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History of ophthalmology

John Martin Wheeler, 1879–1938

John Martin Wheeler was a well known ophthalmologist in the 1930s, whose career encompassed episodes of both spectacular good fortune and misfortune. His father, a country lawyer who had fought in the American civil war, could only afford to send his son to the small, inexpensive Burlington University of Vermont. Having graduated in arts and medicine, Wheeler was very lucky to obtain his ophthalmological internship in New York in 1909. During training, he was remarkable for his diligence and his manual dexterity. Constantly having good ideas for papers and reports, he was so hesitant and cautious that most of these ideas were eventually taken up and published by colleagues – which he never minded!

His forte was meticulous surgical technique, in which he was inspired by his boss, D W Hunter. One of Hunter's most daring procedures was the opening of secondary cataract by running a Graefe knife along the membrane in a single, rapid act of forearm supination. Wheeler describes the result as 'sure and beautiful'. He combined his admiration with pragmatism, in noting that most of the surgeons who came to watch Hunter were too terrified of slashing the cornea to use the technique themselves. Wheeler then developed a less risky method, which he published in the *British Journal of Ophthalmology*, with meticulous pencil drawings of exactly how the operator's thumb and forefinger should rest on the knife. The reader was exhorted to keep the hand and wrist joints perfectly immobile, creating the incision by a 'a rapid, free' movement of the whole arm. If correctly done, 'the knife handle should rotate as if impaled on a pin', and full drawings of the hypothetical pin's position were included.

Wheeler frequently stated that the surgeon should have nothing less than a keen and faultless knife with which to ply his trade, and that this should be ground to perfect sharpness. One can imagine his wrath when anything less was found on his instrument table.

During the first world war, Wheeler entered the medical corps and the care of blinded and disfigured veterans turned his interest permanently towards plastic surgery, on which he

published many of the landmark papers of the time. Most of his patients were soldiers wounded by gunshot or explosives in France in 1918. Operating under ether, Wheeler obviously did his utmost to repair facial fractures, skin defects, and the hasty exenterations of the battlefield, constantly aware of the importance (in view of the extreme youth of his patients) of good cosmetic results.

Returning to civil practice, Wheeler's stroke of good fortune occurred. The King of Siam, arriving in New York with his retinue, chose Wheeler to operate on his eye. Although many of his colleagues must have felt extreme envy, the quiet and retiring Wheeler found the media interest quite distressing, miserably trying to evade the press when arriving at the hospital. The King was delighted with the result and in 1931 awarded a protesting Wheeler the Commander of the Order of the Cross of Siam. He could literally have made a fortune in private practice from then on . . . However, having his log cabin in Vermont as a holiday home, and sufficient equipment for golf, he felt no need for a fortune, and coolly cut back his private practice to concentrate on postgraduate teaching. This must have amazed his envious colleagues, and probably arouses incredulous feelings still.

Tragedy then struck, in the form of a choroid sarcoma which necessitated the removal of John Wheeler's left eye. It seemed that a great operative talent would be lost, yet he adapted to this and continued to show the same degree of manual dexterity. (His patients' reactions on learning that their surgeon had only one eye are not recorded.) Because of his fame and the value of his pioneering work, Wheeler's death three years later was noted widely by ophthalmologists and plastic surgeons. Both specialties continued to profit from his operative techniques for long afterwards.

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