Hugh Owen Thomas: the cripple's champion

A J Carter

Nearly 60 years after he died, surgeons from around the world still honour the memory of Sir Robert Jones, the father of modern British orthopaedics. Sir Robert lived and worked at a time when crippled children were a common sight on Britain's streets, and one of his greatest achievements was to show that many of these children—the victims chiefly of tuberculosis, rickets, and poliomyelitis—could be cured. The principles of treatment which he introduced, however, were not new. They had been established half a century before by his uncle and teacher, Hugh Owen Thomas, who died 100 years ago.

Sadly, and largely for reasons of his own making, Thomas's principles were not widely accepted by the medical profession during his lifetime. Many people suffered needlessly as a result, and John Ridlon, an American surgeon who knew both Thomas and his nephew, said that "one of the greatest things Robert Jones ever did was to make the main principles of Hugh Owen Thomas acceptable to the medical profession."¹

Of the three crippling diseases, by far the most common was tuberculosis which, in children, was largely a disease of joints, particularly the hip joint and spine. Many of its victims were chronic invalids, "hopeless cripples" in the language of the day, often reduced to begging and an embarrassment to a society that prided itself on its achievements. So many were affected that in 1893 a surgeon at Edinburgh's Royal Hospital for Sick Children wrote: "Had I four times the number of beds at my disposal, I could fill them all in a week with cases of spinal diseases and hip-joint disease in its late manifestation . . . only the worst can be admitted."²

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FIG 1—Hugh Owen Thomas and Robert Jones (right) with assistant. An early example of clinical photography

Early days

Hugh Owen Thomas was born at a time when bone and joint disorders were still largely the domain of totally unqualified practitioners known as bone setters, who often used skills that had been handed down over many generations. Thomas himself came from one such line. His family history is shrouded in mystery and romance but goes back to a stormy night sometime around 1740, when an ancestor of unknown origin was washed ashore from a shipwreck off the Anglesey coast. That ancestor, Hugh Owen Thomas's great grandfather, was adopted locally, given a Welsh name, and went on to found a dynasty of traditional bone setters credited with almost supernatural powers of healing.³

Two generations later Hugh's father, Evan Thomas, decided to take the family business from Anglesey to the then rapidly developing port of Liverpool. Hugh himself was born in 1834 at Tyn Llan, Bodedern, Anglesey, where his mother was enjoying a family holiday.

Largely because of increasing hostility from within the profession to the activities of non-qualified practitioners, Evan Thomas decided that his five sons should be the first of the line to enjoy the benefits of a medical training. Hugh, the eldest, began his medical studies at Edinburgh University in 1854, gained his MB, BS in 1858 and, after a spell in London and Paris, returned to join his father's practice in Liverpool in 1860.

Unfortunately—and perhaps inevitably—the partnership between a now highly trained medical man and an unqualified bone setter was not a success. Hugh Owen Thomas left his father's practice in 1866 to set up on his own at 11 Nelson Street, an address destined to go down in history as the birthplace of modern British orthopaedics. The arrival there in 1873 of his young nephew Robert Jones, about to embark on a medical training at Liverpool University, was the beginning of a partnership which was to prove legendary.

Thomas's patients at the Nelson Street practice came mostly from the nearby docks, and many were sailors who had returned from the far corners of the globe with fractures and dislocations that had remained untreated for the weeks or months they had remained at sea. Thomas treated these most difficult of injuries by using the traditional skills of his ancestors—recruiting, where necessary, the additional assistance of up to half a dozen labourers brought in specially from the street (fig 1). When, however, the treatment of diseased as well as dislocated joints began to attract his attention it was to his more conventional medical training that Thomas turned for guidance.

Nature's remedy

During his student days in Edinburgh, Thomas had studied the writings of the seventeenth century physician Thomas Sydenham, who taught that illnesses were best treated by working with nature rather than against her.⁴ From Brodie and Hilton in London

FIG 2—Sea Side Hospital and Convalescent Home, Rhyl

he had learnt that nature's remedy for inflammation, regardless of cause, was rest; when, for example, a joint became stiffened by spasm of the surrounding muscles this happened to provide the correct conditions for that joint to recover.⁵ Thomas applied Sydenham's principles to the problem of Liverpool's crippled children by developing in his workshop an assortment of splints and frames, which he used to immobilise their inflamed joints to an extent previously thought neither possible nor desirable.

After the initial fitting at Nelson Street, all his patients were nursed at home, and a major part of Thomas's incredibly long working day was spent visiting his patients in their backstreet dwellings in order to make any necessary adjustments. Thomas believed that rest should be "enforced, uninterrupted and prolonged" until all signs of inflammation had disappeared—a process that could take many years. His patients' slow but sustained improvement left him in no doubt that his ideas were right.

The methods that Thomas used to achieve such prolonged immobilisation often verged on intimidation, and they tell us a great deal about his personality. When, for example, he suspected that a bandage had been loosened against his wishes he would secure the pin that held it with a large blob of wax and seal it, using his signet ring, with the initials "H.O.T."¹

Fresh air

The greatest influence on Thomas during his time in Edinburgh had been John Hughes Bennett, then the professor of medicine. Bennett was an early believer in the stimulating effects of fresh air and in 1851 had suggested that the recently constructed Crystal Palace should be used during the winter months as a giant sanatorium for London's consumptives.⁶ Bennett communicated his enthusiasm for fresh air to Thomas, telling him of a young patient who had become so desperate at being confined in an atmosphere of 60°F that he broke all rules, walked to the top of Arthur's Seat on a cold day, and ate a beefsteak with great relish on his return home.³ Thomas now began to nurse Liverpool's crippled children in the only fresh air that was available to them—on beds improvised from soap boxes and chained to the railings outside their homes.⁷

Although Thomas seldom strayed far from his native Liverpool, his belief in the healing powers of fresh air began to take him, during the 1870s, to the north Wales fishing port of Rhyl,⁸ where the recently opened Sea Side Hospital and Convalescent Home (fig 2) had begun to treat working class children from the cities in

the open air on specially constructed balconies. It was the first children's hospital to advocate fresh air as an integral part of treatment and provided Thomas with an excellent opportunity to try out his ideas.⁹ The hospital's committee, which included W E Gladstone, MP—Liverpool's greatest son—must have been impressed with what they saw of Thomas's methods, for they gave him what proved to be virtually the only official recognition that he received during his lifetime:

"The committee would also express their best thanks to Dr Thomas of Liverpool for the kind and liberal way in which he has, at considerable inconvenience to himself, frequently visited the hospital in order to illustrate the working of surgical appliances invented by himself, which appliances have proved the greatest possible benefit to the patients."¹⁰

Later developments

This hospital at Rhyl, now the Royal Alexandra Hospital, has its place in orthopaedic history. It was here, towards the end of Thomas's life, that the remarkable crippled nurse, Agnes Hunt, began her training.⁹ This formidable lady had herself been afflicted since childhood with a tuberculous hip, and the inspiration she found at Rhyl led her to set up a small convalescent home in the Shropshire village of Baschurch, where she began to nurse crippled children outside, all the year round, in a collection of primitive farm sheds.¹¹ Agnes Hunt later persuaded Robert Jones, whom she had met originally as a patient, to visit Baschurch. So impressed was he with what he saw there that in 1907 he decided to visit and operate on a regular monthly basis.¹

Baschurch, the first fully open air orthopaedic hospital in the world, became the model not only for the present Robert Jones and Agnes Hunt Orthopaedic Hospital at Oswestry but also for the national scheme for cripples which, during the 1920s under Sir Robert Jones's leadership, set up a network of open air country hospital schools in such places as Stanmore, Wroughton, Harlow Wood, and Biddulph Grange.¹²

A visitor to any of these hospitals between the wars would have found rows of children lying in the sun on Thomas frames (fig 3), and yet, with only a few exceptions, Thomas's pioneering work was destined to remain unknown during his lifetime. Where it was known it was overwhelmingly rejected.

Although isolated from his colleagues, Thomas was fortunate in having one loyal friend and supporter. Rushton Parker, a young Liverpool surgeon later to become professor of surgery in that town. One day during the early 1870s Rushton Parker had come across a boy in the street who, in spite of having one hip immobilised in a splint, was managing to walk on crutches. The boy achieved this thanks to a patten, or

FIG 3—Suntanned children on Thomas frames, Woodlands Hospital, Birmingham, 1927

FIG 4—Thomas ambulatory hip splint

thick sole, which raised his good leg four inches off the ground (fig 4). So impressed was Rushton Parker with this ingenious idea that he quickly sought out Thomas, urged him to publish his work, and himself went down to London to demonstrate his methods at University College Hospital.⁴

Thomas's methods quickly gained acceptance at a number of London hospitals and particularly at the Alexandra Hospital for Children with Hip Disease in Queen Square, which had opened in 1867 to provide long term nursing care for children from the nearby Great Ormond Street establishment.^{13 14} The surgeons at this early specialist hospital adopted Thomas's methods with enthusiasm, and children on Thomas ambulatory hip splints were to be seen walking around Queen Square as early as 1876, within a year of Thomas first writing about them.^{4 15}

Standing alone

Elsewhere almost half a century was to pass before Thomas's principles finally gained general acceptance, and this deep rooted and longlasting rejection of Thomas's ideas by the medical profession can be understood only within the context of the man himself—his personality, his strange appearance, and, perhaps not least, his unorthodox ancestry.

Thomas's appearance is in fact easily explained—his huge gauntlet gloves and buttoned up greatcoat served to protect him from Liverpool's chilling sea breezes; his "second mate's discharge cap" concealed the scar of an old eye injury; and the ever present lighted cigarette between his lips was a protective habit he had acquired while visiting patients in their homes during a cholera epidemic (fig 5).

His personality was much more difficult to explain. Professionally speaking, he was a loner. He neither applied for a surgical fellowship (except in extreme youth when he was ineligible) nor did he attend the meetings to which he was frequently invited. During the late 1870s, however, he decided that, with no children of his own and with no position on the staff of a major hospital, his ideas might well not outlive him. He therefore began to write, and this was when his problems with his colleagues began.

At first Thomas's publications were printed only locally, but there is little doubt that they soon found a wider audience. Possibly because he wrote late at night and after a hard day's work, his "contributions" consisted for the most part of a long winded, ill

considered, and intemperate condemnation of the methods used by his colleagues, whom he chose to label "opponents." Splints that did not totally immobilise the joint (and those who applied them only intermittently) were singled out for particularly harsh criticism.

He reserved his greatest condemnation for those who took advantage of recent developments in anaesthesia and antisepsis to operate. Tuberculosis was largely, but not exclusively, a disease of the poor. While often willing to treat better off patients conservatively, many surgeons preferred in working class children to resort to early excision of the joint or even to amputation (with the results that can be seen in figure 6). Thomas regarded such mutilating operations as not only unnatural but unnecessary and spoke bitterly of "enterprising surgeons who, inspired by the spirit of the times, prefer to cut mechanically what could be unloosed physiologically."¹⁶ Always the champion of the poor, he also pointed out that "such operations are performed almost entirely on the inmates of our charities and rarely upon relatives of the subscribers to those institutions."¹⁴

Although Thomas's non-interventionist philosophy was far from popular, what really upset his colleagues was the fact that he, a totally unknown provincial, had chosen to criticise some of the most distinguished figures in the land. Almost to a man, the profession decided that Thomas was not a gentleman. Ridlon, after visiting hospitals in many other cities, reported that it was hard to find anyone with a good word to say for him.³ Even those who might otherwise have supported Thomas now chose to reject him. While this in itself might not have mattered, the fact that they chose to reject his principles as well was to have profound consequences for years to come.

The people's friend

Hugh Owen Thomas died of pneumonia in 1891 at the age of 57, and thousands of Liverpool's poor, unconcerned by his professional difficulties, flocked to his funeral. Rather more surprisingly, perhaps, many of his own colleagues, often his most implacable

FIG 5—Hugh Owen Thomas

FIG 6—Child amputees outside a “crippleage,” 1910

JOHN GROOMS ASSOCIATION FOR DISABLED PEOPLE

opponents, also attended. The occasion was reported by the *Lancet* in unusually emotional terms:

A grief so profound and widespread as that which was manifested at Liverpool on the tenth instant when the remains of Dr Hugh Owen Thomas were laid to rest, is seldom witnessed. There can be no more eloquent or touching testimony to the worth of a man's character than the tears of the poor among whom he lived. The toilers at our docks and warehouses are not sensitive beings, and the daily struggle of their lives is too earnest to admit of much display of sentiment. To see thousands of these, then, men as well as women, as any one might have done in Liverpool last Saturday, stirred to their very depths by an emotion that found expression in passionate sobs and tears, as they lined the streets or pressed forward to gaze into the open grave, proves that its silent occupant had won his way to their hearts.¹⁷

Although it has been suggested that Thomas's principles might well have died with him had it not been for Sir Robert Jones,¹⁸ this is plainly not so. His methods had gained acceptance in a small number of hospitals during his lifetime. For many years after his death, however, and well into this century, crippled children who could have been cured continued to languish in homes for the chronically sick and incurable. Although there were other reasons for this sad state of affairs—there still existed an age old antipathy to the cripple in many quarters—at least part of the blame must lie with a professional unease about Thomas that lingered for many years. It was only when the number of crippled children became swollen by an even greater number of injured ex-servicemen from the first world war that Thomas's principles were finally accepted.

Recognition

The Thomas splint reduced the mortality from fractures of the femur by 75% during the first world war, saving many thousands of lives,¹ and this brought Thomas the professional recognition that had eluded him during his lifetime. In 1918 the Hunterian professor of surgery, Sir Arthur Keith, gave a lecture on Thomas and his principles to the Royal College of Surgeons; later, in an editorial, the *British Medical Journal* was generous in its praise:

Of no man can it be more truly said that time has justified his teaching and practice. The experience of the war has proved that the principles he laid down for the treatment of injuries and deformities of the limbs were sound and the appliances he devised the best. Thomas's realization that repair could be “fostered only by the patient, personal application of the surgeon's head and hand, day after day, week after week, month after month, year after year” was of even greater value than his discovery of the fuller meaning of the word “rest” and his genius in designing new means of giving rest. No one who will take the trouble to ascertain what he did, and the circumstances under which he accomplished his life's work, will fail to see that he has earned himself a place among great British surgeons. No greater compliment could have been paid to his memory, ideas, and principles of treatment than the selection of his nephew, Sir Robert Jones, for the important position of Director of Orthopaedic Surgery to the British Army during the War. Thus has Thomas vicariously contributed to save many a wounded soldier from crippleddom, and done an immense service to the nation.”¹⁹

Robert Jones took over the Nelson Street rooms after Thomas's death and, with the gentle powers of diplomacy for which he was renowned, brought his master's work to the attention of a grateful world. Of his nephew and pupil, Thomas once said: “Jones is a dear fellow and knows his work, but he lacks the fighting spirit.”²¹ Thomas had failed to realise that original ideas are of limited value unless accompanied by the ability to communicate them successfully to others; in this regard, Sir Robert Jones's quiet reasoning pen was to prove far mightier than Thomas's fighting one ever did. For once in his life, Hugh Owen Thomas was wrong.

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