Charles Edward Smith

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Charles Edward Smith was born at Coggeshall, Essex, on 24 October 1837, into a family belonging to the Society of Friends. His upbringing within the Quaker tradition formed part of the background to a life which would eventually carry him from rural Essex to medical study in Edinburgh, the Arctic seas, northern England and, ultimately, New Zealand. Long before medicine or exploration entered his life, however, Smith displayed an unusually strong fascination with the natural world. This was not a passing childhood enthusiasm but an interest which remained conspicuous throughout his life.

J. Milner Fothergill, who later knew Smith personally as a fellow medical student at Edinburgh and attended him during his final illness, remembered that Smith possessed a bright and enquiring mind and was particularly attracted to natural history. His interest was especially pronounced in ornithology. According to Fothergill, at only nine years of age Smith composed what he called a "Natural History of Birds, Beasts, and Fishes." Before he had reached the age of twelve, he was making his own observations upon the nesting and feeding habits of martins. He acquired an intimate familiarity with local animal and plant life and also began writing poetry while still young.

Smith was educated at the Friends' School at Ackworth in Yorkshire, where his enthusiasm for natural history continued to develop. A later recollection by one of his fellow pupils provides an unusually vivid glimpse of the young naturalist, remembering that "Young Smith's bedroom was hung round with objects of natural history." Saturdays offered opportunities for expeditions into the surrounding countryside and contact with local gamekeepers, through which his practical knowledge of birds and other wildlife was enlarged. At fourteen, he prepared and delivered a lecture on insects, accompanied by an illustrated manuscript of his own making. These activities reveal that Smith was doing more than collecting curiosities: from an early age he was observing, recording, illustrating and attempting to communicate natural history to others.

His developing interests also brought him into association with the celebrated naturalist and traveller Charles Waterton. Contemporary biographical accounts remembered Smith as having gained access to Waterton's natural-history collection, an association particularly appropriate for a young man whose interests were increasingly centred upon ornithology and direct observation in the field.

After completing his education at Ackworth, Smith remained there for a period as a teacher. Teaching, however, did not prove congenial to him. His intellectual temperament appears to have been too restless and his interests too wide-ranging for the occupation to hold him permanently. Medicine would provide his next direction, although natural history was never displaced by it.

The importance of these early interests becomes much clearer when Smith's later life is viewed as a whole. The boy who filled his room with natural-history specimens and watched the behaviour of birds in the Essex and Yorkshire countryside became the medical man who continued to observe wildlife during his Arctic experiences and, many years later, wrote knowledgeably about the birds and ecology of his adopted district of Otepopo in New Zealand. Natural history therefore provides one of the strongest threads of continuity through an otherwise extraordinarily varied life. Before Charles Edward Smith became a physician, Arctic surgeon or colonial medical practitioner, he had already become an observer of the natural world.

Having abandoned teaching as a career, Charles Edward Smith turned to medicine. Accounts published after his death differ over the precise London institution at which his medical education began. J. Milner Fothergill stated that Smith became a student at King's College Hospital, whereas the detailed Essex obituary of 1879 placed him at St Mary's Hospital and specifically associated him there with Dr Edwin Lankester. The latter account stated that Smith studied for two years in London before proceeding to the University of Edinburgh. In the absence of further institutional evidence, the discrepancy between these contemporary sources cannot presently be resolved.

Smith matriculated at the University of Edinburgh for the session 1861–62, receiving Matriculation No. 91. He returned for 1862–63 as No. 1129 and again for 1863–64 as No. 1366. During these years he studied in the intellectual environment dominated by some of the most distinguished figures in British medicine and science, among them Professor John

Goodsir, whose teaching in anatomy places Smith among the large and remarkably diverse body of students trained under Goodsir at Edinburgh.

A particularly vivid portrait of Smith as a medical student was later provided by his friend and fellow student J. Milner Fothergill. Smith was fair-haired, genial, quick-witted and conspicuous for his love of fun and practical joking. He possessed, according to Fothergill, a keen eye for the peculiarities of the professors around him and delighted in turning their mannerisms and foibles into humorous verse. His Quaker upbringing had apparently left him comparatively unimpressed by academic ceremony and authority, and his irreverence could occasionally place him at odds with the expectations of his teachers.

Fothergill recalled that several professors consequently regarded Smith as one of their "black sheep." The expression requires qualification. Fothergill explicitly rejected any suggestion that Smith was dissipated or morally wayward. His failing was instead an unconventional attitude towards formal medical instruction. A day spent observing wildlife in the countryside could attract him more strongly than attendance at an anatomical demonstration or a lecture by Professor John Hughes Bennett. Smith was perfectly capable of neglecting the conventional requirements of class attendance when some natural-history pursuit appeared more compelling, even though doing so risked the certificate of attendance necessary for his medical progress.

The recollection is important because it reveals something fundamental about Smith's character. He was not an indifferent observer or a man lacking intellectual curiosity; rather, his curiosity frequently refused to remain within prescribed academic boundaries. The same independence of mind which could frustrate his professors would later become an important asset when circumstances required observation, improvisation and personal initiative far beyond the security of a lecture theatre.

There was also a practical difficulty underlying Smith's student life. His financial resources were limited, and he was obliged to consider how he might earn sufficient money to continue his medical education. The solution that presented itself was extraordinary. Smith obtained an appointment as surgeon aboard the Hull whaling vessel *Diana*. What began partly as a means of supporting his medical studies would place the young Edinburgh student in circumstances for which no classroom could adequately have prepared him and would transform the course of his life.

In May 1866, Charles Edward Smith joined the Hull whaling vessel *Diana* as surgeon. What might ordinarily have been a demanding but temporary medical appointment became one of the most harrowing episodes in nineteenth-century British Arctic whaling. The vessel carried a crew of fifty-one and sailed northwards towards the Davis Strait whaling grounds. Smith entered an environment in which medical responsibility, seamanship and physical endurance would ultimately become inseparable.

During the summer, the *Diana* worked in Arctic waters around Lancaster Sound and Pond's Bay, but as the season advanced the vessel became increasingly threatened by ice. By late August 1866, she was effectively imprisoned. Smith later recorded that from 26 August 1866 until 22 April 1867 the vessel remained unable to pursue her normal voyage. Contemporary accounts describe repeated attempts to escape the pack, only for the ship to become trapped again as the ice closed around her.

The consequences of an enforced Arctic winter soon became severe. Supplies had been intended for a normal whaling voyage, not prolonged imprisonment through the polar winter. Food was progressively rationed. Bread and meat allowances were reduced, fresh provisions disappeared, and the crew was forced to subsist increasingly upon a monotonous and nutritionally inadequate diet. Fuel presented an equally serious problem. Coal was exhausted and combustible parts of the vessel and its fittings were eventually sacrificed to provide heat. Clothing was inadequate for the prolonged exposure, while the men were required to maintain the ship and operate the pumps despite darkness, extreme cold and diminishing physical strength.

Disease inevitably followed. Scurvy spread through the crew, accompanied in some cases by dysentery, dropsy, haemorrhage and profound physical exhaustion. Smith himself was among those who became ill. Yet the worsening condition of the men left him with little opportunity to withdraw from his responsibilities. As the vessel's surgeon he continued attending the sick while suffering from the same privations and exposure as his patients.

The medical circumstances were exceptionally difficult. Smith had neither the fresh food necessary to arrest scurvy nor an adequate supply of the restorative provisions upon which conventional treatment depended. The disease manifested itself in ulceration, bleeding from several parts of the body and an extraordinary susceptibility to injury. Even slight wounds and abrasions could become ulcerated. As strength declined, exertion itself became

dangerous: men might faint or collapse under stresses which in ordinary health would have been insignificant.

The psychological condition of the crew was another part of Smith's medical problem. He later emphasised the importance of maintaining activity and resisting despondency. In an environment of darkness, hunger, disease and apparently indefinite imprisonment, sustaining morale became almost inseparable from sustaining life. Smith attempted to keep the men active where possible and regarded the preservation of hope and determination as an essential part of their treatment.

The crisis deepened with the illness of the *Diana's* captain, John Gravill. Smith attended him, but Gravill died on the morning of 26 December 1866. In the frozen conditions ordinary burial was impossible. His body, wrapped in canvas, was placed upon the bridge, where the cold preserved it. Other men who died were similarly retained aboard the vessel. The accumulation of bodies on deck became a grim visible measure of the catastrophe overtaking the ship.

Smith nevertheless continued his medical duties and also assisted with the physical operation of the *Diana*. Contemporary reports emphasised that he did not confine himself to his professional responsibilities. With so few men remaining capable of sustained labour, he helped work the vessel and assisted at the pumps. One contemporary account later observed that Smith deserved credit "not only in his own profession, but also in assisting to work the ship." His position had consequently become something more than that of ship's surgeon: he was simultaneously physician, patient and working member of an increasingly incapacitated crew.

Christmas 1866 brought an especially poignant moment. Imprisoned in the Arctic and surrounded by sickness, Smith remembered the very different Christmas he had spent twelve months earlier in Cumberland. In the diary later published as *From the Deep of the Sea*, he recalled "last year's Christmas at Mr. Moffat's!" The reference was to Dr Paul Moffatt of Dalston, himself a former student of Professor John Goodsir. The brief entry unexpectedly links two of Goodsir's Edinburgh students at opposite extremes of experience: one established in medical practice in Cumberland, the other facing disease, starvation and death aboard an ice-bound whaler.

The *Diana* remained in desperate circumstances as the winter continued. By March 1867, the vessel was drifting through the Hudson Strait region and eventually succeeded in breaking free of the worst of the ice. Liberation did not immediately end the danger. The crew was by then profoundly debilitated, and the voyage towards safety had to be accomplished with scarcely enough healthy men to operate the ship. Fog and difficult navigation added to the danger, while the weakened crew still had to keep the pumps working.

At last, on 2 April 1867, the *Diana* reached Ronas Voe in Shetland. The condition in which she arrived shocked those who encountered her. Contemporary reports described a vessel carrying the living, the dying and the dead. Nine corpses lay aboard, another man died as the ship entered safety, and only a handful of the original company remained capable of meaningful physical work. Shetland fishermen who boarded the vessel encountered the consequences of months of cold, hunger, disease and exhaustion at first hand. Further deaths followed after arrival, bringing the reported loss from the voyage to fourteen men.

Fresh provisions now accomplished what Smith's depleted medical resources at sea could not. He later recalled the striking improvement which followed the availability of proper nourishment. Milk and raw eggs proved especially useful in the worst cases, while fresh animal and vegetable food, particularly potatoes, assisted recovery. Small doses of iron preparations were subsequently employed as strength returned. The contrast confirmed for Smith the central importance of fresh diet in recovery from scurvy.

The contemporary response to his conduct was unusually emphatic. The *Nautical Magazine and Naval Chronicle*, recounting the *Diana's* arrival and the sufferings of her crew, declared that it would be unjust not to publish the name of the surgeon whose "unceasing exertions and admirable example" had done so much to save his surviving shipmates. It identified Charles Edward Smith, formerly a student at the University of Edinburgh, and concluded simply that "he deserves all the honour a brave man can be paid."

Smith had gone north as a young medical man seeking employment. He returned having faced a situation in which medical knowledge alone was insufficient. For months he had treated men while sharing their hunger, cold and disease, maintained his duties after becoming ill himself, helped physically to work a crippled ship, and continued doing so while members of the company died around him. The Arctic voyage of the *Diana* would thereafter remain inseparable from his name.

News of the *Diana's* return and of Smith's conduct aboard her rapidly spread beyond Hull and Shetland. During the summer of 1867, he became the recipient of an unusual succession of public and professional tributes. Their significance lay not merely in their number but in the breadth of the bodies offering them: the Board of Trade, the medical profession of Hull, underwriters and merchants, and the wider community all separately recognised his conduct.

The medical press was among the first to draw national attention to him. On 6 July 1867, the *Lancet* devoted a notice specifically to "Mr. Charles Edward Smith of the Whaler 'Diana.'" It observed the exceptional difficulties under which surgeons in the whaling service could be required to practise and, after referring to the scurvy and privation suffered aboard the *Diana*, delivered a succinct professional judgement upon Smith's performance: "And right medically he seems to have acted."

The Board of Trade formally recognised his services through the Local Marine Board at Hull. Smith was presented with a beautifully illuminated testimonial recording the "generous, humane, and unwearied" character of his conduct during the voyage. The *Lancet* congratulated both Smith and the medical profession upon the distinction. Smith's response was characteristic of the modesty repeatedly attributed to him: rather than accepting the praise solely for himself, he redirected attention towards the courage and endurance of the men with whom he had served.

Recognition also came directly from his medical colleagues. In July 1867, members of the medical profession in Hull presented Smith with a purse of gold and a silver inkstand. The latter, purchased from Bethel Jacobs of Whitefriargate, Hull, bore an inscription stating that the presentation had been made in recognition of his services to their fellow townsmen "under circumstances of extreme peril, privation, and difficulty." This tribute is particularly significant because it represented the judgement of fellow medical practitioners upon the conduct of a comparatively young surgeon tested under conditions few of them could ever have encountered.

A further public presentation followed in August. Smith was entertained at a luncheon at the George Hotel in Hull attended by prominent members of the local commercial community. Representatives of underwriters at Lloyd's, bankers, merchants, shipowners, professional men and tradesmen of Kingston-upon-Hull presented him with a testimonial engrossed upon parchment together with a purse containing 108 guineas. The wording praised his courage,

professional skill and “unwearied kindness” during the months of danger and sickness, while also recording the affection in which he had come to be held by the crew.

The contemporary figure of 108 guineas is worth preserving because a later obituary gave the amount as 180 guineas. The report published in the *Lancet* immediately after the presentation records 108 guineas, and as the contemporary account it provides the stronger evidence for the sum actually presented.

Other commemorative gifts were subsequently associated with Smith’s services. The *British Medical Journal* later recorded that the Board of Trade presented him with a case of surgical instruments valued at £50, together with its testimonial, and that the medical profession of Hull honoured him at a public dinner and with a silver cup. Taken together, these presentations demonstrate that the response to Smith was neither fleeting nor confined to a single organisation.

The importance of the honours lies ultimately in what contemporaries believed they were recognising. Smith was praised not simply because he had survived an Arctic disaster, but because witnesses believed that his professional conduct had contributed materially to the survival of others. The language employed repeatedly joined medical skill with personal qualities: courage, humanity, kindness, endurance and an unwillingness to abandon his responsibilities.

For a man who only a few years earlier had been remembered at Edinburgh as an unconventional student whose attention could wander from formal instruction towards whatever interested him more, the transformation was striking. The young medical student whom professors could regard as a “black sheep” had returned from the Arctic publicly commended by his profession and by the British authorities for the qualities he displayed when medical responsibility was tested under extraordinary circumstances.

Smith did not allow his Arctic experience to remain solely a story of personal endurance. On 22 January 1868, he appeared before the Edinburgh Obstetrical Society, with Dr Burn in the chair, to present observations gathered during his northern voyage. Described in the proceedings as the late surgeon of the Hull whaler *Diana*, he addressed the Society on “The Midwifery and Diseases of the Esquimaux; Also, the Effects of Protracted Exposure to Cold and Privations upon the Human System.” His remarks were subsequently published in the *Edinburgh Medical Journal* in March 1868.

The presentation was divided between observations of the Inuit people Smith had encountered and the medical consequences of prolonged exposure experienced by the *Diana's* company. His comments upon Inuit pregnancy, childbirth, infant care, marriage, diet and disease belong unmistakably to the language and assumptions of nineteenth-century European medicine and ethnography. They should consequently be read as Smith's contemporary observations rather than as modern anthropological conclusions. Nevertheless, they demonstrate the breadth of his curiosity: even while serving as a ship's surgeon he was recording practices and conditions among the people he encountered.

The second part of his paper possessed a different authority, for here Smith was reporting upon a medical catastrophe which he had personally observed and treated. He described the effects produced upon the human body by prolonged cold, deficient food, inadequate clothing and physical exhaustion. Particularly striking was his account of advanced scurvy. The blood, in his description, appeared profoundly altered; haemorrhage could occur from the mouth, nose, stomach, lungs, bowel and kidneys, while apparently insignificant superficial injuries could deteriorate into ulcerating wounds.

Smith also attempted to evaluate the treatments available to him. Potassium bitartrate, which he had tried during the voyage, appeared to produce little or no benefit. His experience after reaching Shetland was more decisive. The rapid improvement accompanying fresh nourishment convinced him of its therapeutic importance, and he told the Society: "I found a diet of milk and raw eggs of the greatest service with our worst cases." Fresh animal and vegetable food, particularly potatoes, followed by small doses of preparations of iron, assisted the recovery of the survivors.

His observations extended beyond physical symptoms. Smith believed that despondency itself constituted a serious danger during prolonged privation. Maintaining strength, encouraging activity and preventing the men from surrendering psychologically to their circumstances were, in his view, essential components of treatment. Wine and spirits could be used when available to sustain failing strength, but he placed considerable emphasis upon keeping the patient active and, as he expressed it, keeping the heart going.

Smith also distinguished several patterns of death among the affected men. Some succumbed after general dropsy; others died from exhaustion or sudden shock, including fatal syncope following comparatively slight exertion. Dysentery further complicated the condition of the

crew. He reported that four men died from scurvy even after the vessel had reached Shetland, bringing the total number of deaths associated with the voyage to fourteen.

His attention was not confined entirely to human pathology. Smith informed the Society that two dogs aboard the vessel had developed symptoms which he regarded as decidedly those of hydrophobia and had consequently been destroyed. In striking contrast, a canary and a common linnet survived the extreme cold of the ship's cabin and were eventually brought home. Such details are characteristic of the same habit of observation that appeared repeatedly throughout Smith's life: medical, zoological and environmental phenomena were recorded alongside one another.

At the conclusion of the presentation, Dr Pattison formally moved that the Society convey its thanks to Smith for his "most interesting remarks." The occasion represented an important stage in his development as a medical observer. Experiences acquired under exceptional conditions had been organised, compared and presented before an Edinburgh medical audience so that others might benefit from them.

There is a particular significance in Smith's return to Edinburgh in this capacity. He had once occupied its lecture rooms as a student, sometimes impatient with formal instruction and more attracted to observation beyond their walls. He now returned with evidence which no ordinary lecture room could have supplied. The Arctic had become his clinical field, and the observations made there had entered the medical literature.

Smith's recovery from the effects of the *Diana* voyage was not immediate. The *British Medical Journal* later recalled that several months were required before he recovered sufficiently from the exhaustion and illness he had endured. Remarkably, his experience did not extinguish his willingness to return to northern waters. He subsequently undertook a second polar voyage, an expedition remembered in the Essex press as having been made with the Arctic traveller and sportsman James Lamont and undertaken for scientific purposes.

This second expedition was considerably less hazardous than his first, but it appealed directly to Smith's longstanding interest in natural history and exploration. A later Essex account stated that during the voyage five abandoned vessels were encountered and that Smith went ashore at a place which the newspaper claimed had not previously been trodden by human feet. Such a statement cannot now be accepted literally without independent geographical

evidence, but its appearance in the contemporary account demonstrates how Smith's second northern journey was remembered by those who knew his history.

The voyage also reinforced the scientific dimension of his Arctic interests. Smith's northern observations were not confined to medicine. His association with Arctic natural history subsequently entered the anatomical literature through Professor William Turner's account of an exceptional bidental narwhal skull. The specimen, obtained after Inuit hunters encountered the animal near Pond's Bay, possessed two extraordinarily developed tusks measuring approximately seven feet four inches and seven feet one inch. Turner recorded Smith's observations in the *Journal of Anatomy and Physiology* in 1873. A narwhal tusk later accessioned by the National Museum of Scotland as Z.1887.10 may be associated with this remarkable specimen, although the identification cannot presently be regarded as certain.

After his Arctic ventures, Smith returned to more conventional medical employment, although even this phase of his career was unusually varied. He became surgeon to a large body of railway navvies engaged upon works near Carlisle. The appointment placed him among labourers whose occupations exposed them to injury and disease and required a practitioner capable of dealing with a dispersed working population.

The position proved unsatisfactory for reasons that reflected Smith's conception of professional responsibility. During an outbreak of ague, he found himself unable to obtain the medicines he considered necessary for the treatment of the men. According to the later biographical accounts, the contractor refused to provide the required medical supplies. Rather than remain nominally responsible for patients whom he believed he could not treat properly, Smith resigned the appointment.

His connection with the Carlisle district also returned him to the orbit of Dr Paul Moffatt of Dalston. The association between the two men had begun before the Diana expedition, as Smith's Christmas diary recollection demonstrates. By the time of the 1871 census Smith was residing with Moffatt at The Green, Dalston, and a later account explicitly described him as Moffatt's assistant. Their relationship therefore extended beyond friendship into medical practice. It is an unusual recurrence within the history of Goodsir's students: two men who had separately passed through Edinburgh's anatomical teaching subsequently worked together in a Cumberland village.

Smith next held an appointment as house-physician at the Glasgow Royal Infirmary. His time there appears to have been comparatively brief, but the manner of his departure was remembered. Nurses and attendants of the institution presented him with a testimonial when he left, suggesting that the personal qualities which had attracted affection among the Diana's crew were also recognised within an ordinary hospital environment.

A further period of practice followed at Esk in County Durham. The surviving accounts provide little detail concerning his work there, and his stay was again short. One obituary also records that he purchased a practice in Durham but relinquished it after only a limited period. His British medical career after the Arctic was therefore characterised by movement rather than permanent settlement: railway medicine near Carlisle, association with Moffatt at Dalston, hospital work in Glasgow and practice in Durham followed one another within a comparatively few years.

During this period, Smith also consolidated his formal professional standing. The Roll of Licentiates of the Royal College of Surgeons of Edinburgh records him among its Licentiates in 1872. Later documentation produced by Smith himself in New Zealand would identify his Edinburgh qualifications more fully as Licentiate of the Royal College of Surgeons of Edinburgh, Licentiate of the Royal College of Physicians of Edinburgh, and Licentiate in Midwifery of the Royal College of Surgeons of Edinburgh.

Britain nevertheless failed to provide Smith with a permanent professional home. The sea, which had already brought him both suffering and distinction, again offered the means of changing the direction of his life. He accepted appointment as surgeon aboard the *Dunedin*, carrying approximately five hundred emigrants to New Zealand. This voyage would take him not towards another temporary adventure, but towards the country in which he would establish the most settled medical practice of his life.

Charles Edward Smith’s appointment as surgeon aboard the *Dunedin* opened the final major geographical chapter of his life. The vessel carried approximately five hundred emigrants to New Zealand, placing Smith once again in medical charge of a large company at sea, although under circumstances very different from those he had experienced in Arctic waters. A later obituary recorded that the emigrant commissioners regarded the *Dunedin* as one of the finest ships, and in particularly good condition, on her arrival in New Zealand. The passengers themselves presented Smith with a testimonial acknowledging his kindness towards them during the voyage.

Rather than return immediately to Britain, Smith chose to remain in New Zealand. He settled at Otepopo in the Province of Otago, where he acquired the practice formerly conducted by Dr Haines, another native of Essex who had died there. For the first time since completing his medical education, Smith appears to have found a community in which he could establish a comparatively settled professional life.

Otepopo and its surrounding district presented demands very different from hospital practice in Britain. Smith's patients were scattered across a wide rural area, and contemporary accounts remembered journeys of forty or fifty miles in the course of his work. Medical attendance could require prolonged riding in difficult conditions, sometimes leaving him wet and without food for many hours. The extent of the district also meant that he frequently had to depend upon his own resources. Later accounts specifically remembered his performance of difficult operations without the assistance which would ordinarily have been available to a practitioner working in a large town or hospital.

Smith's professional standing in the colony can be established unusually precisely from a notice issued in his own name. On 13 August 1874, while residing at Otepopo, he formally notified the Registrar of Births, Deaths and Marriages for the District of Dunedin of his intention to have his name entered upon the Register of Medical Practitioners in New Zealand under the Medical Practitioners' Registration Act 1869. In doing so, he stated his qualifications as Licentiate of the Royal College of Surgeons of Edinburgh, Licentiate of the Royal College of Physicians of Edinburgh, and Licentiate in Midwifery of the Royal College of Surgeons of Edinburgh.

The notice is particularly valuable because Smith himself declared these qualifications and deposited his diplomas, written copies of them, and evidence of his registration in the Medical Register of Great Britain for public inspection at Dunedin. It therefore provides stronger evidence of his professional qualifications than later newspaper notices which occasionally styled him M.D. No evidence presently establishes the university or date of such a medical doctorate, and Smith's own formal declaration of his qualifications in 1874 did not include an M.D.

His position within the public medical organisation of the district soon became more substantial. By November 1874, Smith had been appointed Public Vaccinator for the districts of Otepopo and Hampden. The appointment extended his responsibilities beyond private

practice into preventive public medicine and brought him into official contact with families throughout the surrounding community.

The growing permanence of his position is also visible in a notice published in February 1875 announcing the removal of his premises. Smith informed the inhabitants of Otepopo that he had moved from the residence of Mr James Patterson to the house recently occupied by Mr William Mellor, near the church. Although seemingly a minor advertisement, the notice places him firmly within the everyday geography of the settlement: he was no longer an itinerant ship's surgeon or a temporary hospital appointee, but a resident practitioner whose patients needed to know where he could be found.

Smith also developed a notable relationship with the Māori people among whom he practised. The *British Medical Journal* later recorded that he was held in great esteem by Māori patients within his extensive district. Its account suggested that the attachment was sufficiently strong for his eventual departure to be experienced by some as the loss of a trusted and paternal medical figure. Allowing for the paternalistic language characteristic of nineteenth-century obituary writing, the evidence nevertheless indicates that Smith's practice crossed cultural as well as geographical boundaries.

His standing in Otepopo eventually extended beyond medicine. Contemporary New Zealand evidence would later style him a Justice of the Peace, confirming the recollections that he served as a magistrate. Such an appointment indicates the degree to which a man who had arrived in New Zealand as a ship's surgeon had become integrated into the civic life of his adopted district.

Otepopo consequently represented something different in Smith's otherwise restless career. Earlier appointments had repeatedly been followed by departure; here, he developed a practice, accepted public medical responsibilities and acquired civic standing. The wandering medical student and seafarer had, for a time, become the doctor of a community.

An unusually detailed glimpse of Smith at work as an Otepopo practitioner survives in the proceedings of a criminal case reported in April 1875. The evidence is valuable because, unlike the later obituary descriptions of his medical abilities, it records Smith speaking professionally about a patient whom he had personally examined and treated.

The case arose from an incident at Otepopo on 14 April involving John M'Conchie, who suffered an injury to his right forearm. Walter Knight was subsequently charged with cutting

and wounding him, and when the case came before the court Smith was called to give medical evidence. He identified himself simply and authoritatively: “I am a legally qualified medical practitioner, residing at Otepopo.”

Smith told the court that he had attended M’Conchie for an incised wound situated on the inner aspect of the right forearm. He estimated its length at between one and two inches and considered that it had divided the integuments and the first layer of muscle. His evidence therefore went beyond merely confirming that an injury existed; he described its anatomical position, depth and character.

The possible weapon was also placed before him. From the appearance of the injury Smith believed that it had been produced by a cutting instrument possessing a convex edge. He considered that the blow had probably been delivered downwards and stated that the wound might have been caused by the tomahawk produced in court. More specifically, he thought the wrist had been struck by the extreme edge of the weapon.

The care with which Smith expressed that opinion is noteworthy. He did not state categorically that the tomahawk had caused the wound. His evidence distinguished what he could establish from examination from what he could only infer from its appearance. The wound was, he said, “a clean one,” and the characteristics were compatible with the weapon shown to him. In a criminal proceeding where the identification of the implement could have obvious consequences for the accused, Smith confined himself to the limits of his medical evidence.

His involvement had not ended with the initial examination. Smith had continued to supervise M’Conchie’s recovery. Up to a few days before the hearing, the wound had appeared to be progressing favourably, but when Smith examined it again on the day of his evidence he found that the bandages had evidently become loose and that healing was no longer proceeding as well. Even so, his prognosis remained reassuring: he did not believe that M’Conchie would suffer permanent injury.

The report provides a rare opportunity to see Smith practising medicine rather than being described retrospectively as a medical practitioner. Observation of the wound, anatomical interpretation, consideration of the probable mechanism of injury, continuing clinical supervision and prognosis all appear within a few sentences of his testimony. It also

demonstrates another responsibility of a nineteenth-century rural doctor: medical knowledge could be required not only at the bedside but before the courts.

Smith himself would become the subject of a court proceeding two years later. In April 1877, the *Otago Daily Times* reported that a man named Joseph Congreve had been charged at the Police Court with "assaulting and battering Dr Charles Edward Smith, of Otepopo." The hearing occupied the greater part of the day and was adjourned until the following day. The surviving report presently available gives no explanation of the circumstances or outcome, and it would therefore be unsafe to reconstruct the episode beyond what the contemporary notice establishes.

Taken together, these two appearances offer very different glimpses of Smith within the legal life of colonial Otago: in one he stood before the court as the medical witness whose professional judgement assisted an investigation; in the other he appeared as the alleged victim of an assault. Neither episode defined his career, but both place him firmly within the everyday realities of the community in which he lived and practised.

Charles Edward Smith's years at Otepopo brought a degree of personal settlement as well as professional stability. On 3 May 1876, he married Grace Elizabeth Summerell at Dunedin. The ceremony was conducted by the Registrar, and the marriage was announced in the *North Otago Times* the following day.

The notice identifies Grace as the eldest daughter of William Summerell of Hampden. It also provides useful contemporary evidence of Smith's standing at this stage of his New Zealand life, describing him as "Charles Edward Smith, Esq., J.P. of Otepopo," and giving his qualifications as L.R.C.S. Edinburgh and L.R.C.P. Edinburgh. The designation J.P. independently confirms that by May 1876 Smith was serving as a Justice of the Peace.

Marriage added a domestic dimension to a life which had previously been characterised by considerable movement. Later biographical accounts recalled that Smith built a new house at Otepopo and surrounded it with reminders of Britain, planting English flowers and fruit trees. The detail is a small but evocative one. After years spent moving between schools, medical institutions, ships and temporary appointments, Smith was creating a home of his own on the opposite side of the world from the Essex countryside of his childhood.

The surviving evidence also establishes that Charles and Grace became parents. Their family life, however, was touched by bereavement. On 29 January 1879 their infant son, Frederic

Henry Smith, died at Otepopo. The brief notice published in the *North Otago Times* on 1 February recorded only: “On the 29th January, at Otepopo, Frederic Henry, infant son of Charles Edward Smith, surgeon.” No age or cause of death was given.

The loss occurred during what would prove to be the final year of Smith’s own life. It would be tempting to connect the bereavement with the deterioration of his health or his subsequent decision to leave New Zealand, but the surviving evidence does not justify such a conclusion. Frederic Henry’s death should therefore stand on its own as one of the few firmly documented events in the private life of Charles and Grace Smith.

These domestic details are particularly valuable because so much of Smith’s surviving record concerns exceptional events—the Arctic, medical emergencies, public honours and professional responsibilities. At Otepopo, he was also a husband and father, living in a house he had made his own and attempting to establish the settled family life that had been largely absent from his earlier years.

The stability was not to last. Yet before illness brought Smith’s New Zealand career to an end, another side of him emerged vividly in print. The interests which had filled his childhood bedroom with specimens and repeatedly drawn the Edinburgh student away from formal lectures had never disappeared. In March 1877, writing from Otepopo, Charles Edward Smith once again revealed himself unmistakably as a naturalist.

In March 1877, Charles Edward Smith contributed a long letter to the *North Otago Times* under the heading “The Shooting Season.” Dated at Otepopo on 19 March and signed “Charles Edward Smith, Surgeon,” it provides one of the clearest surviving expressions of his personality in his own words. Ostensibly a survey of the game available as the shooting season approached, the letter ranged far beyond sport. It combined ornithological observation, knowledge of local habitats, humour, literary allusion and an unmistakable concern about the indiscriminate destruction of wildlife.

Smith began with pheasants, reporting that both English and Chinese varieties had become numerous in the district. Cultivation, he observed, had encouraged the birds to descend into the valleys, where they had become familiar inhabitants of farmland. His account moved readily between species and habitats. Coveys of partridges could be encountered, while the district supported grey duck, Paradise duck, the blue or mountain duck of the rocky watercourses, the shoveller and native teal.

Wetland birds received equally close attention. Smith described the swamp turkey, or pukaki as it was termed in the newspaper, as abundant upon the marshy ground around Island Stream and the Kakanui River, adding with characteristic practicality that it was “most excellent eating.” Bitterns were also numerous. Here, the naturalist gave way momentarily to the humorist: a cold roasted bittern, he suggested, might be placed before unsuspecting friends and passed off as pheasant.

Among the birds he encountered, one clearly impressed him above the others. Smith had observed a solitary white heron at the rocky estuary of the Kakanui River. He described it as a rare and beautiful bird and noted that it was held sacred by Māori. His pleasure in observing it was accompanied by apprehension that neither rarity nor beauty would be sufficient to protect it from destruction. The fate of two swans belonging to Mr Wheatley, which had already been killed, provided him with an unhappy local precedent.

Smith’s concern became still more explicit when he considered the introduced birds of the district. Thrushes, blackbirds, goldfinches, greenfinches and starlings had become established, but he feared the activities of men “to whom nothing comes amiss” and of self-proclaimed naturalists whose collecting threatened precisely the rare and curious creatures they professed to study. His exasperation produced perhaps the most memorable sentence in the letter: “From such votaries of science—Good Lord deliver us!”

The remark reveals an interesting tension within Smith’s own nineteenth-century relationship with nature. He wrote in anticipation of a shooting season and was plainly familiar with game and its culinary qualities, yet he distinguished between regulated field sport and the needless destruction of uncommon species. His objection was particularly sharp when killing masqueraded as scientific collecting. For Smith, observation and knowledge did not require the extermination of the object being studied.

Fish and other wildlife also entered his survey. Smith reported seeing approximately half a dozen small trout in the Otepopo River and referred to information from Mr Young of Palmerston concerning a fine trout found full of spawn. From this, he argued that the fishing season ought to close sufficiently early to protect breeding fish. He also described a tame kingfisher being kept for the amusement of children, while warning of the bird’s voracious appetite and its potential destructiveness towards young trout and other freshwater fish.

The letter was enlivened throughout by the same humour which Fothergill remembered from Smith's Edinburgh days. A local story concerning a supposedly formidable boar culminated in the revelation that the animal was in fact a pure-bred Ayrshire bull. Classical and literary references mingled freely with observations of birds, fish, shooting and local characters. The result was not a dry catalogue of species but the work of a man who enjoyed both the natural world and the telling of a good story.

"The Shooting Season" is consequently an unusually revealing document. Smith was writing neither as a professional zoologist nor as a detached scientific classifier. He was a country medical practitioner whose knowledge had been accumulated through direct observation of the landscape around him. He noticed where species occurred, how cultivation altered their distribution, which birds inhabited particular waterways, the arrival and establishment of introduced species, and the pressures exerted upon wildlife by human activity.

There is also a striking consistency in Smith's method of observation across apparently unrelated parts of his life. Whether describing an Arctic animal, examining an injured patient's forearm, recording the effects of deprivation upon the human body, or watching birds beside a New Zealand river, he began with what he could see. His subjects changed radically; the impulse to observe closely did not.

The Otepopo letter therefore gives us something that obituaries and professional records cannot. It allows Smith's own voice—knowledgeable, humorous, occasionally indignant and deeply attentive to the world around him—to emerge. The naturalist who had accompanied the medical man throughout his life was still very much present in Otago.

In December 1878, another aspect of Charles Edward Smith's intellectual interests emerged through an important addition to the collections of the museum at Dunedin. The *Otago Daily Times* reported the arrival of a group of Roman antiquities discovered near Colchester in Essex and presented by James Hurnard through his relative, Charles Edward Smith of Otepopo. Hurnard was Smith's brother-in-law, giving the transfer a direct family connection between Essex and Otago.

The circumstances of the discovery were described in a letter accompanying the objects. During the summer of 1877, a field situated about halfway between what the newspaper printed as "Sexden"—evidently a misprint for Lexden, immediately west of Colchester—and Colchester had been ploughed to a greater depth than previously. This exposed evidence of

Roman pottery production on an extraordinary scale: no fewer than seven pottery furnaces were said to have been discovered. One of the furnaces was considered sufficiently important to preserve in situ, and a brick structure was erected over it for protection.

Hurnard assembled representative objects and fragments from the discoveries and forwarded them to New Zealand. Smith acted as the intermediary by whom they reached the Dunedin museum. The *Otago Daily Times* regarded the resulting collection highly, describing it as a "small but most interesting and valuable addition to our Museum" and specifically recording that it had been presented by James Hurnard "through his relative, Mr Charles Edward Smith, of Otepopo."

The assemblage was remarkably varied. Among its most conspicuous objects were two fine examples of Roman cinerary urns, one of which still contained charred human bones and ashes. Fragments of two larger cinerary urns were also present and reportedly bore stamps or names associated with their Roman makers. The collection therefore preserved evidence not only of burial practices but also of pottery manufacture and identification.

Several amphorae or portions of amphorae represented another class of Roman ceramic vessel. These varied in size and included examples bearing stamps relating to their manufacture or origin. Other pottery included dark-coloured wares decorated or chased with ornament, together with examples of the distinctive red ceramic commonly termed Samian ware. One piece bore a potter's name stamped upon its rim, providing the museum with material potentially capable of being associated with a particular Roman workshop or craftsman.

One especially evocative object was an earthenware Roman lamp, described in the newspaper as a *lucerna sepulcralis*. It was ornamented with floral or chaplet-like decoration. The contemporary account associated such lamps with Roman burial practice and explained the belief that they had been left burning within tombs. Whether every aspect of that nineteenth-century interpretation would now be accepted, the presence of the lamp itself considerably broadened the range of objects represented in the collection.

There was also a small vessel of Roman glass, described at the time as a lachrymatory or unguentarium. The terminology reflected contemporary archaeological interpretation, but the survival of glass alongside pottery and metalwork made the assemblage notably diverse.

The numismatic material was substantial enough to attract particular attention. Six silver denarii were included. The newspaper described individual types and drew attention to one bearing a representation of *Securitas* with the legend “Securitas P.R.” Two of the silver coins were serrated denarii. In discussing them, the writer also invoked the classical tradition of placing a coin with the dead as payment to Charon for passage across the river separating the living from the underworld.

Eighteen Roman copper coins accompanied the silver pieces. These were described as belonging principally to the Imperial series, including examples of middle brass. Their inscriptions had not all been deciphered when the collection was reported, and the museum intended to examine and arrange the coins according to the consuls or emperors represented upon them. The newspaper was therefore documenting a collection which had only just entered the process of museum identification and classification.

Smith’s role requires careful definition. The evidence does not establish that he excavated these objects, nor should the archaeological discovery itself be attributed to him. The discoveries were made in Essex and the collection was presented by James Hurnard. Smith’s importance lay in acting as the family and geographical intermediary through whom this body of Roman material travelled from the vicinity of Colchester to a museum thousands of miles away in New Zealand.

That role is nevertheless significant. Smith had established himself sufficiently within Otago for his brother-in-law in Essex to entrust him with the transmission of a coherent archaeological collection. He, in turn, ensured that the material passed into a public institution rather than remaining solely in private hands. In December 1878, the people of Dunedin could consequently examine Roman objects uncovered in the soil of Smith’s native county because of a chain of family and scholarly exchange linking Hurnard in Essex, Smith at Otepopo and the museum in Dunedin.

The episode adds an unexpected antiquarian dimension to Smith’s biography. By the closing months of 1878, the former Edinburgh student was connected not only with medicine and Arctic exploration but with the circulation of archaeological material between Britain and colonial New Zealand. The objects themselves may therefore represent one of the few tangible collections with which Smith was directly associated that could conceivably survive today.

By the beginning of 1879, Charles Edward Smith's years at Otepopo were drawing to a close. The physical demands of his extensive rural practice had been considerable. Later accounts remembered long journeys of forty or fifty miles, exposure to wet weather, irregular meals and the necessity of attending widely separated patients under difficult conditions. His health eventually deteriorated sufficiently for him to relinquish the practice he had established in Otago.

Contemporary biographical accounts attributed his declining health, at least in part, to the severity of his professional life in New Zealand. Such retrospective judgements cannot establish a precise medical cause, but there is no doubt that illness had become serious enough for Smith to abandon his position and return to Britain. An Essex obituary stated that approximately six months before his death he gave up his New Zealand practice, disposed of his household furniture and prepared to leave the country in the hope that rest and the sea voyage might restore him.

The decision represented a profound reversal of the life Smith had built at Otepopo. He had established a practice, married, become a father and acquired civic responsibilities there. His departure was therefore not simply the conclusion of another temporary medical appointment. He was leaving the community in which he had achieved the greatest degree of permanence in his adult life.

The *British Medical Journal* later emphasised the esteem in which Smith had been held among the Māori population of his district. Its language was characteristic of its period, but the underlying point is clear: his departure was felt personally by people whom he had treated. Smith was remembered not merely as a practitioner who had worked in the district, but as a medical man with whom patients had formed a considerable attachment.

The return voyage failed to restore his health. Smith reached England only a few months before his death. After his arrival, he stayed for a time with his brother at Stratford. His condition, however, required further medical attention, and he entered hospital in London.

At this final stage of his illness, one of the friendships formed during his Edinburgh student years re-entered his life. Dr J. Milner Fothergill, who had known the lively and unconventional Smith as a fellow medical student, now attended him professionally. Dr Ord was also involved in his treatment. The circumstance gives Fothergill's later memoir, "Diana

Smith," particular authority as a personal recollection: its author had known Smith near the beginning of his medical career and had seen him again as that career approached its end.

Other medical men were also associated with Smith's final illness. The detailed Essex account named Dr Thyne in London, Dr Chatteris of Glasgow, Mr Simpson of Coggeshall and Mr Galpin of Kelvedon among those involved in his care. The number and geographical spread of the practitioners consulted indicate the seriousness and persistence of his condition, although the surviving accounts presently available do not provide sufficient evidence to assign a precise diagnosis.

As his health continued to fail, Smith left London and went to the home of his father at Kelvedon in Essex. The Essex account stated that he spent approximately the last six weeks there. He had returned to the county in which his life had begun, but only after an extraordinary geographical circuit encompassing Yorkshire, London, Edinburgh, the Arctic, northern England and New Zealand.

Charles Edward Smith died at his father's residence at Kelvedon on 6 September 1879. He was forty-one years old. His death was subsequently reported in New Zealand as well as Britain, the North Otago Times identifying him as "late of Otepopo," a simple designation which preserved the connection between the Essex-born medical man and the New Zealand community in which he had spent the final substantial period of his working life.

His remains were taken to Coggeshall, his birthplace, and interred in the burial ground of the Society of Friends on Thursday, 11 September. The choice returned Smith not merely to Essex but to the religious community into which he had been born. Addresses were delivered at the grave and afterwards at a meeting of Friends, marking the death within the Quaker community which had formed the background to his earliest years.

The Hull press remembered a different aspect of the man. Announcing his death under the heading "Death of an Arctic Surgeon," the *Hull & Eastern Counties Herald* recalled the young surgeon of the *Diana* whose name had become familiar in the city twelve years earlier. It noted that Smith had gained many friends in Hull and that his departure from the town had been deeply regretted. The newspaper also referred to a pamphlet which Smith was said to have written concerning life aboard the *Diana* during the Arctic ordeal. The precise identity and survival of that publication remain to be established, and it should not automatically be assumed to have been identical with the diary published many years later.

The medical profession supplied perhaps the most striking contemporary epitaph. When the *British Medical Journal* looked back upon Smith's career a few weeks after his death, it did not choose a conventional heading based upon his qualifications, place of practice or Arctic service. It called its account simply "A Life of Heroism."

At only forty-one, Charles Edward Smith's life was over. Yet his story did not end at Coggeshall in September 1879. Family memory, the medical press, the people of Hull and Shetland, and eventually his own published diary would continue to preserve different versions of the man they remembered.

Charles Edward Smith's death did not bring an immediate end to the public memory created by his extraordinary career. In the years that followed, he was remembered through family writing, medical biography, Arctic commemoration and, eventually, the publication of his own words. These different forms of remembrance preserved complementary aspects of Smith: the courageous surgeon, the much-loved relative, the Arctic survivor and the observant diarist.

One of the most personal commemorations came from his brother-in-law, James Hurnard. In *The Setting Sun*, Hurnard transformed the ordeal of the *Diana* into a family remembrance of the man he knew simply as "Charlie." The verses were reproduced in the *Essex Weekly News* shortly after Smith's death and are particularly valuable because their language is intimate rather than institutional. Hurnard wrote of:

> "Our Charlie tended and cheered up the sick,
> Worked at the pumps to animate the rest"

The two lines capture precisely the combination which had impressed contemporary witnesses twelve years earlier: Smith did not separate his responsibility for the sick from the physical struggle to keep the vessel and its company alive. Yet Hurnard's "Our Charlie" changes the perspective completely. The celebrated Arctic surgeon was also a brother and brother-in-law whose experiences had become part of family memory.

Hurnard continued the image by recalling Smith bringing the *Diana*, "scarce floating," back towards England. His poem was not intended as a clinical or navigational record and should not be used in place of the contemporary accounts of the voyage. Its importance lies elsewhere. It demonstrates how the qualities publicly associated with Smith—endurance, courage and devotion to others—had been absorbed into the private memory of his family.

Smith's Arctic service was also commemorated far from Essex. In May 1890, more than a decade after his death, a memorial associated with the *Diana* was unveiled at Lerwick. The ceremony recalled the vessel's imprisonment in the ice, the death of Captain Gravill and members of the crew, and Smith's service as surgeon during the disaster. Its location was particularly appropriate, for Shetland had been the place where the surviving company finally reached safety in 1867.

The family was directly represented at the ceremony. The memorial was formally handed over to the town by Alderman Smith, Mayor of West Ham, who was identified as the brother of Charles Edward Smith. Alderman and Mrs Smith were afterwards entertained at luncheon at the Grand Hotel. The event demonstrates that remembrance of the *Diana* had survived for more than twenty years and that Smith's family remained involved in preserving the history of the expedition.

There was another, quieter survival of Smith's reputation. J. Milner Fothergill's memoir, "Diana Smith," published in *Good Words for 1880*, preserved the personality of the man behind the Arctic reputation. Fothergill had the unusual advantage of having known Smith personally as an Edinburgh student and of having attended him during his last illness. His account consequently remembered qualities which formal tributes could not: Smith's humour, his fair-haired appearance, his irreverence, his fascination with natural history and the restless curiosity which sometimes placed him at odds with academic convention.

The memoir was accompanied by a portrait of Smith. This published likeness is itself an important part of his surviving record. The face of the man who otherwise appears principally through matriculation entries, newspaper reports, medical testimony and the recollections of others was thereby preserved for later readers. Fothergill's memoir ensured that the *Diana* surgeon was remembered as an individual rather than merely as the central figure in an Arctic story.

The most substantial survival of Smith's own voice came much later. His journal of the *Diana* expedition remained unpublished in book form during his lifetime. In 1922, it appeared in London as *From the Deep of the Sea: Being the Diary of the Late Charles Edward Smith, M.R.C.S., Surgeon of the Whale-Ship Diana, of Hull*, published by A. & C. Black and edited by Charles Edward Smith Harris.

The significance of the diary extends beyond the history of a single whaling voyage. Unlike the testimonials and obituaries written about Smith, it allows events to be encountered through the observations of the man who experienced them. The published journal preserves not merely the great moments of danger but the changing moods, daily anxieties, personal recollections and details which could disappear from retrospective accounts. His Christmas remembrance of "Mr. Moffat's," for example, survives because Smith himself considered that distant domestic memory worth recording amid the Arctic winter.

The original manuscript journal is preserved in the Hull Museums Collections. Its survival gives Smith's legacy an important archival dimension: the later printed edition can be traced back to a manuscript produced by the surgeon himself during one of the defining episodes of his life. Together, manuscript and publication provide an unusually direct documentary connection between Smith and the events for which he became best known.

Yet to remember Charles Edward Smith solely as "Diana Smith," as Fothergill affectionately called him, would considerably diminish the breadth of the surviving evidence. His Arctic service understandably dominated his public reputation, but the records now assembled reveal a much wider figure: a medical student of Professor John Goodsir, a practitioner capable of giving careful medico-legal evidence, a writer on the physiological consequences of extreme deprivation, an observer of natural history, a rural New Zealand doctor and public vaccinator, a Justice of the Peace, and an intermediary in the transfer of Roman antiquities from Essex to the museum at Dunedin.

His life also left material and documentary traces in widely separated places. The possible surviving narwhal tusk, the Roman objects transmitted to Dunedin, the manuscript *Diana* journal at Hull, Fothergill's published portrait, the Lerwick memorial and the medical and newspaper literature together form a dispersed record of a man whose own movements had been equally extensive.

That dispersal is perhaps appropriate. Smith never belonged entirely to one place or one field of endeavour. Coggeshall claimed his birth and burial; Edinburgh his medical education; Hull and Shetland remembered the *Diana*; Cumberland and Glasgow formed part of his British medical career; Otepopo preserved the most settled years of his professional and family life; and the Arctic supplied the ordeal by which his contemporaries first came to know his name.

The Essex press later described Charles Edward Smith as a man who had “earned his laurels under Polar skies.” The phrase is memorable, but the surviving evidence shows that those laurels represented only one part of an exceptionally varied life. What endured most consistently was something less dramatic: an impulse to observe closely, to act when circumstances demanded it, and to place whatever knowledge or ability he possessed at the service of the people around him.

Charles Edward Smith is one of those students whose significance becomes apparent only when the scattered evidence of an entire life is brought together. No single document adequately represents him. The University of Edinburgh matriculation records establish the student; the medical registers establish the practitioner; his journal preserves the Arctic witness; medical literature records the observer of disease; newspapers reveal the country doctor, naturalist, magistrate, husband and father; museum evidence introduces the intermediary in the movement of archaeological material; and the recollections of those who knew him restore something of the personality behind the documentary record. Only in combination do these sources reveal the extraordinary range of the man.

For the history of Professor John Goodsir’s students, Smith is particularly instructive. He was not one of the celebrated academic successors through whom Goodsir’s influence is usually measured. He did not become a professor, establish a great anatomical school or leave behind a large body of formal scientific publications. Indeed, the young Smith remembered by J. Milner Fothergill could appear an unlikely product of rigorous Edinburgh medical education: humorous, independent, impatient with convention and sometimes more interested in what he could discover outdoors than in what a professor intended to teach indoors.

Yet it is precisely this apparent contradiction which makes him so interesting. Smith’s subsequent life demonstrates that education cannot always be measured by conformity within the classroom. The habit which repeatedly characterised him was close observation followed by practical judgement. It appeared under radically different circumstances and with radically different subjects. His life suggests a mind more naturally suited to investigation through experience than to passive acceptance of instruction.

There is an important distinction to be made here. It would be impossible to claim that every later quality Smith displayed resulted directly from Goodsir’s teaching. The evidence does not permit such a conclusion, and Smith’s passion for natural history clearly preceded his arrival at Edinburgh. What can be established is that he belonged to Goodsir’s student body at

a formative period in his medical education and subsequently carried into an unusually wide-ranging career an observational habit entirely compatible with the anatomical and scientific culture in which he had studied.

Smith also demonstrates why the history of Goodsir's students cannot properly be restricted to those who achieved conventional academic distinction. The wider importance of a teacher is found not only among professors and eminent surgeons but among the hundreds of former students who carried medical knowledge into ships, hospitals, industrial communities, rural practices and distant parts of the world. Smith's career reached environments almost unimaginably remote from the Edinburgh anatomy classroom in which his connection with Goodsir began.

His story is equally valuable because it resists easy classification. He cannot adequately be described simply as an Arctic surgeon, although that was the role which brought him national recognition. Nor was he merely a colonial medical practitioner, naturalist or traveller. These were not separate identities successively assumed and discarded. They overlapped. Medicine, natural history, curiosity, humour, independence and a willingness to accept personal responsibility recur throughout the evidence in different combinations.

There is also something strikingly unfinished about Smith's life. He died at forty-one, after illness had forced him to surrender the practice and home he had established in New Zealand. The surviving record gives no opportunity to know what another twenty or thirty years might have produced. His death occurred when he had already accumulated experiences sufficient for several ordinary careers, yet while he was still young enough for further work to have been expected.

That premature ending makes the survival of his own words particularly valuable. Smith is not known solely through the judgements of others. In his Arctic journal, his medical observations and his New Zealand writing, his own voice survives. It can be serious, clinically attentive, amused, indignant and deeply curious. The personality remembered by Fothergill can therefore be tested against the writings of Smith himself, and the two are remarkably compatible.

Among the thousands who passed through Professor John Goodsir's teaching during his twenty-one years as Professor of Anatomy at Edinburgh, many inevitably disappeared into obscurity. Charles Edward Smith very nearly might have done so as well. His records lie

dispersed across university archives, professional institutions, medical journals, newspapers, museum collections and family remembrance, while different episodes of his life have often been preserved without recognition of the man connecting them.

Reuniting those fragments changes the scale of the biography. The unconventional Edinburgh student, the surgeon remembered by the men of the *Diana*, the medical observer before an Edinburgh learned society, the practitioner working among scattered communities in Otago, and the naturalist watching birds beside the Kakanui River were not separate historical figures. They were one man.

Perhaps the most appropriate contemporary judgement remains the simplest. Shortly after Smith's death, the *British Medical Journal* entitled its account of him "A Life of Heroism." Heroism was unquestionably present in his life, but the evidence assembled here permits a broader judgement. Courage was required during the exceptional moments; curiosity, observation, humanity and professional responsibility were required during the ordinary ones.

Charles Edward Smith deserves to be remembered for both.

And within the recovered student body of Professor John Goodsir, that may be his most enduring distinction: the student once inclined to leave the lecture room in order to observe the world ultimately made the world itself his classroom. (University of Edinburgh, Matriculation Volume, session 1861–62, Charles Edward Smith, Matriculation No. 91; University of Edinburgh, Matriculation Volume, session 1862–63, Charles Edward Smith, Matriculation No. 1129; University of Edinburgh, Matriculation Volume, session 1863–64, Charles Edward Smith, Matriculation No. 1366; Royal College of Surgeons of Edinburgh, Roll of Licentiates, 1872, Charles Edward Smith; *Monthly Notices of the Royal Astronomical Society*, volume XIX, London: George Barclay, 1859, page 169; Smith, Charles Edward, *From the Deep of the Sea: Being the Diary of the Late Charles Edward Smith, M.R.C.S., Surgeon of the Whale-Ship Diana, of Hull*, edited by Charles Edward Smith Harris, London: A. & C. Black, Ltd., 1922; Turner, William, *Journal of Anatomy and Physiology*, volume 8, 1873, pages 133–134; "Arrival of the Missing Whaleship 'Diana,' and Dreadful Sufferings of the Crew," *Nautical Magazine and Naval Chronicle*, May 1867, pages 279–283; "Mr. Charles Edward Smith of the Whaler 'Diana,'" *The Lancet*, 6 July 1867, page 21; "Present to Mr. C. E. Smith, of the 'Diana,'" *Medical Times and Gazette*, 3 August 1867, page 138; *The Lancet*, 24 August 1867, page 251; Smith, Charles Edward, "The Midwifery and Diseases of the Esquimaux; Also, the Effects of Protracted Exposure to Cold and Privations upon the Human

System," *Edinburgh Medical Journal*, March 1868, pages 858–860; Fothergill, J. Milner, "Diana Smith," Part I, *Good Words for 1880*, edited by Donald Macleod, London: Isbister and Company Limited, 1880, pages 485–489; "Medical Practitioners' Registration Act, 1869—Charles Edward Smith," *North Otago Times*, 21 August 1874, page 3; "Public Vaccinator," *North Otago Times*, 3 November 1874, page 2; "Otepopo—Notice of Removal," *North Otago Times*, 16 February 1875, page 4; "Cutting and Wounding," *North Otago Times*, 29 April 1875, page 2; "Marriage," *North Otago Times*, 4 May 1876, page 2; Smith, Charles Edward, "The Shooting Season," *North Otago Times*, 21 March 1877, page 2; "Police Court," *Otago Daily Times*, 21 April 1877, page 2; "The Roman Relics in the Museum," *Otago Daily Times*, 7 December 1878, page 5; "Death," *North Otago Times*, 1 February 1879, page 2; "Death of an Arctic Surgeon," *Hull & Eastern Counties Herald*, 11 September 1879, page 8; "The Late Mr. E. Smith of Coggeshall.—An Adventurous Life," *Essex Newsman*, 20 September 1879, page 2; "Kelvedon: The Late Dr C. E. Smith—A Life of Heroism," *Essex Weekly News*, 26 September 1879, page 7; "A Life of Heroism," *British Medical Journal*, 11 October 1879, page 588; "A Life of Heroism," *Shields Daily Gazette*, 15 October 1879, page 3; "Death," *North Otago Times*, 27 October 1879, page 2; *Essex Times*, 2 January 1880, page 5; "Interesting Memorial," *Carlisle Patriot*, 30 May 1890, page 5).