3 136

JAMES ROBINSON (1813-1862)

professional irritant
and
Britain's first anaesthetist

CHRISTINE HILLAM

2nd Lilian Lindsay Memorial Lecture

18 May 1996
British Dental Association Conference
Edinburgh

LINDSAY SOCIETY FOR THE HISTORY OF DENTISTRY

Christine Hillam *
was presented with the second Lilian Lindsay Memorial Medal
on the occasion of her lecture

* BA, PhD, Hon. Research Fellow, Clinical Dental Sciences, University of Liverpool.

JAMES ROBINSON (1813-1862)

professional irritant and Britain's first anaesthetist

James Robinson was, we are told, a man of below average height, inclined to corpulence, with prominent and expressive, though not handsome, features, dark piercing eyes and a manly, open expression to his face. He was somewhat ill at ease and, in his early thirties at least[1]

> deficient in that freedom of manner that marks the man of the world; and on first introduction appears cold, formal and proud; — this however soon wears off as he becomes accustomed to his visitor, or interested in conversation, and he becomes an agreeable and amusing companion.

This hint that there was more to Robinson than met the eye should forewarn us that his passage through life and through the world of dentistry was not to be a quiet one.

Details of the early days of James Robinson are sketchy and somewhat enigmatic.[2] It cannot but be felt that if more were known of the child and youth, the better would be our understanding of the forces that drove the very singular adult, for driven he certainly was. A restless spirit, according to Alfred Hill (who came to know Robinson well and has left us an affectionate word picture of him);[3] a man of profound humanity who at the same time was

---

1 *Forceps*, 2(1845), 54. Although Robinson may not actually have written this description himself, he was, as we shall see, closely involved with the journal and can be expected to have approved its tenor.

2 This is due in part to the fact that his early death was so sudden. The obituary writer of *Dental Review* says of his own account: 'That this should not be more ample in detail, is attributable to the difficulty of obtaining the necessary information in the short space of time at our disposal' (*Dent.Rev.* 4(1862), 189). Thereafter, the professional and political stance which he represented — and his role in the introduction of inhalation anaesthesia — were eclipsed and he faded from memory.

3 A.Hill, *The history of the Reform Movement in the dental profession in Great Britain during the last twenty years* (London: Trübner, 1877), p. 70.

possessed of a fiery temper and ferocious energy. The constant search for new realms to conquer led him and others into fields undreamt of at the outset where his hot-headedness brought him repeatedly into conflict with those around him, a situation not infrequently, one suspects, engineered, actively courted and even needed by Robinson himself.

It would not be unreasonable to assume that the roots of this combative approach to life lay in his early experience of it. Hill, in whom Robinson confided, remarks somewhat cryptically, 'Certainly, his path had not been strewn with flowers'.[4] Yet by conventional criteria, the seed bed looks to have been a promising one. He was apparently the son of Captain Charles Robinson, RN ('one of the present Commanders of Greenwich Hospital'),[5] born in Hampshire on 22 November 1813.[6] He had at least one sister, Charlotte, who was living in Gosport at the end of Robinson's life.[7] 'From an early period, energy and activity gave indication of the perseverance and enterprise which were characteristic of maturity'.[8] *Forceps* declares him to have been educated 'to fit him for any station of society'; yet we find him leaving school at the age of fourteen to be apprenticed to an unnamed (and hence presumably undistinguished) London medical man practising under the title 'surgeon and chemist'.[9]

4 Hill, p. 299.

5 As note 1. It has not, as yet, proved possible to authenticate this statement. This Captain Robinson entered the Navy in 1767 and saw service in America and the West Indies before being captured by the French in 1794. After his release in 1795, he did not return to sea again. He was admitted to the Royal Hospital at Greenwich on 27 August 1840 (as a pensioner, not in the position of authority suggested by the statement in *Forceps)* and by 1849 was the most senior Commander in the Navy. He had one son who had been in action at Trafalgar, another who served with the marines and was a colonel in the Spanish service, and a number of other naval relatives (W.O'Byrne, *A naval biographical dictionary* (London: 1849), p. 990). Superficially, he appears rather too old to have been James Robinson's father.

6 Obituary, *Dent.Rev.*, 4(1862), 189. In the 1851 census (HO 107/1509 f.489 p.15) Robinson's place of birth is given as Southampton, but no baptismal entry has yet been traced for him in either the city or the immediate surrounding area.

7 Will of James Robinson, made 9 October 1861, probate London 7 April 1862.

8 As note 6.

9 This was a description then adopted by a number of practitioners, including William Marsden, founder of the Royal Free Hospital. This did not meet with approval of the pharmacists and the 1852 Pharmacy Act specifically prohibited holders of the Licence of the Society of Apothecaries (LSA) and Membership of the Royal College of Surgeons (MRCS) from practising pharmacy without membership of the Pharmaceutical Society.

James's apprenticeship is passed over in lack-lustre terms by *Forceps* which speaks of him being engaged 'till the expiration of his indentures' in the 'usual routine of his profession' (which no doubt required him to extract teeth). 'He then entered himself at Guy's Hospital' for the lectures on the teeth (delivered at this date by Thomas Bell) and at the new London University for courses in chemistry and clinical medicine given by Drs Turner and Watson respectively. (*Forceps* also recounts that he attended lectures in general anatomy, physiology, surgery and pathology but does not state whether this was at Guy's or at the University).[10] To the studies of chemistry and the structure of the teeth Robinson devoted himself 'with unremitting ardour', 'making the utmost use of his excellent opportunities of acquiring an accurate and extensive knowledge of both', letting his other studies become 'subservient to his favourite pursuit'; for by now he had 'determined to become a dentist'. Whether this decision was out of a deep interest, commercial astuteness or financial necessity, we are not told; the same question might perhaps be asked of the entry into dentistry of John Tomes.

In the same year that he attended lectures, 1830, *Forceps* has Robinson 'having completed his studies' in Store Street, Bloomsbury

> where he resided for some years in habits of the closest intimacy with the late Dr Turner, and the other professors of the University, by whom he was appreciated as a man of first rate talent and highly esteemed for his private worth.

Dental Review assumed this to mean that 'he commenced business ... we have been given to understand, as a chemist'. This may well have been the case but in fact, there is no firm evidence of Robinson being in Store Street until around 1833 when, still only 19 or 20, his name appears in a trade directory as a dentist at number 8, along with that of Thomas Hall (who is also sometimes described as a chemist).[11]

10 Neither establishment, in fact, offered a course in 'pathology' as such, although Guy's had its 'morbid anatomy' and the University ran a series of lectures on the 'nature and treatment of diseases' (*Lancet*, I 1829-30, 6-10). Holloway rightly underlines the fact that education at this level in the 19th century was self-directed, with students attending the courses of lectures useful or interesting to them individually, rather than being obliged to enrol for a complete course of training (S.W.F.Holloway, 'Producing experts, constructing expertise: the School of Pharmacy of the Pharmaceutical Society of Great Britain, 1842-1896', in *The history of medical education in Britain*, ed. by Vivian Nutton and Roy Porter (Amsterdam: Rodopi, 1995), p. 121).

11 Pigot, *London and provincial ... directory for 1833-34* (London: 1833). Neither Robinson nor Hall appear in earlier trade directories as dentists. Hall does not appear as a chemist elsewhere before 1835 (Robson's *Directory of London*) and soon also disappears as a

The combination of the *Forceps* account of Robinson's early training and the *Dental Review* obituary, although apparently straightforward, transmits a complex tale which may be deliberately vague in the telling, leaving the reader to draw his own conclusions. It gives little firm evidence of Robinson's original intentions and no information at all on which were the events that led to his turning to dentistry. Was he committed from the age of fourteen (in November 1827 at the earliest if he was born in 1813) to a five-year apprenticeship in surgery or to a shorter (and cheaper) one as a chemist and druggist? Whichever side of his master's business he was being trained in, he would have completed no more than 1 year 11 months at the start of the 1829-30 session of lectures for which he was registered at London University, scarcely 'at the expiration' of any kind of indentures.[12] This rather suggests he was committed to a three-year agreement and attended lectures during his final year rather than after it. If he was indeed destined from the start to be a chemist and druggist, then he would have been a well-educated one after his brief spell at Guy's and the University in a period when academic study for the growing numbers of chemists and druggists was not compulsory. This may well account for his apparent acceptance in medical circles at this stage in his career: better an enterprising chemist and druggist than a failed medical student.

However, the more conventional length for an apprenticeship with a chemist and druggist was four years;[13] it may be that, like a number of his contemporaries, Robinson broke his agreement or may even have had it broken for him by the death, bankruptcy or prosecution by the Society of Apothecaries of his anonymous master.[14] If this was the case, it is not surprising that an

dentist. Robinson never appears in trade directories as anything but a dentist.

12 Robinson's name appears in both the *Registers of University College, London*, 1829-30 and the *General Entry of Pupils*, Guy's Hospital, London, 1823-1832 (folio 141, pupil 478) (R. Ellis, 'James Robinson: England's true pioneer of anesthesia', *Proceedings of the 3rd international symposium on the history of anesthesia, March 27-31 1992, Atlanta, Georgia* (Wood Library-Museum of Anesthesiology, n.d.)).

13 Personal communication, J.G.L.Burnby.

14 Such was the case with West, a dentist in practice in Broad Street, London, who 'left Mr Stacey [a chemist and druggist] before he was legally entitled to, and engaged himself as an assistant to Messrs Taylor & Co' (*Forceps*, 1(1844), 278). Dropped-out apothecary or surgical students (some of them unable to stomach the experience of increasingly adventurous operations performed without anaesthesia, others in straitened circumstances or attracted by the substantial incomes to be made on the fringes of the medical and para-medical worlds), probably contributed substantially to the growing numbers of chemists and druggists of the period, and hence to the formation of the Pharmaceutical Society in 1841 and passing of the Pharmacy Act of 1852. They also swelled the ranks of dentists, as they

attempt should be made in *Forceps* to disguise the irony that the champion of proper professional training might not have received it himself.

Whatever the true course of events, James Robinson was diverted into dentistry at an early age. He would not have been alone among his peers in launching a career in dentistry from this base.[15] With the demise of the professional toothdrawer, the extraction of teeth had become increasingly the province of the chemist and druggist and often accounted for a substantial part of his business.[16] Some chemists and druggists became involved in all aspects of dentistry and of these a fair number went over to full-time practice.[17]

It was both a good time and a bad time to be starting out on a dental career in London. On the one hand, demand for treatment (as measured by the number of those offering their services as dentists) was clearly growing in line with, or even in excess of, the increasing prosperity in the rapidly expanding capital which was creating a new clientele.[18] To some extent this merely reflects the wider picture of the change in middle-class attitudes to seeking professional treatment for their ills described by Holloway, and compounded of the wider availability of surplus income, the growth in individualism, the more acute sense of social position and a new equation of success and progress with good health.[19] This last element was exploited by those dentists whose inclusion in their 'treatises' of dire warnings of the systemic ramifications of dental disease confirmed the reader's worst fears and raised his wildest hopes that

had always done and would do in the future, though to what extent has not yet been systematically established. Robinson himself refers to drop-out medical students and failed MRCS candidates as recruits taking up dental practice (*Am.J.dent.Sci.*, 1st series, 10(1850), 248).

15 The respected dentist Arnold Rogers had also apparently served his apprenticeship to a chemist and druggist (*Forceps*, 1(1844), 4).

16 Wardroper recounts the case of a chemist who made £200 a year from extracting teeth at one shilling a time (4,000 teeth a year) (W.Wardroper, *The structure, diseases and treatment of the teeth* (London: 1838), p. 9).

17 Just how many did so is difficult to say, through lack of business records. See C.Hillam, *Brass plate and brazen impudence: dental practice in the provinces, 1755-1855* (Liverpool: Liverpool University, 1991), pp. 19-21, 52-54, and 'Pestle and forceps: the pharmaceutical dentist of the nineteenth century', *Pharm.Hist.*, no.3, 18(1988), 5-8.

18 Whilst 20-30 advertised themselves as dentists in trade directories in London in 1800, a good 130 were doing so by 1830, when Robinson made his career choice.

19 S.W.F.Holloway, 'Medical education in England, 1830-1858: a sociological analysis', *History*, 49(1964), 318-19.

dental treatment was the answer to his problems.[20] (This approach also served to associate dental treatment with health care; although pain relief might find a natural home there, for the majority of people the remaining aspects of dentistry counted — and count — as a cosmetic issue). However, the changing attitude towards health care does not provide the complete answer to the phenomenon of increased demand for dental treatment at this period. There seems little doubt that by the early nineteenth century the incidence of dental disease had increased by comparison with earlier decades.[21] This can be related to dietary changes and the more widespread indiscriminate consumption of sugar (13 lb per head in 1788[22] to 30.6 lb in 1801).[23] Also feeding into the equation were recent technical innovations — forms of amalgam used as filling materials and the large-scale production of porcelain artificial teeth — which, whatever their merits and demerits in objective terms, in the patient's eyes made restorative treatment apparently less of an ordeal and prosthetic treatment more aesthetic and affordable than did the use of traditional materials. However, the resultant expansion in demand (which seemed likely to bring a new entrant to dentistry a comfortable living) exceeded the supply of those with even minimal training, let alone an apprenticeship; in the absence of any form of regulation, the vacuum was increasingly filled by opportunists who learned on the job. Whilst the results of their attempts at treatment may have provided work for more established dentists, it did nothing for the reputation of dentists as a whole. It may well be wondered where Robinson himself learned his practical dentistry — it would certainly not have been from his courses at Guy's or the university. It seems likely that if his teacher had been a well-known practitioner, he would have said so. Hill certainly knew: 'if it were necessary, much of the struggle of his early days could be given here in minute detail';[24] unfortunately he chose not to share his knowledge with posterity, even when

20 e.g. 'A multitude of diseases, apparently originating in the remoter parts of the body, might yet be traced to the teeth' (J.Nicholles, *The teeth, in relation to beauty, voice and health* (London: Hamilton & Adams, 1834), p. ix). The author goes on to cite disorders of the stomach and ear, pains in the limbs, epilepsy and tuberculosis. For a fuller exposition of this theme, see C.Hillam, 'Anxiety in the market place: an historical perspective', *Dent.Hist.*, 26(1994), 22-28.

21 M.E.Corbett and W.J.Moore, 'The distribution of dental caries in ancient British populations: IV 19th century', *Car.Res.*, 10(1976), 401-14.

22 J.Burnett, *Plenty and want* (Harmondsworth: Penguin, 1968), p. 24.

23 J.Burnett, *A history of the cost of living* (Harmondsworth: Penguin, 1969), p. 180.

24 Hill, p. 299.

writing fifteen years after Robinson's death.[25]

Clearly, James Robinson made a great success of his new venture; as early as 1834 he was appointed surgeon dentist to the Metropolitan (later the Royal Free) Hospital, a post he held for the rest of his life and one which afforded him considerable clinical opportunities. In the first ten years of his tenure, he claimed to have treated more than 5,000 patients.[26] (Lindsay states that he was involved in 1837 in founding the Windmill Street London Dental Dispensary with Harrison, Snell and Saunders.[27] If so, then his apparent lack of a prestigious dental training was no barrier to mixing with those who were to be considered the élite of the profession).

By the late 1830s, Thomas Hall had disappeared from the scene, leaving Robinson apparently single-handed and with an expanding practice.[28] In 1840, perhaps already married to Anne Elizabeth Webster, he moved to more prestigious premises just round the corner at 7 Gower Street.[29] Here he developed over the next twenty years a large and prestigious practice which attracted a clientele that included 'persons of the highest rank'.[30] At the time of his

25 Robinson told Hill: 'an American dentist taught me to put in gold plugs; ever since I have been very thankful to him for his instruction, and I do not hesitate to tell you where I got it.' 'This was a candid and manly admission', comments Hill (*ibid.*).

26 As note 1.

27 L.Lindsay, 'Personalities of the past: VI James Robinson,1813-1862', *Br.dent.J.*, 98(1955), 176-77. She cites no source for her claim, which it has not yet been possible to verify.

28 There are no further trade directory entries for Hall at 8 Store Street after 1836.

29 The house has been renumbered several times: in 1841 it was 7, by 1861 5, in 1865 10. It is currently no.14 and bears a blue plaque at the suggestion of the author (1988). The late Richard Ellis and the Lindsay Society for the History of Dentistry were intimately involved in seeing its installation by English Heritage come to fruition. (At some stage Robinson also acquired Kenton House, Harrow, where he spent at least weekends). No record of the registration of Robinson's marriage can be found between 1837 (when civil registration began) and the end of 1841, nor was any appropriate marriage licence issued at any time up to the end of 1841 (London Marriage Licences, Guildhall Library). However, the 1841 census returns show the couple already married (HO107/673/14). Ann Elizabeth Webster appears to have come from an extensive (and probably affluent) family. One of her brothers, Ridley Manning Webster, was an accountant at 2 Cloak Lane, Queen Street in the early 1830s and a house agent at 1 River Tce, City Road at the time of Robinson's death. The Robinson marriage was childless. The Webster grave at Highgate Cemetery contains 12 members of the family (including Robinson and his wife) buried there between 1852 and 1923 (entry 4642 in the record of Grave Owners).

30 Hill, p. 299.

death, it was considered 'one of the most extensive in this country', built up by dint of 'an immense amount of personal labour (his regular professional hours were from nine to five or six)' — clearly a fact which much impressed the writer in 1862.[31] According to Hill[32]

> the practice of his profession was pursued by him with all the energy and ardour of one who made gold the great idol of his heart, nevertheless, possessing ample means, as a result of his indefatigable industry, few could vie with him in liberality, and none could surpass him in the joy springing from hospitality or any act of benevolence. ... It could not be said that it was the abundance or the brilliancy of his talents which secured him so much success. He had neither the one nor the other of these. It was rather the diligent use of the moderate qualities which he possessed that brought his name so prominently to the front.

But perhaps the real key to his success as a practitioner — 'Mr Robinson was a good dentist, and knew it' — is contained in a further comment of Hill's:[33]

> His frankness in investigating, and then giving his opinion on any case before him, were noticeable features in his character. If some considered it correct to throw a veil of mystery over their proceedings in practice — press their fingers on their lips, knit their brows, fix their gaze on nothing, and appear profoundly thoughtful — to give a fictitious importance to the case in hand, not so with him. He was free to explain all that was needed explanation, — tell how, why, and where, and make himself the personal friend of the patient seeking his assistance.

This confirms the editorial comment in *Dental Review* at the time of Robinson's death that

> In the enjoyment of a lucrative and extensive practice, the relation in which he stands to his patients is almost universally that of a personal friend, and the influence he possesses over them is remarkable.

The experience of being a patient of Robinson's was briefly recorded by Sir Charles Brown of Preston:[34]

31 As note 6.

32 Hill, pp. 298-99.

33 *ibid.*, p. 300. Documentary evidence is lacking which would make possible an objective comparison between Robinson's practice and those of his peers.

34 C.Brown, *Sixty-four years a doctor* (Preston: George Toulmin, 1922), p. 32. T.C.Jackson was one of the medical men present at Robinson's death.

> On July 17th, 1853, I travelled to London by a night train to undergo a preliminary examination in Classics and Mathematics at the Apothecaries Hall. During the journey I suffered greatly from a decayed molar tooth, and an abscess at its root. Shortly after my arrival I was taken by a surgeon named Thomas Carr Jackson ... to the house of ... Mr. James Robinson. Mr. Jackson then administered the chloroform, and Mr. Robinson extracted the tooth. I remember that as I was regaining consciousness, Mr. Robinson patted me on the cheek, and said, 'Now, Sir, you shall come again another day and have the tooth out,' and that after feeling at my gums with the tip of my tongue, I said, 'But it is out.' I was perfectly unconscious during the extraction, and was able to walk along Gower Street in a few minutes without feeling sickness, dizziness, or any discomfort whatever ...

Robinson had a number of apprentices. The best known of these was Richard White (1819-92) (father of Richard Wentworth White, one of the early presidents of the British Dental Association), who began his own prestigious practice in Norwich in 1843 after some time in Great Yarmouth.[35] Assuming White to have served a full three-year apprenticeship with Robinson at the conventional age, this seems likely to have been from about 1833-36 and at Store Street. By 1841 the position of 'dentist's apprentice' was occupied by Thomas Margets and by 1851 by Albert Soltan.[36] If Robinson was indeed taking apprentices for three-year periods from 1833 onwards, then there are potentially another seven unknown dentists trained by him. (One may perhaps have been Hasler Harris who ran Robinson's practice after his death and succeeded to his appointment at the Royal Free Hospital).[37]

James Robinson had more restless energy than could ever be absorbed even by what his contemporaries saw as a punishing professional routine. Having proved himself in one area of life, he was ready for new challenges. *Dental Review* describes him as belonging to that honourable group of self-made men who

35 G.Richards, *Lasting impressions* (Norwich: printed for the author, n.d. [1993(?)]) and White, *History, Gazetteer and Directory of Norfolk* (1845).

36 1841 census returns for 7 Gower Street. HO107/673/14. 1851 census returns for 7 Gower Street. HO107/1509 f.489 p. 15.

37 Kelly's directories of London, 1863-68. In his will Robinson directed his wife to secure the services of a previous pupil to run the practice should their nephew, Ridley Manning Webster, be under 25 and not qualified as a dentist. Harris's appointment to the Royal Free Hospital is recorded by *Dental Review* above a report taken from the *Daily News* that Robinson had had a general accident policy with the Railway Passengers Assurance Company which paid out £1,000 for a premium of £3 (*Dent.Rev.*, 4(1862), 191).

> always busily employed, however much they accomplish, ... are constantly seeking after something greater, and no sooner is one object fulfilled than new projects take the place of those which previously engaged their attention.

Without doubting the sincerity of Robinson's involvements, perhaps this aspect of his personality also lay behind the series of ventures upon which he then launched himself and for which we know him best.

The first of these was the reform of dental practice, at the time open to all-comers trained or not and hence, in a rapidly expanding market and especially in London, attracting elements seen as undesirable in the eyes of those with reputations — and incomes — to maintain. This had always been the case but by the 1830s and 40s other factors had entered the equation which prompted some practitioners to do more than self-righteously lament the way of the world.[38] Firstly, the numbers of opportunists were seen as reaching levels likely to swamp the dental 'respectable'. Not only would this dilute the latter's social standing, it seemed likely that overcrowding — and undercutting by the newcomers out to capture the expanding middle-class market — would lead to a drop in individual incomes. This had been seen in general medical practice (which was the very reason for some dentists pursuing the calling they did).[39] Albeit in an ironic context, reference is made in *Forceps* to 'the good old days'[40]

> when the prices of artificial teeth enabled the dental practitioner to keep up his respectability, and live like a gentleman, and we feel convinced that even now, in these days of deterioration and cheapness, [Mr Nicholls] would consider the proposition to make a set of masticators for less than a handsome remunerating price, as something very like an insult.

Secondly, this was a great period not only of parliamentary and social reform, but of radical educational changes which were to propel many an occupational group — lawyers, engineers, architects — into professionlisation;[41] and, most

38 As did, for example, John Gray in his *Dental practice* (London: 1837) and other practitioners who were at pains in their self-promotional literature to point to the difference between themselves and common 'empirics'. Hill considered such types to be drawing the whitest of kid gloves over their own ink-stained fingers (p. 14).

39 Incomes from dental practice were in general substantially greater than from medical practice (see Hillam, *Brass plate*, pp. 48-50).

40 *Forceps*, 2(1845), 6.

41 For a fuller discussion of this point, see Holloway, 'Medical Education in England', 320-21.

importantly, reform of the whole medical and para-medical field was very much in the air. Bill after bill was drawn up in an attempt to regularise the practice of medicine and the position of the Royal Colleges, Hastings had founded the Provincial Medical and Surgical Association (the forerunner of the British Medical Association) in 1832 and the pharmacists had formed their own Society in 1841. It was correctly perceived by some that for dentists to decline to be swept into this turbulent current, or to leave their regulation to others, would have disastrous consequences for their future position not only with the public but also vis-à-vis these other bodies, both as a group and as individuals.

As happenings in the dental world in America became known — the *American Journal of Dental Science* (started in 1839), the College of Dental Surgery in Baltimore (1840) and, above all, the American Association of Dental Surgeons (1841) — some British dentists began to set their sights more urgently on similar goals.[42] A letter from 'J.B.', an anonymous dentist, appeared in the *Lancet* on 13 April 1839 advocating compulsory dental education and certification. Then two years later, in 1841, George Waite published his *Appeal to Parliament* urging the College of Surgeons to appoint some of its dental members to examine intending dentists and issue certificates of competence. In March of the same year, Jacob Levison (1799-1874) (then in practice in Birmingham) made a case in the *Lancet* for an independent 'Faculty of Dental Surgeons'.[43]

These two stances — dentistry as a dependency of the College of Surgeons and dentistry as an independent profession with its own College — were in evidence from the very beginning in the attempts to regularise the practice of dentistry and may perhaps be seen as a parallel with the arguments then current over the position of general medical practice. The coat-tail alliance with surgery had its roots in the pre-'scientific' era of medicine. At that time the repertoire of the 'pure' surgeon was very limited and the extraction of teeth was by far the most frequently performed surgical procedure. ('Tooth extraction is a severe operation', remarked a correspondent to the *Lancet* as late as 1831).[44] Reputations were based on the astuteness of empirical observation and the gap in knowledge and effectiveness between well-read dental practi-

42 Details of these developments were given wider publicity in Britain in a letter to the *Lancet* dated 3 July 1841 from W.H.Lintott, who described attempts to rescue 'a most useful, though perhaps humble branch of surgery from the depths of degradation to which it has been reduced' (*Lancet*, II 1841, 596-97).

43 This was not Levison's first contribution to the *Lancet*; a letter from him on 'Exposure of quackeries in dental surgery' appeared on 10 Sept 1830 (*Lancet*, II 1830-31, 764).

44 *Lancet*, letter dated 31 May 1831.

tioners (some of whom had a degree of formal surgical background) and the average surgeon, pure or not, was smaller than it later became. Leading dentists of that period saw themselves — and were seen — as part of 'the profession', or 'the faculty'. Many of the older generation of dentists of the early nineteenth century probably still saw the world as organised on these lines. In their identification with the medical profession through the surgeons, they were joined, but for different reasons, by the younger of those dentists who were Members of the College of Surgeons.[45] These were the men who had embraced the new learning — modern anatomy, pathology and physiology — and saw a very sharp difference between themselves and the common body of dentists with their lack of formal academic learning. To them, association with the enhanced status enjoyed by the surgeons (the 'Company' had become the 'College' in 1800), was the best means of maintaining their own position. Inasmuch as they were concerned with improving the state of dental practice as a whole (this seems to have been of little concern to some of them except as a means of self-preservation), they looked to the College of Surgeons to protect them from the incursions of the ignorant by initiating a dental examination. Ranged on the other side were men like Robinson who had also pursued some academic study and considered themselves 'scientific' but who held no formal qualification.

Into this minefield, eighteen months later, towards the end of 1842, stepped James Robinson. He proposed a British Society of Dental Surgeons on the American model and invited individuals to serve on a provisional committee.[46] Bearing in mind the length of time needed to arrive at this stage of organisation, it may well be that Robinson was taking over where Levison had left off on his departure from London.[47] Membership of the new British Society (subscription 2 guineas) was to be open to those over 21 with an elementary classical education who had studied with a dentist member of the society for three years (probably the best confirmation that Robinson's own apprenticeship had been of this duration).

At about the same time, advertisements were printed for the forthcoming

45 The number of Members of the College practising dentistry in London in 1846 was put at 20 (out of a dentist population of 200).

46 His letter dated 29 November inviting Marshall Purland on to the provisional committee to convene a general meeting of the profession is preserved in the 'Purland Scrapbook' now at the Wellcome Library (*Dental memoranda collected by T.Purland*, 1844 (Wellcome Library, 63518), 122v).

47 Until about 1840 Levison had been living at 8 Gower Street and was almost inevitably personally known to Robinson.

British Quarterly Journal of Dental Surgery, the first ever British dental journal. This was to be published by Churchill and edited by James Robinson.[48] The first of its two issues (each 64 pages long) appeared on 30 March 1843. The declared aim of the journal was to promote an association of dentists, so that 'power will gradually accumulate in the combined hands of the truly respectable and scientific men and be proportionately derogated from unprincipled persons and pretenders'. Few dentists in Robinson's position would have quarrelled with this goal, divisive as it was; in fact, division was precisely what most of this group sought. As we have seen, there existed at this time great disparities of social aspiration and scientific knowledge among the practitioners of dentistry and this in an era which was placing increasing value on the new learning as a marker of professional and gentlemanly status. This could only foment anxiety in those dentists who saw themselves as losing caste by contamination with increasing numbers of those they saw as less scrupulous, more trade-orientated and less 'scientific' than themselves. In order to maintain credibility, it was necessary to demonstrate their superiority and their active pursuit of reform of dental practice not only to the public but, most importantly, to the medical profession. In contrast with dentists, medical men had already moved ahead along the path of standardised training (even if apprenticeship had been retained) and thus had no high opinion of a group left behind without it. Even now they were undergoing the paroxysms of yet another wave of discontent and reform.

Less universally acceptable was the new *Quarterly*'s hope that at last — suggesting this was not the first attempt — dentists would be able to unite for the common good, become incorporated, institute examinations and grant their own diplomas.[49] We have already seen that only eighteen months before, George Waite had advocated in his *Appeal to Parliament* that it was the Royal College of Surgeons which should be empowered to set examinations in dentistry. The dentists who supported Waite's view might not be numerous at this stage, but those of them who were Members of the College were potentially highly influential in dentistry, if not, as it was to emerge, in their *alma mater* where they were seen as seceders in a generalist climate.

It is no surprise to find Robinson putting forward the opposite case for an independent dental profession on the American model. He was, after all, the very embodiment of self-help and judgement on merit alone rather than by the standards of others. As *Dental Review* puts it

48 *Dental memoranda*, 123.

49 *Brit.Quart.J.Dent.Surg*, 1(1843), 3.

> The man who had fought his way by his own perseverance was not likely to be the one who would desire his profession to be in subjection to any other body, whatever might be the standing or position of the latter.

Moreover, from his carefully maintained contacts in the university medical world in which he moved both socially and geographically, he brought the concept of a unified profession, a view opposed by the College of Surgeons. He must surely have foreseen that some certificate of dental competence emanating from the College of Surgeons would inevitably lead to a two-tier profession headed by those dentists who were already Members; these would have formed an elite clique from which he and others like him, equally 'scientific' in their own eyes, would have been debarred by dint of ineligibility for Membership.

The contents of the short-lived *British Quarterly* were a mixture of reprinted extracts (some of them from American and French publications), reviews, editor's replies to correspondence and original papers or articles on clinical and historical topics, some of them written by Robinson himself.[50] A prominent feature of both issues, however, was the comment on professional politics. It emerges that Jacob Levison and Robinson had learned from Sir James Graham that his medical bill of 1843 would include no dental provision.[51] The fact that 'the government at present has no intention of assisting us, or forwarding our views' only strengthened their stance that dentists must form their own representative association and when it was large enough 'to give weight and character to its transactions ... an application might be made in due form for the support of the legislature'.[52] By now, Robinson had already got wind of the fact that a small self-appointed group had taken it upon themselves to approach Graham and the College of Surgeons as though representing the whole dental profession. He poured contempt on the secrecy and 'exclusiveness' with which this had been done; from now on, battle lines were drawn. It was not surprising that Levison, at the time of his 1841 letter to the *Lancet* suggesting a faculty of dental surgeons, had evinced no support from Nasmyth, Bell and the others to whom he had also written,[53] for many of them belonged

50 e.g. [anon], 'History of dental surgery', *ibid.*, 5-10, 70-74, and [the editor], 'Successful treatment of irregularities of the central and lateral incisors in an adult'. *ibid.*, 11-16.

51 *ibid.*, 1(1843), 66.

52 *ibid.*, 1(1843), 33.

53 *ibid.*, 1(1843), 20.

to the group involved in the present 'conspiracy'.

The new journal was reported to be well received in America but nothing came of the attempt to form an association. Ultimately, 'the petty and party feelings of some, the jealousy of others, and the lukewarmness of all, prevented [Robinson] from accomplishing his purpose, and after expending some time and trouble, and a considerable sum of money, the project fell to the ground, and an opportunity of furthering the best interests of dentism was lost'.[54]

But not abandoned. By 1 October the same year, the day after issue 3 of the *British Quarterly* should have come out, an advertising leaflet appeared for a forthcoming dental journal.[55] This may well have referred to *Forceps*, which made its first appearance on 13 January 1844.[56] Hill, who knew, states that Robinson 'inaugurated' this journal;[57] Trueman goes so far as to say he was the editor, perhaps seeing *Forceps* as merely a continuation of the *British Quarterly*.[58] Just how deeply Robinson was involved is, strictly speaking, unclear, for the names of neither the proprietors nor the editor are ever mentioned in its pages. It seems very likely, though, that he was at least one of the proprietors and that he can be identified with the 'gentleman connected with this Journal' who 'admirably frustrated' by his letter the scheme of the clique of 'ten or twelve officious noodles' who had petitioned Sir James Graham as though they represented 'the entire Dental Practitioners of this country, without consulting that body'.[59]

The biographical sketch of Robinson which appeared in the journal in 1845 notes his 'numerous and valuable contributions to dental literature, and the arts and sciences', often published anonymously. Apart from the two numbers

54 *Forceps*, 'Mr.Robinson', 2(1845), 54.

55 *Dental memoranda*, 124.

56 Occasional hints in *Forceps* and elsewhere suggest that there was more dental political activity going on at this time than made its way into Hill, the only contemporary secondary source for this period. The last issue of *Forceps* carries an advertisement for the disposal by the proprietors of a journal entitled *The Dental Profession*.

57 Hill, p. 300.

58 W.H.Trueman, 'History of the dental periodical literature of the British Empire, 1843-1924' in *Index of the periodical dental literature ... for ... 1876-1885* (Buffalo: Dental Index Bureau, 1925), xxiv. Trueman may perhaps have derived his information from the *American Journal of Dental Science*. Other statements that Robinson was the editor all appear to postdate Trueman and may currently be assumed to be derived from him.

59 *Forceps*, 2(1845), 42.

of the *British Quarterly*, there were few other outlets for dental articles in Britain at the time, suggesting that, in addition to the contributions which bear his name,[60] a fair amount of the unaccredited copy of *Forceps* emanated from him. Hill certainly seems to convey the impression that Robinson bore the responsibility for the occasional feature 'Funny Sketches', but whether as author or as editor is unclear.[61] In one of these the writer speaks of 'our editorial hand';[62] other comments in the leaders and 'Sketches', however, definitely point to them being written by someone other than Robinson. The whole issue remains as enigmatic as does much of Robinson's life.

Although *Forceps* is described from the beginning as a 'journal of dental surgery', the first seven issues have a rather different focus from subsequent numbers. It appears to have been intended as a general forum for dentists, medical men and chemists and druggists — in fact, for disaffected, splenetic and sharp-tongued practitioners everywhere. It was, says Hill, 'calculated to irritate'.[63] The title *Forceps* is more indicative of the line of attack it would take towards the establishment than of an exclusively dental preoccupation; indeed, a fair proportion of the early articles, editorials and reports of meetings of societies deal with the concerns of general medicine and pharmacy.[64] The publication seems likely, in fact, have been run by professional journalists for a pressure group in an arrangement of which we no longer possess the details.[65] The potential of the formula of Robinson's earlier *Quarterly Journal* may perhaps have been seen by others with their own axes to grind who then produced enough backing to bring out such a journal fortnightly. A correspondent to an early issue rejoicing in the pseudonym of 'Flagellator' speaks of the 'society of gentlemen concerned with the management and publication of *Forceps*'.[66]

60 'Exfoliation of the entire alveolar process of the lower jaw of a child', *Forceps*, 1(1844), 202; 'Singular case of fistulous opening in the right cheek produced by the irritation of a diseased stump', *ibid.*, 143; 'The ter-chloride of carbon in cancrum oris', *ibid.*, 264-65; 'History of dental surgery', *ibid.*, 2(1845), 41, 52-53.

61 Hill, p. 300-01.

62 *Forceps*, 2(1845), 2.

63 Hill, p. 300.

64 There are reports, for example, of medical and chemical lectures delivered to the City of London Literary and Philosophical Society and to the Medico-Botanical Society, and frequent extracts from the French medical press. Whilst a case may be made for their being included to broaden the horizons of dentists, the detail of some of them seems more likely to appeal to chemists and druggists.

65 The final number (8 March 1845) refers to a 'medical gentleman', a writer for the journal, who will edit articles and prepare them for publication (*Forceps*, 2(1845), 60).

From Issue 8 (20 April 1844), however, things are somewhat different. Readers are informed that from now on there will be four extra pages, largely devoted to dental literature, so that readers can build up a fine library. These will be selected by a 'dental editor', described as 'a gentleman who holds high rank as a practitioner of the art'. Reprinted are Edwin Saunders's lectures delivered at St Thomas's Hospital and articles by Gariot and A.F.Talma.[67] One has the impression of a shake-up behind the scenes resulting in a new editorial policy. Perhaps medical and pharmaceutical backers had withdrawn at this point, for from now on items more relevant to them are less prominent. The whole publication, outside the leaders, becomes rather more sober and earnest. Gone, sadly, are the reviews of plays, formulae for hair dye and explanations of how flies walk upside down on ceilings.[68] Continuing, however, are resounding attacks on quackery of all kinds[69] — and in all places — and the 'Funny Sketches', which frequently border on the libellous.[70] The Sketches were based on information sent in (some of it by Purland),[71] and can be offensive and at times antisemitic.[72] The following extract will serve to

66 *Forceps*, 1(1844), 75.

67 E.Saunders, 'Diseases and operations of the teeth', *Forceps*, 1(1844), 237 *et seq;* J.B.Gariot, 'Treatise on the diseases of the mouth', *Forceps* 1(1844), 634 *et seq.*; A.F.Talma, 'Memoir of preservation of the teeth', *Forceps*, 1(1844), 34 *et seq.*

68 *Forceps*, 1(1844), 23.

69 *Forceps* reserved some of its most vituperative attacks for the Mallan family of dentists, some of whom were close neighbours of Robinson's in Gower Street (e.g. 'Importation under the new tariff', 1(1844), 6, and 'An old friend with a new name', *ibid.*, 36).

70 The following were the subjects of 'Funny Sketches': Arnold Rogers, John Gray, Morgan, Patterson Clark, Abraham Moseley, Thomas Bell, Miles, King, Humby, Sale, Lea, Berg, Brophy, Clarke, Woodcock, Daniels, Mehemet Ali, Dezenville, West, Nicholls, Ibbotson, Fox, Robinson, J.D.George. A handbill for *Forceps* in the Purland scrapbook uses as an advertising ploy a long list of dentists throughout the country of whom 'Funny Sketches' have already been prepared.

71 *Forceps*, 1(1844), 266: 'the editor thanks an anonymous correspondent for the loan of "Dental memoranda"; 'we ... shall, most probably, shortly avail ourselves of some of its curious contents'.

72 See, for example, that of Abraham Moseley examined in C.Hillam, 'Quackery is in the eye

give a flavour of this feature of *Forceps*:[73]

> Mr. Edward Miles was at the usual age articled to a chymist and druggist at Southampton, where he was initiated into all the mysteries of black draughts and dinner pills, and acquired a knowledge of chymistry ... he left Southampton for the metropolis, and engaged himself as assistant to Mr.White, a chymist in the Haymarket ... and afterwards entered into an arrangement with Mr.Fret, a surgeon ... in the city.
>
> Here, we presume, he had some opportunities of practising the dental art, at least as far as occasionally deducting a grinder from a journeyman carpenter, or some such aristocratic member of Society; the success of his operations, and a dislike to the monotonous occupations of wrapping sundry parcels, containing 'the draughts to be taken as before', day after day, (like a horse in a mill) not even varied by the occasional small talk of a retail shop, induced him to turn his thoughts to Dental Surgery. He engaged a Mr.B. to teach him the mechanical branch of the profession, in which, having, we presume, the necessary craniological organs, he made rapid progress, and went through a regular course of study in the surgical and scientific department, and about 16 years since, commenced practice in the street in which he still resides.
>
> Like many others he at first practised as cupper as well as dentist, and according to precedent, kicked away that ladder as soon as he was sufficiently exalted to do without it; indeed we are somewhat surprised that he used an adventitious aid, which his own talents and the patronage of the Society of Friends, of which he is a member, must have rendered perfectly supererogatory [sic].

Miles got away lightly; Morgan was accused of having been a milkman and Robert Fox of having started as a pastrycook.

The picture of dental practice in the 1840s to emerge from *Forceps* is indeed frequently an alarming one, peopled by quacks of every kind perpetrating every permutation of sharp practice. Hence it has subsequently been repeatedly mined for horror and hilarity in the cause of demonstrating the allegedly low status and ill-repute of dentists of the period, producing a stereotype which has then been perpetuated. However, whilst the overall picture undoubtedly reflects reality, *Forceps* makes no attempt to be quantitative, its aim being mainly to startle complacent dentists into organising themselves. It thrives on hyperbole. Nor should it be forgotten that those involved with it had their own axes to grind; their observations should not be taken as objective reporting.[74] A more sober description of London dental practice of the period is obtained from Robinson's address to the Alumni Society of the Baltimore

of the beholder: motes and motives', *Dent.Hist.*, 29(1995), 10.

73 *Forceps*, 1(1844), 74.

74 For a fuller development of this theme, see Hillam,'Quackery is in the eye of the beholder', as note 77.

College of Dental Surgery in 1850, although even here he does not attempt to quantify the size of the different groups of practitioners he identifies.

Yet *Forceps* was not all randomly fired shafts of venom. As well as printing tantalising answers to long-disappeared letters, we have seen that it also contained weighty and up-to-date articles on the practice of dentistry, for like its predecessor, the *Quarterly*, it took seriously the question of education. Whilst being forthright in pointing out the gulf between respectable practice and sharp practice ('wielding the scourge of ridicule with a rigid and impartial hand'),[75] it was also concerned to disseminate the best of current literature and to educate. (There were, after all, no real comprehensive dental textbooks being produced in Britain at this period and there was very little contact between practitioners). A dental college was again mooted by Purland[76] and a whole editorial in the twelfth issue devoted to the education of dentists.[77] An apprenticeship of three or five years was advocated, followed by courses in anatomy, physiology, pathology and surgery. Mathematics and chemistry were considered important and French and German 'of the greatest advantage'. There should also be specialist teaching at a dental school and hospital. The issue of 16 November 1844 advertises the fourth dental lecture to be given at the University on the 19th of the month; these lectures were delivered by Durance George. (It was in 1845 that John Tomes began his lectures at the Middlesex Medical School. Robinson himself is credited by *Forceps* with having given lectures on the teeth at the London School of Medicine some time before early 1845).[78]

This branch of the reform movement had always stood for an independent dental profession with its own incorporated body awarding diplomas, partly on the grounds that the requirements of the Membership examination of the Royal College of Surgeons were completely devoid of dental content. By 7 September 1844 *Forceps* was accusing the College of Surgeons of not enforcing its own regulations against quackery, stating that the Membership examination was too

75 *Forceps*, letter, 1(1844), 75.

76 *ibid.*, 1(1844), 99. The whole concept of a College of Dentists may perhaps have borrowed something from Thomas Wakley's short-lived College of Medicine of 1831 (*Lancet*, I 1830-31, 846-68 and II 177-222 and S.S.Sprigge, *The life and times of Thomas Wakley*, facsimile of the 1899 edition, intr. by C.G.Roland (Robert E.Krieger, 1974), pp. 221-25); elements of the same idea were revived in Wakley's medical bill of 1840. Dentists also had before them the real model of the School of Pharmacy established by the Pharmaceutical Society in 1842, one year after the first step of the formation of the Society itself.

77 *Forceps*, 1(1844), 105-06.

78 As note 1.

easy and reporting that those dentists who possessed the Membership were not prepared to mix with the 'unqualified' and only acquired membership 'to give dignity to their quackery'.[79] By the final issues of the journal, it was raging

> We would ask these self sufficient gentlemen who pride themselves on the possession of the diploma, what advantages the profession, or the public have derived from their exertion; how far they have contributed to the improved practice of the one or the interest of the other. We do not pause for a reply — but emphatically answer — NOTHING — we do know both publicly and privately that there are some bright exceptions — we do not place such men as Saunders, Bell, George Canton, Harrison, and Ibbotson, in this category *for they are exceptions* and we can safely assert that taken as a body and compared with Cartwright, Robinson, Barker, Lintott, Tomes, Bromley, Bridgeman, Bate *cum multus alias* [sic] the M.R.C.S. Dentists are the least useful and most self opinionated class of the dental profession.

Thus some of the most prominent dentists who would not join the movement were identified as the enemy. So the would remain for another twenty years.

Throughout the short run of *Forceps*, a constant theme was the formation of an association of dentists which would 'place the profession of Dental Surgery on an equality, at least, with the other branches of the medical profession, without being obliged to borrow their rank from the College of Surgeons'.[80] Particularly from the time of the new editorial policy, no issue is without reference to it in a leader or a possibly contrived letter. A number of the readers (who were spread all over Britain) were keen to send in subscriptions to the association;[81] one even did so and had his money returned. Correspondents were frequently informed that the Association was imminent (only twenty or thirty members were needed to get it off the ground, it was said), yet it never materialised. The reasons for this are a matter for speculation. It may be true, as is usually thought, that there was generalised apathy among practitioners; but in addition, the problems *Forceps* sought to address may have been largely a London phenomenon and so not sufficiently pressing to galvanise the provincial practitioners whose participation was needed to establish a national body. Alternatively, there may indeed have been support for a society, but not under the leadership of such as James Robinson, known by now for his irascibility and hasty outbursts. The unidentified group behind the idea seem to have been holding on until they had the support of some suitable leading figure in the profession; yet, simultaneously, these same figures are rather naively attacked

79 *Forceps*, 1(1844), 183.

80 *ibid.*, 1(1844), 74.

81 e.g. *ibid*, 1(1844), 129.

in strong terms for not fulfilling their duty and coming forward, an approach scarcely calculated to win them over.[82] An editorial of August 1844 answers the impatience of readers by pointing out that those who offer their services in such situations do not always make the best leaders and that the most suitable candidates do not like to push themselves. In the same issue, Brophy is urged to come forward in support of the cause and lead dentists to the promised land of separate development.[83] In October 1844 a committee of enquiry was suggested to correspond with the Baltimore College of Dental Surgeons.[84] Sadly, the transatlantic success appears not to have been enough to rouse British dentists into forming their own society. The idea never entirely went way in the intervening years,[85] but it took the prospect of further medical legislation to revive virtually the same proposals in 1855.

According to Hill, Robinson suffered for years afterwards from the hostility engendered by his association with *Forceps* and was ostracised by his fellow practitioners. He is reported as saying, 'I have written many silly things in my time, and I am afraid many unjust things too. As to the *Forceps*, I heartily wish I had never had anything to do with it; and I should like to know that not a single copy of it was now in existence.' Robinson came to feel, says Hill, 'the utter inutility of the method he had employed to compass the result intended; ... he realised, by a disagreeable experience, that the pen which is dipped in gall sooner or later becomes an instrument to wound the conscience of him who uses it'. Assuming him to have been the driving force behind the journal (at least after the first few issues), he seems to have seen himself as the Thomas Wakley of the dental world; indeed, some aspects of *Forceps* read like a watered-down version of the early *Lancet*, attacking cliqueism as Wakley had launched his onslaught on nepotism in hospital appointments. Words applied to Wakely — 'often flamboyant, frequently bitter, and sometimes extraordinarily vicious',[86] — could equally be used of *Forceps*. It propagated in an obsessive and sometimes gleefully juvenile manner much that was vituperative,

82 *ibid*, 1(1844), 62.

83 *ibid*, 1(1844), 158.

84 *ibid.*, 1(1844), 207.

85 e.g. C.S.Bate on the need for a dental college or school (*Lancet*, I 1846, 230-31); C.Smartt admiring the American dental colleges (*ibid.*, II 1850, 626); J.I.Keen on the need for a dental college and journal (*ibid.*, II 1851, 263).

86 M.J.Peterson, *The medical profession in mid-Victorian London* (Berkeley: University of California, 1978), p. 26.

divisive, and at times antisemitic, all in the name of outing quacks and rallying dentists to unite. The publication probably set back prospects for reform a good ten years.

Forceps folded in March 1845 after a run of fifteen months. (This was not in itself a sure sign of financial problems, since many of these early journals were principally organs to represent particular interest groups). The failure of the whole project must have been a deep disappointment to Robinson. Added to this was his bitterness at being passed over in favour of Cartwright jun. for the post of dentist to King's College Hospital in Tomes's stead in December 1844.[87] *Forceps* had canvassed for him shamelessly (without naming him) in the issue of 14 December, describing him as one who[88]

> both as a writer and a teacher, *has proved* his capability of instructing others in the same judicious and scientific practice he carries on with so much credit to himself, and whose propinquity to the hospital would render his services available at any moment.

Forceps put Robinson's rejection down to the old cliqueism, a favourite word of the journal's, since his application had been supported by certificates from every medical officer at the Royal Free Hospital and from many of the most prominent physicians and surgeons in London. The writer came to the conclusion that this had been a situation in which turbot and claret had been more effective than any certificate.

Despite this double blow of losing the appointment and seeing his plans for a society come to nothing, and all within a few weeks, Robinson moved on in a new direction. He had gained a considerable amount of experience of writing over the previous few years and it was this which now began to absorb some of his energies. He seems to have spent part of his time after the closure of the journal preparing for the press his book *The surgical and mechanical treatment of the teeth, including dental mechanics* which appears to have been published simultaneously in London and Philadelphia.[89]

The book is something of a hybrid. Like virtually all its English predecessors (and contemporaries), it is partly addressed to the general reader and so lies open to the charge of covert advertising. This is done with the deliber-

87 *Forceps*, 1(1844), 279.

88 *ibid*, 267.

89 J.Robinson, *The surgical and mechanical treatment of the teeth, including dental mechanics* (London: Webster; Philadelphia: Lindsay and Blakiston, 1846). A German language edition was published by Haas in Vienna in 1848. The book may, perhaps, have been based on the lectures he is said to have delivered at the London School of Medicine.

ate aim of furnishing the public with some safeguard against malpractice, for 'it is our belief,' says Robinson, 'that the professions exist primarily for the public', who 'will hardly think worse of [them] for ceasing to speak an unintelligible language'. However, the second part, devoted to dental mechanics ('the basis of the dental art'), transforms the publication into what can be considered the earliest British handbook (if not exactly a textbook) for dental students. Here Robinson is standing firmly for the equal importance of both the mechanical and the surgical aspects of dental practice, unlike some of his contemporaries who preferred to stress the surgical for fear of being tainted by the manual. Stylistically the book is the very embodiment of his impatience with humbug and his desire to get straight to the matter in hand. It is neither as academic as Tomes's later published lectures, *Dental physiology and surgery*[90] nor as weighty as Chapin Harris's *The dental art,*[91] yet it nevertheless conveys the impression of being based on cumulative real experience and of describing clearly and authoritatively the techniques of mechanics. It is one of the very few publications on dentistry of the period in Britain which is not published exclusively to advertise the practice of the author.

There were by now no British dental journals in which Robinson's book might be reviewed, but it did not escape the notice of the *Medico-Chirurgical Review*. This journal tore the book apart, mocking the pretensions of 'dentists' (a vulgar Americanism), 'a lower and distinct class' who should be 'humble adjuvants to the surgeon or physician'. The reviewer saw nothing new in the first part of the book and plenty of errors. The second part he would not quarrel with but remained very adamantly against the association of 'dentistry' with 'dental surgery'. The anti-American, anti-dentist feeling in this review led to its being snapped up for reprinting in the *New York Dental Recorder*.[92]

On 8 March 1846 Robinson had been made an honorary Doctor of Dental Surgery by the Baltimore College of Dental Surgeons and it was his American connections which were to lead him on to the next venture in his professional life. Living just down the road from Robinson in Gower Street was his friend Francis Boott, an expatriate American physician who around 1830 lectured in medicine and *materia medica* at the Webb Street medical school.[93] Boott was

90 J.Tomes, *A course of lectures on dental physiology and surgery* (London: Parker, 1848). These had been originally published in the *Medical Gazette* between 1845 and 1847.

91 C.A.Harris, *The dental art, a practical treatise on dental surgery* (Baltimore: 1839).

92 *N.Y.Dent.Rec.*, 1(1847), 50-54.

93 *Lancet*, 1 1829-30, 15. Boott was not held in high regard by a visiting American doctor, who called his book one 'in wh[ich] he attempts to support a priori opinions by badly

also a friend of Jacob Bigelow of Boston who on 28 November 1846 sent him a newspaper account of the first general surgical operation carried out at Massachussetts Hospital on 16 October with the aid of ether administered by William Morton.[94] The letter crossed the Atlantic in the *Arcadia*, which docked in Liverpool on 16 December. It reached Boott on the Thursday 17 December. He communicated the contents of the letter to James Robinson (and others) and apparently the two of them set about improvising an apparatus constructed from part of a Nooth's Apparatus for the domestic manufacture of soda water.[95] Two days later, on Saturday 19 December 1846, they administered the first ever anaesthetic in Britain, although not in Europe, as is often said.[96] Boott had already sent Bigelow's account to the *Lancet* and on 21 December wrote to the editor again:[97]

> ... on Saturday, the 19th, a firmly fixed molar tooth was extracted in my study from Miss Lonsdale, by Mr. Robinson, Dentist of Gower Street, in the presence of my

observed & half-proven facts'. Quoted by J.H.Warner, 'American doctors in London during the age of Paris medicine' in *The history of medical education in Britain*, ed. by V.Nutton and R.Porter (Amsterdam: Rodopi, 1995), p. 359.

94 The newspaper cutting was from the *Boston Medical and Surgical Journal* and a reprint of a paper delivered to the Boston Society of Medical Improvement on 9 Nov 1846 by Bigelow's son, Henry Jacob Bigelow, a surgeon at the Hospital.

95 In a letter to the *Medical Times* dated 28 December 1846, Robinson states that on hearing Boott's news on 17 December 'I immediately contrived an apparatus for the purpose of testing these remarkable allegations', making no reference to Boott's involvement (*Med. Tim.*, 2 Jan 1847, 273). A letter dated 16 Jan 1847 speaks of 'an apparatus invented by myself and Dr.Boott, and now manufactured by Mr.Hooper' (*Med.Gaz.*, 4(1847), 166). On the next page of the journal (167) appears the statement, 'The invention of an ingenious apparatus, which has been employed at all the metropolitan hospitals, for the respiration of ether, is generally, and we believe with propriety, ascribed to Mr.Robinson, of Gower Street'.

96 The first anaesthetic in France was administered on 15 December 1846 (*Gazette des Hôpitaux Civils et Militaires*, 23 Jan 1847, vol.IX, 39, quoted by M.Zimmer, 'Des premiers brevets d'invention ... Pour une histoire du développement de l'anésthésie' (unpublished DEA thesis, Paris 7, Sorbonne, 1995), pp. 35-41 and 'Les premiers brevets d'invention en anésthésie générale', *Le chirurgien-dentiste de France*, 28 Sept 1995, 31-37).

97 *Lancet*, I 1847, 5-8. At this stage, Boott does not make clear who administered the anaesthetic. In his own later publication, Robinson, in alluding to the 'first trials in England' refers to 'that on Dec.19th, by myself, in the case of Miss Lonsdale' (*A treatise on the inhalation of the vapour of ether for the prevention of pain in surgical operations* (London: Webster, 1847), p. 7). Elsewhere, when speaking of the Lonsdale case, he uses the words, 'I etherized' (*Amer.J.dent.Sci.*, 5(1855), 178).

> wife, two of my daughters, and myself, without the least sense of pain, or the movement of a muscle. The whole process of inhalation, extracting, and waking, was over in three minutes.

Robinson and Boott had problems with the first apparatus and failed to anaesthetise their next three or four cases. Boott attributed this a design defect which allowed the exhalation to return to the bottle instead of to the atmosphere.

On 21 December, having observed Robinson and Boott in action in other cases over the weekend, Robert Liston performed the first general surgical operation under ether at University College Hospital, the removal of a leg, assisted by William Squire using his own apparatus.[98]

This was a fast moving field, as the new anaesthetists discovered by trial and error the parameters for success and modified their apparatus accordingly. Robinson had soon refined his own equipment (the *Medical Times* was to reproduce a woodcut of what it called 'a most perfect apparatus')[99] and continued his experiments:[100]

> I tried it for the first time on my servant, who in two minutes became so perfectly insensible as not to feel the application and pressure of a pair of forceps applied to one of the central incisors, although a portion of the gum was enclosed within their grasp ... The first case in which it was applied to practical purposes, was that of a girl thirteen years of age, of a healthy constitution and robust appearance. ... scarcely a minute elapsed before she became narcotized, and I took the opportunity to remove a deep-seated stump of the first molar of the lower jaw. On recovering herself, she appeared to be in a state of bewilderment, and enquired what I had given her, and how long she had been in the country; and on my asking whether she was now ready to have her tooth out, she answered she would rather postpone the operation till the next day. ... She had not felt the slightest pain, but had been dreaming of the country.

Robinson's next patient was a youth of thirteen or fifteen of a nervous disposition:

> To give him confidence, I was obliged to allow my servant to inhale in his presence. This overcame his fears ... He recovered in three minutes, and could not

98 F.Boott, 'Surgical operations performed during insensibility, produced by the inhalation of sulphuric ether', *Lancet*, I 1847, 5-8 and W.Squire, 'On the introduction of ether inhalation as an anaesthetic in London', *Lancet*, II 1888, 1220-21. In this second paper Squire recounts being taken by Liston to Boott's or Robinson's house on Saturday 19th.

99 *Med.Tim.*, 9 Jan 1847, 291.

100 J.Robinson, *A treatise on the inhalation of the vapour of ether for the prevention of pain in surgical operations* (London: Webster, 1847), p. 7.

> imagine how or when I had extracted the tooth. On being asked if he had been dreaming, he replied, 'No; I have been dead or something.'

On 28 December Robinson wrote to the *Medical Times* reporting details of his experiments so far.[101] This letter, in which he predicted that the discovery of anaesthesia would have effects as far reaching as had had the application of steam power, not only made sure that anaesthesia was widely and well-publicised, as Ellis rightly points out,[102] but also served to stake his claim to precedence.

Robinson continued to make trials of the technique and to demonstrate it to a wide variety of medical and non-medical audiences at his own practice, at Boott's house and in a number of London hospitals (including the Westminster Hospital, Westminster Ophthalmic Hospital, Guy's, University College Hospital, King's College Hospital and the Metropolitan Hospital), frequently administering anaesthetics for general surgical cases. On at least one occasion he and his apparatus were called in by Liston to take over the anaesthesia in mid-session,[103] for, widely recognised as the most skilful administrator in the country, both he and his apparatus were in great demand. Of all the devices in circulation in the first few weeks, Robinson's own improved version (later manufactured by the chemist Hooper) was only to be surpassed ultimately by that of John Snow, who had called on Robinson in Gower Street on 28 December to see this new discovery for himself.[104] At the end of the first three weeks, Robinson was described by the *Medical Times* as having more experience of the technique than anyone else.[105] (It was Robinson who first suggested the administration of oxygen with anaesthesia).[106]

The general and medical press were now full of reports of successful operations performed under anaesthesia and both the technique and those involved — including Mr Robinson — received the widest publicity. Within a few weeks inhalation anaesthesia became generally accepted in Britain, in no small part, in Ellis's view, due to Robinson's personal success. Such influential

101 *Med.Tim.*, 15(1847), 273-74.

102 Ellis, 'James Robinson, England's true pioneer of anaesthesia', 160. This important paper should be consulted for a professional view of the value of Robinson's work in this field.

103 *Med.Tim.*, editorial, 'Painless operations', 15(1847), 289-90.

104 J.Robinson, letter, *ibid.*, 15(1847), 273-74.

105 *ibid.*, 28 Jan, 15(1847), 328.

106 *ibid.*, 29 Mar, 15(1847), 610.

figures as Liston, who had been on the point of discontinuing their efforts, were won over by Robinson's consistent results. This was to turn the tide of opinion when reported back to America, where the discovery had met with some resistance.

Robinson never relinquished an active interest in advances in anaesthesia,[107] contributing to the debate on the introduction of chloroform by Simpson in November 1847[108] and devising his own 'highly ingenious' inhaler, as it was described by the *Lancet*.[109] However, a letter of his published in the *Lancet* on the quantities of chloroform he had administered in different operations was reprinted in the *New York Dental Recorder* followed by an editorial comment on the death of one of Robinson's patients in the chair.[110] Several years later, in 1855, a paper appeared in an American journal describing his trial of anaesthesia by cold at the Royal Free Hospital and how he was currently devising an improved method of delivery.[111] He makes a point of giving details, for he has heard that a British dentist is seeking to patent a similar device. With characteristic Robinsonian forthrightness, he says,

> This mania for patent rights by professional men, I hope to see discontinued ... or otherwise we shall not be surprised some fine morning to find onesself paying a 'trading tax' for an *improved* method for boiling eggs — and another for eating them.

The same paper expresses his obvious disapproval of the military decision not to use chloroform to treat wounded soldiers in the Crimean War.

Despite this continued involvement, Robinson withdrew from the forefront of the development of anaesthetic techniques at end of April 1847, after only four months. Why he did so, is not clear; Ellis suggests it may have been prompted simply by the need to attend to his dental practice, but also suspected some quarrel between him and Liston.[112]

107 see Ellis, 158-59, for details of continuing contact between Robinson and Snow and Simpson, and for a full exposition of the events of this period.

108 *Lancet*, I 1848, 135-36.

109 *Lancet*, II 1847, 655.

110 *N.Y.Dent.Rec.*, 3(1849), 78-79.

111 J.Robinson, 'Anesthesia in dental surgery: its history and introduction into Europe', *Am.J.dent.Sci.*, new series, 5(1855), 178-91.

112 R.H.Ellis, 'The life of James Robinson, Britain's first anaesthetist', paper read to the

During the period of his intense activity in this field, Robinson had not omitted to record his observations and within a few weeks — it was listed in *The publishers' circular* of 1 March 1847[113] — was ready with the first ever book devoted to the subject, *A treatise on the inhalation of the vapour of ether*, dedicated to Francis Boott. It begins by reproducing the letter addressed to Boott from Bigelow and the account of the first few days' experiments sent by Boott to the *Lancet*. There then follow 'Further experiments in England' (25 of his own dental cases), details of the apparatus and the method. The remaining pages are occupied with reports (some already published in the medical press) of anaesthetics administered in London and elsewhere in England in those first few weeks, some by Robinson himself but most by others who apparently sent their accounts to Robinson in response to his direct enquiries. (This is somewhat reminiscent of Bartholomew Ruspini's advertising booklet for his styptic which consisted largely of letters of recommendation from various medical men he knew to whom he had sent samples of his product). Both the *Lancet* and the *Medical Gazette* welcomed the book as a useful compendium of the situation so far, but reserved more space for their reviews of Snow's book on the same subject published a few months later in October.[114]

The tone of this second book of Robinson's reflects what Ellis rightly sees as his pragmatic and empirical approach, compared with Snow's more cautious and scientific writing. He clearly takes a naive delight in recounting the famous people (including the future Napoleon III) to whom he demonstrated the technique, ostensibly to show that anaesthesia was not limited to the charity hospitals. Nevertheless, the cases are recounted with a freshness and humanity which is striking and epitomise Robinson's personal (and perhaps slightly outdated) interpretation of what it meant to be 'scientific', that is, to be a close clinical observer and recorder. These accounts must have made almost miraculous reading to his contemporaries. One of the more entertaining cases (by his own admission) reads as follows:[115]

> A solicitor was anxious to have two teeth removed while under the influence of ether. After inhaling for four minutes he became narcotized, and the teeth extracted. On partial recovery he took me by the hand, and in a semi-jocose tone, said, 'Now we'll dance the Polka — Now we'll dance the Polka.' A proposition that sufficiently proved his unconsciousness of what he was talking about: he soon however settled down into a more sober state of mind, when he assured us that he was as perfectly unconscious of any pain as of the proposal he had made, only a few minutes before.

Lindsay Club (now the Lindsay Society for the History of Dentistry), 27 February 1985.

113 J.Robinson, *A treatise on the inhalation of the vapour of ether*, with a preface by Richard H.Ellis (Illinois: Baillière Tindall, 1983), vii.

114 *Lancet*, I 1847, 284 and *Med.Gaz.*, 4(1847), 379.

115 Robinson, *A treatise on the inhalation ... of ether*, 21.

Once again Robinson had demonstrated to himself and others that he was capable of performing the extraordinary. His eminence in the use of anaesthesia cannot but have had a beneficial effect on his dental practice and in 1849 he was appointed dentist to Prince Albert; the dentist to the Queen at this time was the eminent Edwin Saunders.

Ironically, although this episode established Robinson's personal position in the medical field at large, the introduction of anaesthesia probably set back the relative status of dentists as a whole. Whereas before anaesthesia tooth extraction had been the principal surgical procedure and general surgical operations a comparative rarity, now a whole new world of possibilities was opened up to 'pure' surgery; the surgeons shot ahead in both experience and, as a result, in status, regarding the dentist's field of operation as even more limited and trivial than they had before.

This was the period when Robinson's name began to feature regularly in the American dental press. At the same time as he was working on his book on anaesthesia, the first of four parts of a lengthy piece of his on the importance to dentists of a knowledge of medicine and surgery appeared in the *American Journal of Dental Science*.[116] As with his books, these observations are based on his clinical experience and are designed to demonstrate his reading and education (a riposte, perhaps, to the *Medico-Chirurgical Review*), for Robinson never seems to have embarked on original scientific research in the manner of Tomes. In 1849 the *New York Dental Recorder* noted a report he had sent to the *Lancet* on a new filling material he had devised consisting of collodion and asbestos and the following year reprinted an extract on tic douloureux from his first book, 'a work containing much practical information for the dental operator and which should be in the library of every dentist'.[117] Also in 1850, in his capacity as European correspondent to the *American Journal of Dental Science* Robinson contributed a paper on the 'extensive trial' he had made of Evans's amalgam 'at a public hospital' and a report of a meeting in London at

116 J.Robinson, 'Observations upon the importance and value of a knowledge of the collateral branches of medicine and surgery in connection with dentistry', *Amer.J.dent.Sci.*, 1st series 7(1847), 324-29; 8(1847), 29-33, 8(1848), 113-19, 247-53; the first 2 parts were reprinted in *N.Y.Dent.Rec.*: II(1847-48), 24-28, 48-51.

117 'New filling for teeth', *N.Y.Dent.Rec.*, 3(1849), 168 and 'Nervous affections of the face frequently mistaken for neuralgia or tic douloureux', *ibid.*, 4(1850), 274-77.

which George Harrington demonstrated his device for using tortoiseshell as a denture base.[118] In July of the same year he sent his address on 'Dental education in England' to the Society of the Alumni of Baltimore College of Dental Surgery to be delivered on his behalf.[119] As remarked earlier, this was a much more measured account of the state of dental practice in London. In it Robinson drew attention to how the situation then obtaining was partly created by the medical profession, since dentistry was frequently the destination of failed medical students and unsuccessful doctors.

It was also during this period (1851) that Robinson published his *The gold, its alloys, and other metals used by dentists*, a short pamphlet addressed largely to the general public warning them of the dangers of base metals used in denture bases. A paper on the same subject subsequently appeared in the *American Journal of Dental Science.*[120] Tomes also published a work on this subject in 1851, although it is not clear who goaded whom into print.

Surprisingly, the next few years of Robinson's life, 1852-55, appear to have been quiet ones. One can scarcely believe this to have been so in reality, bearing in mind his track record so far. He must surely have been involved in some startling venture or other of which we as yet know nothing. However, he does not come to our notice again until the next attempt to rally dentists to professionalise themselves at a time when medical reform was again in the air.[121]

This fresh impetus was initiated when Samuel Lee Rymer wrote a letter to the *Lancet* dated 25 August 1855 on the necessity of a College of Dentists on the American model.[122] He called for the College of Surgeons to appoint examiners for a licentiate in dental surgery and for a college of dentists to be

118 J.Robinson, 'On Evans' amalgam for filling teeth', *Am.J.dent.Sci.*, 10(1850), 126-34. J.Robinson, 'The application of tortoise-shell to mechanical dentistry', *Am.J.dent.Sci.*, 10(1850), 199-202, reprinted without the diagrams as 'Tortoise-shell applied to dentistry' in *N.Y.Dent. Rec.*, 4(1850), 272-74.

119 *Am.J.dent.Sci.*, new series, 10(1850), 225-56.

120 J.Robinson, 'The alloys of gold for dental purposes', *Amer.J.dent.Sci.*, 2nd series, 2(1852), 269-85.

121 Amongst many other things, the 1858 Medical Act was to revise the charter of the Royal College of Surgeons and to establish a Medical Register administered by a General Medical Council.

122 The *Lancet* and the other medical journals followed the events of the next few years with interest. Details of the movement are recorded in their pages as well as in the rival dental journals.

established to provide the necessary dental education. The following July the appeal was repeated in the new *British Journal of Dental Science*, and an advertisement was placed in the general press announcing a public meeting to be held on 22 September 1856. A steering committee selected from the most promising of the respondents to this announcement had met two days before; Robinson, it should be noted, was not among them. At the meeting, it was duly resolved to form a society and to promote an educational scheme.

It was also announced, to the complete surprise of most of the organisers and audience, that educational proposals had already been put to the College of Surgeons in the form of a 'memorial' by another group the previous December. It transpired that this rival movement had been meeting in complete secrecy since November, several months after Rymer's letter to the *Lancet*. The 'memorialists', as they became known, were then forced out into the open and proved to be, not surprisingly, very much the same group as had approached the College the first time round, in the 1840s.[123] Whilst waiting for their reply from the College, they had also been busy writing round the country to selected (and very flattered) dentists inviting them to become members of a new Odontological Society of London.[124]

Undeterred by this startling news, Rymer's new group pressed on, drew up its provisional rules, sent them to every known dentist in the country and publicised a meeting to establish a dental association to be held on 11 November 1856 at the Freemasons Tavern. Whereupon, the Odontological Society initiated its own proceedings, unannounced, on the 10 November, and thus laid claim to be the oldest dental society in the country. This way of going about things revived bad memories in the minds of those who had been involved in attempts at reform in the days of *Forceps* and aroused great resentment in the profession at large. Cudgels were dusted down and battle engaged once more with the old enemy.[125]

The College of Dentists faction, meanwhile, was in need of a chairman

123 Samuel Cartwright, FRS; John H.Parkinson; John H.Parkinson jun., MRCS; Edwin Saunders, FRCS; W.M.Bigg; Samuel Cartwright jun., MRCS; G.A.Ibbetson, MRCS; James Parkinson; John Tomes, FRS; H.L.Featherstone; Alfred Canton, MRCS; Robert Nasmyth, MD, MRCS; J.L.Craigie, FRCS; T.Barrett, MRCS; Arnold Rogers, FRCS; Thomas A.Rogers, MRCS; Hubert Shelley, MB MRCS; S.J.A.Salter, MB MRCS FLS.

124 Some of their replies are preserved in the archives of the Royal Society of Medicine (MS 229).

125 For fuller details of the membership of each group (their professional experience, age profile, geographical location, etc), see F.C.Hillam, 'The development of dental practice in the provinces from the late 18th century to 1855' (unpublished PhD thesis, University of Liverpool, 1986), pp. 268-79.

for its own meeting on 11 November. Rymer (then only twenty-two and possibly, one suspects, acting as a front for a behind-the-scenes organising group) saw himself primarily as the convenor and no eminent member of the profession had come forward to lead the movement; in fact, some, like Bell, had refused to do so. Alfred Hill, the secretary of the committee (and later to write a history of the reform movement which this account takes as its starting point), spent two whole days going unsuccessfully from dentist to dentist on a short list, until only one was left: James Robinson.

Robinson was fully aware that he was the last resort. He could see there was a crisis and told Hill that he could see no reason why he should be made use of to get them out of their difficulty. He too refused. Urged to reconsider, he changed his mind a few days later. This must have been a bitter-sweet moment for Robinson; the reforms he had thrown his energies into ten years before now seemed likely to come about, but not because of him. Hill tells us 'simple justice to his memory demands that it should be put on record that no lower motive than the strong desire to be useful to the struggling members of the profession actuated him', but yet he adds that when Robinson made his decision[126]

> a spirit of daring, if not of defiance, was in active operation. *Because* others had been timid, he determined to show that fear had no control of him.
>
> To one of such a temperament there was also a certain amount of fascination in the post. It offered ample opportunities for the display of generalship in guiding the affairs of the institution itself; ... there would be sure to be found a certain amount of activity and excitement which were alike congenial to his natural tastes. ... there would be plenty of work, a certainty of conflict with apathy, pride, and indifference, with just a chance of a happy hit or two in directions which had hitherto been sealed against him. ... His remark ... at the time of his making his decision was, 'Remember, if I draw the sword, I fling away the scabbard.' Henceforth [continues Hill] ... there was to be war in earnest.

(We begin to get some inkling of what lay behind the dark, piercing eyes which *Forceps* had remarked on ten years before).

Thus, with these ominous words, James Robinson became on 16 December 1856 (when the final laws of the College had been presented) first president of the College of Dentists.[127] His resounding inaugural speech was liberally cheered, especially when he declared that, whilst they had the highest regard

126 Hill, p. 72.

127 Membership was to be open to all dentists in full time practice until 31 Dec 1857, after which entry was to be by examination. The College had over 150 members at this stage compared with the Society's 50.

for the College of Physicians and an equal respect for the College of Surgeons, they thought that dentists were best educated by a College of Dentists.[128]

But James Robinson did not remain President for long. During 1857, both the rival groups were anxious about their position under the new medical bill currently under discussion; the College of Dentists, which had already started its series of lectures, was keen to achieve incorporation, the Odontological Society to get its proposal of a dental diploma included in changes to the constitution of the College of Surgeons. By August, with no progress made on either front, they overcame their mutual antipathy so far as to agree with the *Lancet* that amalgamation would be in the best interests of both parties. By the end of the year, their committees had drawn up a joint proposal for establishing a dental school with an examination set by the Royal College and with members of the new amalgamated society as examiners for dental subjects. An amicable dinner hosted by the Odontological Society, to which Robinson was invited and at which some of the antagonists of long-standing (including Robinson and Tomes) met each other for the very first time, seemed to seal the matter. However, at a meeting of the College of Dentists on 8 January 1858, the general membership rejected amalgamation — whereupon the officials, some of the committee and sixty members (out of 300) resigned. Robinson and a number of others went over to the Odontological Society, which by now had its fully worked-out curriculum. By June, Robinson was on the organising committee of their proposed dental hospital and in July was made a trustee.[129] In the same month the Royal College was empowered to grant a Licence in Dental Surgery and in December 1858 the Dental Hospital of London (later to be known as 'the Royal') opened its doors in Soho Square; plans were going ahead to inaugurate the associated School. So, after just over a year as president of the College of Dentists, during which time he promoted its interests with characteristic vigour, Robinson was now on the other side, and apparently taking a prominent role. But all did not run smoothly there, either.

The first hint of friction came at the end of August 1859 (only nine months after the opening of the Hospital) when Robinson wrote to complain about inaccuracies in the list of subscribers to the new charity.[130] A year later, in July 1860, a Mrs Young of Twickenham claimed that, although she had paid 10 guineas to Robinson, her name did not appear in the list of Life

128 These proceedings were widely reported on in the British dental and medical press and in America.

129 Minutes of the Dental Hospital Organization Committee (C.Bowdler Henry, unpublished history of the Royal Dental School, pp. 285 & 291).

130 Minutes of the Committee of Management, 31 Aug 1859 (Bowdler Henry, p. 333).

Governors. Robinson was asked, by letter, to explain himself. His letter of reply on 15 November asserted that he no longer had the same confidence in the Hospital as before.[131] When in December the Hospital came to renew its lease of 32 Soho Square, Robinson was invited to resign his position of trustee, a suggestion he agreed to. The whole business came out into the open at the Annual Meeting of the hospital on 31 January 1861.[132] It seems not only had Robinson addressed critical remarks to the President, Lord Stanley (recruited to the position by Robinson himself), but had sown doubt in the minds of a number of the subscribers, with the result that some subscriptions were not renewed. He had also kept back a life subscription from one of his patients and made trivial complaints about spelling mistakes in the list of subscribers and about rudeness on the part of the hospital porter. If that were not enough, he had been responsible for the inclusion on the list of vice-presidents of the name of the Bishop of London without, apparently, proper authorisation. When asked to produce his authority for this last action, Robinson replied that the Bishop's promise had been verbal and enclosed a quotation from a letter from the Bishop's private chaplain to the effect that he would remind His Grace of the matter. In the end Robinson wrote to the committee requesting that

> no further correspondence in reference to the Dental Hospital will be continued, as my time is too much occupied with other matters to be engaged in a fruitless correspondence.

Very true, for by now Robinson had rejoined the College of Dentists side. In fact at the same time as he had been ruffling feathers in the Odontological camp and making his first complaint about the subscribers' list, in August 1859, he was appointed one of the examiners for the diploma issued by the College of Dentists.[133] When the Metropolitan School of Dental Science opened at the College's premises at 5 Cavendish Square in October 1859 (six months earlier than the rival faction's London School of Dental Surgery), Robinson donated a 10 guinea [£10.50] student prize in perpetuity. By October of that year, at the same time as he was expressing his lack of confidence in the Dental Hospital of London, he was already a vice-president of the College and in 1860 its treasurer.

There had been a certain amount of changing sides since the failure of the amalgamation plan in early 1858, but this second volte face of Robinson's was

131 Bowdler Henry, p. 348.

132 *Brit.J.dent.Sci.*, 4(1861), 49.

133 The diploma carried no legal weight and the College was not incorporated.

considered extraordinary. Hill says Robinson later told him that the reason for his leaving the Dental Hospital of London was his personal dislike of being associated with one particular member of staff; who this was is not revealed. (It may possibly have been Thomas Underwood with whom Robinson had been in partnership when the second phase of the reform movement started in 1855. Underwood had been selected by the College of Dentists to represent them over the amalgamation question, not the President, James Robinson). *Dental Review* somewhat cryptically remarks that he came to realise that the independent route was the correct one after all and that 'he had failed to perceive an influence over his own free will'. Robinson's action clearly caused a great sensation, for Hill comments, 'the method he employed in getting quit of his position in and connection with the Dental Hospital of London, to say the least, was not to be admired, and many considered it altogether inexcusable'.[134] He adds that it was evident that Robinson's 'ardent love for prominence and influence was not extinguished, or indeed extinguishable'. Whatever lay at the root of Robinson's move, 'every possible reparation was made toward counteracting the effects of any injury sustained by the college from his resignation of the presidency'.[135] His return to the fold regalvanised the College of Dentists and largely due to his unremitting efforts, in November 1861 it opened its own National Dental Hospital at 149 Great Portland Street (to become the Dental Department of University College Hospital in 1915). After the customary ceremonies, the venture was launched with a splendid late dinner. 'The elegant entertainment at the close was most liberally given by Mr Robinson, to whom the honour of founding the hospital is, by universal consent, accorded'.[136]

All this intense political activity had given Robinson further opportunities for dental journalism, as each faction acquired or set up its own journal to promulgate its point of view and attack the other side. When the *British Journal of Dental Science* (initially sympathetic to the College of Dentists) was acquired by the Odontological Society group, Robinson founded early in 1857 the *Quarterly Journal of Dental Science*, of which he became co-proprietor, principal editor and contributor. His presidential address and his paper on adaptations of the forceps both appeared there and were later published in American journals.[137] Details of meetings and lectures at the College were

134 Hill, p. 302.

135 As note 2.

136 *Dent.Rev.*, 3(1861), 567. Quoted by J.A.Donaldson, *The National Dental Hospital, 1859-1914* (London: British Dental Journal, 1992), p. 15.

137 Presidential address, *Quart.J.dent.Sci*, 1(1857), 39-45 (reprinted *Am.J.dent.Sci.*, 7(1857),

published, as well as extracts from a new work on dentistry by Robinson himself. This *Quarterly Journal* ceased publication in 1859 for reasons which Hill, who was one of the editors, glosses over but which must surely be related to the fact that two of those intimately involved with it (Hill himself and Robinson) had by now joined the opposing faction. The role of organ of the College was taken over by the new *Dental Review*, to which Robinson contributed two papers on orthodontics, a special interest of his, in 1859.[138]

Although still at loggerheads, the College and the Odontological Society could look forward to 1862 with a fair degree of confidence; each had achieved its principal aims of founding a society, a dental qualification, a school and hospital, and each was publishing its transactions and represented by a dental journal. What no one could predict was that James Robinson would die on Tuesday 4 March in bizarre circumstances. The previous Thursday he had attended a committee meeting at the Hospital and after his usual surgery on Saturday, retired to his house in Kenton, Harrow for what was left of the weekend. On the Sunday he had been entertaining friends there. They left about 5pm and as he was walking back to the house, a stray twig on one of his favourite rose-bushes caught his eye. He took his pruning knife out of his pocket and dealt with the offending sprig. He was stooping down at the time and the point of the knife entered his left thigh. Although he feared serious injury at first, there was no bleeding at this stage. A handkerchief was bound round the leg and he went to bed. His wife, without his knowledge, then immediately sent for a doctor. Robinson was found to be in a state of collapse and when the bed clothes were turned back, it was discovered that he was drenched in blood. The principal in the practice was sent for and the haemorrhage staunched, but despite the concerted efforts of a further five doctors (all old and close friends), Robinson never recovered and died at 12.45am on the Tuesday morning. It was at first supposed that the haemorrhage was from a vein, but the post mortem revealed that a large arterial branch of the *vastus internum* had been wounded. He was buried in the family grave of his wife's family at Highgate Cemetery on 11 March 1862 in the presence of a host of professional colleagues and friends.

Robinson's obituary in *Dental Review*[139] was reprinted in *Dental Cosmos*,[140] but this journal also carried a special report from their London correspondent which referred to him as the practitioner whose 'name was probably more extensively known in the world than any other ... as an energetic and valuable member of our profession'.[141] A further item appeared later in the year, a reprint of a piece by the editor of *Dental Review*, 'one who appears to have known him intimately':[142]

> In America and Germany, his reputation as a dentist is well known. In England, his acquaintance among the dental profession is, probably, greater than any man's. ... The daily newspapers record his death as that of a public character ... [he] has made for himself a world-wide reputation ... he receives honours, which, at least, in this country, have never been previously accorded to any member of the dental profession. ... One naturally inquires what were the mental and physical endowments of the individual which enable[d] him to accomplish in a comparatively short space of time what so many fail to perform in a lifetime? Great activity, great energy, and entire devotion to the work in hand were among the marked traits of Mr Robinson's character. To these must be added a large amount of self-confidence and self-esteem ... but while these qualities may be sufficient to ensure success, others of a more kindly and social nature are requisite to produce that general popularity which Mr Robinson enjoyed in an eminent degree.

The *British Journal of Dental Science* willingly bore testimony to 'his talents, his professional acquirements, his great energy of character, and his many social virtues', but could not resist the temptation to point out one last time that they had differed entirely with Robinson on all aspects of professional politics and had often had occasion 'freely to condemn his public acts'; they nevertheless added to the end of the obituary *'Requiescat in pace!'*.

Robinson's death did not go without mention in the medical press. The *Lancet* called him 'a man of much energy of character and of great mechanical skill ... in social life he was much and deservedly esteemed'.[143] To the *British Medical Journal* he was the 'estimable member of the dental profession, so well known as the founder of the National Dental Hospital, and by his earnest endeavour to raise the character of dentists ... Mr Robinson's name is intimately connected with the early history of anaesthetic agents, he having been the

389-400, and *Dental Newsletter*, 10(1857), 308-14); 'The adapted forceps', *ibid*, 1(1857), 22-24 (reprinted *Am.J.dent.Sci.*, 7(1857), 439-42, 8(1858), 67-78 and 271-79).

138 'The causes of irregularity of the teeth', *Dent.Rev.*, 1(1859), 268-73, 334-39, 396-400; 'The mechanical treatment of the irregularities of the second teeth', *ibid.*, 480-86, 535-38, 591-94.

139 This obituary is the sole source for James Robinson's date of birth.

140 *Dent.Cosm.*, 3(1862), 670-72.

141 *ibid.*, 535-36.

142 *ibid.*, 665-66. The *Dental Review* obituary also appeared in the *Dental Register of the West*, 16(1862), 239.

143 *Lancet*, 8 March 1862, 266.

first to employ them in this country in dentistry'.[144] The *Medical Times*, also made reference to his role in the introduction of anaesthesia and considered his death would sadden many of the medical profession 'among whom he was well known and much respected'.[145] This obituary was followed in the next issue by an item in the 'Notes, Queries, and Replies' column which is worthy of *Forceps*. It took the form of a letter to the editor from an 'Ambrose Pare' redivivus expressing his surprise[146]

> that the ligature of arteries is still unknown to English Surgeons and that the old plan of tying a tight bandage round a wounded limb is resorted to, even the cautery (an old, but efficient mode of stopping bleeding,) being also neglected. At least, so I gather from what I read of the death of one whom I hear spoken of as one of your busiest dentists, Mr Robinson. He wounded a muscular branch of one of his femoral arteries; he was attended by Messrs Hancock and Jackson, Messrs Wotton and Harris, Bridgewater and O'Brien; yet not one of these Surgeons (as far as I can learn) tied the wounded vessel, and the poor dentist bled to death. Allow me, then, to refer the Profession to my demonstration of the superiority of the ligature over other ruder methods of stopping the flow of blood from wounded arteries ...

A certain shocked disbelief is discernible in some of these reports, but the death certificate includes in the explanation of the cause of death the word 'accidentally'; the informant was his colleague at the Royal Free Hospital, Thomas Wakley, coroner for Middlesex.

Robinson's will had been made only the previous October; his assets were valued at under £8,000. His practice and all his professional library and copyrights he left to his wife's nephew, Ridley Manning Webster, assuming him to be 25 and a dentist and provided he gave half the profits of the practice to Robinson's widow. In the event of Webster's not yet being a dentist over 25, his widow was to approach one of Robinson's former pupils to run the practice until he was. The practice was continued from 1862-67 by Haslar Harris. Ridley Manning Webster (who qualified as a dentist in 1868 and died in 1923) appears to have presented at least some of Robinson's books to the National Dental Hospital, which in turn had disposed of some or all of them by 1953 when they were in the hands of a bookdealer.

So ended prematurely an astonishingly eventful life. Robinson had embarked on so many different ventures, and broken so much completely new

144 *BMJ*, 8 Mar 1862, 269-70.

145 *Med.Tim.*, 15 Mar 1862, 283.

146 *ibid.*, 312.

ground. He founded the first dental journals in Britain, thus setting the precedent for the periodical as first destination of new work and ideas rather than the book. In the process, he established a public forum for dentists of the day which was quite new and palpably exciting. He was the first to give a general anaesthetic in Britain and by his success was instrumental in convincing others at home and abroad to persevere. He was the first President of the College of Dentists, a body which was more than a dental society and quite independent of other professions. (Had this line of development been pursued, dentistry could have been as self-governing as pharmacy, the law and veterinary surgery a hundred years before the institution in 1956 of the General Dental Council; instead it allowed itself (connived, even) in the short term to become a colony of a medical profession which not only had no interest in it but considered it as some inferior trade). He was the author of the first detailed text on dental mechanics published in Britain and of the first book on anaesthesia published anywhere in the world.

Not all Robinson's endeavours, especially those which were probably nearest to his heart, were so successful from his point of view. He did not succeed in carrying the profession towards reform in the early 1840s; when it did move in that direction, this was not attributed to his own efforts, but to those of the 22 year old Samuel Lee Rymer. 'His chief desire was to stand at the head of his profession, and to be the centre from whence all progress and reforms should appear to emanate'. Nevertheless, he almost single-handedly founded a dental hospital.

Yet all his individual involvements seem to have been of fairly short, if intensive, duration, lasting no more than a year or so and in some cases no more than a few months. Hill was probably right to point to Robinson's need for excitement and a need to prove himself fearless; once this element of an adventure had dissipated, or perhaps when continuance depended on more detailed considerations than appealed to him, his irritability brought him into conflict with others and he was off in pursuit of something else. Clearly ever open to and excited by new ideas — Hill calls him 'an eager searcher after information' — he seems to have been somewhat impatient of any but pragmatic detail; he was more characterised by promptitude than precision, says Hill. The first part of his 1846 book consequently deals in considered generalities rather than in the display of detailed knowledge contained in Tomes's of the same period; his work on anaesthesia similarly lacks the reflection of Snow's slightly later work. Whilst clearly widely read, Robinson's view of what it was to be a 'scientific' dentist principally embraced a rejection of mystery and a reliance on objective clinical observation, which perhaps links him more with eighteenth century rationalism rather than with the new science of his day. He frequently speaks of 'useful' information and its contribution to the 'art of dentism'; one

can imagine him deriving huge enjoyment from the Great Exhibition of 1851.

This search for the sparrow behind every peacock lay at the root of his dealings with the world. Pretension, whether displayed by misleading opportunists or by those who tagged MRCS to their names with the intention of impressing, was like a red rag to a bull to Robinson and a call to do battle with the self-important and the self-seeking. At the same time, he was himself described as 'quick to perceive what he considered his opportunity, and equally prompt to take advantage of ... it'; and he was certainly anxious to impress by demonstrating his own influential connections in both the social and professional worlds. Yet whilst his conviction of his own rightness and his high estimation of his own worth brought him into frequent conflict with others (a situation he often seems to have deliberately courted), he does not appear to have been self-righteous; Hill recalls that whilst taking open delight in his success, he was equally frank about how he had achieved it and in acknowledging those who had helped him along the way. As Ellis has pointed out, there is a certain naivety discernible in his accounts of the prestigious people to whom he has demonstrated ether. Indeed, a degree of disingenuousness seems to have characterised many of his actions, an impression borne out by Hill's comment that no one 'put off the harness at the close of the day more eagerly, or enjoyed the freedom from the demands of practice with more boyish hilarity than he'; this was no dour zealot or pompous prig (even a superficial reading of his accounts of clinical cases is enough to convince of the humanity of his personality).

Rather he was one continually driven to prove his own capabilities or even superiority, and that the recognition he sought could be won *without* having followed the conventional route. Early on in his career Robinson showed his ability to set up a highly successful dental practice despite an inauspicious beginning so far as training went. This seems to have been achieved by dint of determination and hard work, for we learn that, whilst good, he was not exceptionally gifted as a dentist. His early appointment at the Metropolitan Hospital demonstrated that it was not necessary to be a member of the Royal College of Surgeons, like Bell, to enter the world of the voluntary hospital. (In his attitudes towards the Royal College of Surgeons and in his style of journalism, he almost seems to have taken on Thomas Wakley at his own game).

It was this period which saw the beginnings of what must be seen as at least an unconscious rivalry with John Tomes, whose career has so many parallels with Robinson's.[147] It is noteworthy that it was not Robinson who

147 One feels the main difference between the two men's approaches was that Tomes was anxious to be accepted by the medical hierarchy and leave dentistry behind, whilst Robinson delighted in being a dentist and sought to create a new establishment by changing the profession. He was sincerely devoted to dentistry and to contributing whatever he could to elevating its status. His main criterion for judgement of others was whether they had advanced the state of dentistry and he had unbounding faith in the profession's ability to reform itself from within.

was selected as emissary of the College of Dentists to meet Tomes over the amalgamation question, but his partner Thomas Underwood. When Tomes's lectures on dentistry were published in the *Medical Gazette* from 1845, Robinson made sure his own work appeared in 1846 before Tomes's saw the light of day in book form in 1848.

If Robinson needed proof of his capabilities and acceptance in the general medical field, he had it with his initial success in anaesthetics (unacknowledged by Tomes). Here he was in rivalry with John Snow and it was perhaps after proving his proficiency to his own satisfaction that he withdrew from the forefront of this field and again rushed to get into book form before his rival.

The last major challenge which Robinson took on gave him the ideal opportunity to prove he could do better. It seems somehow almost inevitable that, having perhaps found his influence not as great as he would have liked it to be in the Dental Hospital of London, to the bewilderment and contempt of some, he swiftly reverted to the College faction where he proceeded to energise the Metropolitan School and found his own rival National Dental Hospital. Whether he would have stayed long associated with either had he lived, we cannot know. As it was, the two sides lost heart for the fight after Robinson died and amalgamated into the Odontological Society of Great Britain.

His fiery courage and his iron determination so often proved just what was needed for the occasion, but the other side of the same coin — the hot-headedness and rash impulses which frequently overruled his judgement and led him into actions he later regretted — rendered him a liability to any organisation he was involved with, be it College of Dentists or Odontological Society. When they found expression in his journalism, they were more divisive than productive for his own cause and served as much to unite the other side as to galvanise his own. Robinson undoubtedly went about his onslaughts more as a 'double-handed broadswords-man rather than the skilled fencer with the foil', one whose blade made an ugly wound whenever and wherever it fell, at times missing its mark and leaving his antagonist 'in possession of a momentary advantage'. This apparent lack of finesse must have made him seem offensive to men like Bell and led Bowdler Henry to dub him 'somewhat vulgar'. Yet this side of him did not seem to be a prominent feature of other areas of his life and he was held in respect by the medical profession.

James Robinson was seen as paradoxical by those who knew him, and the impression scarcely decreases with time. Kindred spirits were devoted to him

but his outbursts 'repelled all those whose temperament was opposed to vehement, resolute action' and prevented him from 'winning the esteem and securing the co-operation of many of the leading dentists of his day' who nevertheless acknowledged his amazing energy and love of work. His opponents assumed he was motivated purely by the desire to oppose. Rather there seems to have been in Robinsón a deep-seated and almost paranoid resistance to being dominated, a 'keen susceptibility, [an] almost instinctive discovery of anything like the curb-rein'. Its public expression is to be seen in his vision of an independent dental profession, setting its own standards and examinations, commanding respect on its own merits and patronised by no one.

Although he saw himself as somewhat reserved and even shy, Robinson was himself well aware of the chaotic proclivities to which he was prey and which he could not always keep in check. The demands of dental practice must at times have proved a real trial to him. His advice to dental students reads like the fruits of experience, and perhaps of an internal struggle:

> [A dentist] ... must learn to command nerve and firmness, and never to exhibit the slightest alarm under trying circumstances. Without reference to the station of his patient, he must be calm, bold and precise. He must not suffer himself to be influenced in any degree in the execution of his professional duties, against the dictates of his better judgement. He must strenuously cultivate an easy, gentlemanly deportment in the surgery, combining the proper degree of dignity with a becoming sympathy for his patient; so far as some tenderness is consistent with the offices he is called upon to perform. He must be governed by a high sense of honour, and express it in a friendly politeness that will secure confidence, reassure timidity, and give the public just grounds to form a favourable opinion of his ability and integrity. He must observe the utmost cleanliness in his person, recollecting that it is the patient's *mouth* which he has to treat. In the course of his manipulations, he must not touch the face further than is requisite to support the part he is about to operate on. Under no circumstances must he make a display of his instruments, nor after one patient has been treated, permit another to enter the apartment before all the instruments, cloths, glasses, &c., previously used, have been removed. He must take no snuff, and eschew tobacco. In short, he must be amiable, agreeable and inoffensive. ... the *mens conscia recti* is the very root of calmness, and of the best kind of courage, as well as of those amenities of manner which are the most certain to be acceptable to others. We commend the acquisition and preservation of it to the rising generation of dentists; and this is the last and best advice that we have to offer.

A somewhat different persona from the one we have seen in action, but yet another facet of that complex individual who was James Robinson, professional irritant and Britain's first anaesthetist.

ACKNOWLEDGEMENTS

I am grateful to R.A.Cohen for drawing to my attention publications by James Robinson not listed in the *Index to Dental Literature*, to Howard Merrill for the extract from Charles Brown's memoirs (previously unnoticed by any writer on Robinson) and to Lyndsay Lardner (Assistant Librarian, Reader Services, Wellcome Institute for the History of Medicine) for discovering reference to the London College of Medicine in Sprigge's life of Thomas Wakley. I have profited in a different way from intermittent discussions with Nita Burnby on the state of medical, dental and pharmaceutical practice in London in the early part of the nineteenth century, but would point out that any erroneous conclusions I have come to on the subject are purely my own. A.J. George (Archivist, Southampton City Council) is especially deserving of my thanks for the searches he made of Anglican parish register indexes of the city in pursuit of James and Charles Robinson, as is Dawn Squires (Highgate Cemetery Ltd) for supplying me with details from the records of grave owners. Most of all, I am deeply indebted to the Director of Curatorial Services of the Dr Samuel D. Harris National Museum of Dentistry, University of Maryland, Baltimore, Dr John M. Hyson, Jr, for supplying me with photocopies of Robinson's publications in early American dental journals not easily available in Britain.