated to eccentricity, but H-J was no eccentric. The title of his presidential address to the Association in 1939, "Simplicity and truthfulness in arithmetic", throws a clear light on his character He placed truth very high on the list of major virtues; "the truth shall make you free", he would say, and for him the basic truths were fundamentally simple. He was not ignorant of the complexities of mathematics or of life, but he believed that these were often self-created, and would resolve into simplicities if only we learned to approach them with simple and humble minds.