GENERAL

IN BRIEF

- Describes the development and absorption of the chemist-dentist into dental practice.
- Illustrates the chemist-dentists as co-heirs of the toothdrawers
- Shows social change in dentists' identity
- Accounts for the ending of dental apprenticeships
- Notes the change in educational patterns in dentistry in the nineteenth century

Ethics: How the Apothecaries Act of 1815 shaped the dental profession. Part 2. The chemist-dentists and the education of dentists

M. G. H. Bishop¹ and S. Gelbier²

The Apothecaries Act of 1815,¹ (revised by the Act of 1823)², has been credited with being the most important forward step in the education of the general medical profession in the nineteenth century,³ although a closely argued revisionist view of its significance by S W F Holloway⁴ makes clear his view that it was also a successful and deeply reactionary political move by the Physicians to emasculate a rival group growing rapidly in numbers and power. The first part of this paper⁵ showed how the apothecary/general medical practitioner was removed from competition with the emerging dental practitioner. This second paper illustrates the quite astonishing reversal of fortune between chemists who practised dentistry, and the pure dentists, following the Act. It also points to the influence of the Act on the social position, education, and qualification of dentists.

THE CHEMIST-DENTISTS

In contrast to the near invisibility of dentistry at the time of the new Apothecaries Act, the chemists and druggists were already a highly visible group by the end of the eighteenth century. They were organised and powerful enough to petition successfully for exclusion from the terms of the Act at the time of its passage through the House of Commons. The result was Clause XXVIII of the Act, which set on a firm basis the previously fluid and indistinct barrier between the apothecaries, and the druggists and chemists: '...nothing in this Act shall ... prejudice, or in any way affect the Trade or Business of a Chemist and Druggist ... but all Persons using or exercising the said Trade or Business ... shall and may use, exercise and carry on the same ... in such manner, and as fully and amply to all Intents and Purposes, as the same Trade or Business was used....'

Holloway demonstrates convincingly that although the apothecaries had started their pressure for legislation to defend themselves from the encroachments of the chemists, the increase in numbers of the latter was, in fact, a modernising movement without which the apothecaries could not have made the professional advancement into general medical practice which they did.

It is a matter for speculation as to whether this group of chemists, large in number, and organised, could have become the controllers of dentistry following the Act, had not the leaders of the independent profession of dentistry been such outstanding characters, using the Royal College of Surgeons and the American pattern of Dental Colleges as their models, and had not the ancient institution of apprentice-ship been extinguished.

The reversal of fortune in numbers and status between the chemists and the dentists, the latter nearly invisible at the time of the Act, and just 60 years later absorbing over two thousand chemist-dentists into their discipline, would not have been credi-

ble to anyone at the time. But that reversal, more perhaps even than the gaining of the Licence in Dental Surgery from the Royal College of Surgeons in 1859, is the measure of the progress of the independent profession in the nineteenth century.

After 1815, those deciding which path to follow, apothecary or chemist, had to pick which line the local economy would bear best, or to follow their own inclinations and abilities. Having made the decision, they could not change easily. apothecary 'Scalpen' was still perfectly at liberty to draw teeth, but the pattern of practice tended, as the social status of the apothecary/general medical practitioner changed in the way Trollope and Thackeray showed, to favour dental practice carried out by true dentists and those in the chemist's shop. Either patients knew where the shop was, or a feeling developed of fitness to practice such activities which the apothecary/general medical practitioner did not feel, or encourage, as he became a doctor by function and title. The Dentists Register up to August 1879 records only 37 practitioners of dentistry in conjunction with medicine, or with medicine and surgery combined, out of a total of 5,289, 0.7% of the total.6

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THE REVISED HEIRARCHY OF MEDICINE FOLLOWING THE APOTHERCARIES ACT

The revised hierarchy of medicine which the Physicians had, by including the apprenticeship clause, succeeded in making unbreakable, consisted of the physicians, the surgeons, the apothecaries and the chemists.

We know of dentist-chemists from several sources. The British Dental Association archive includes the indenture of William Skinner of Whissonsett,⁷ a small village or hamlet some four miles south of Fakenham in Norfolk, who in 1860 was bound Apprentice in The Art of Dentist Chemist and in his General Trade for 4 years to Howard Ramson Plattin of Fakenham, where the latter was in business in Swan Street in 1850, and Bridge Street 1853.8 Drawing largely on local press advertisements, Hillam records 69 chemist-dentists among 214 pre-1855 provincial dentists,9 and we can see how such a practice was set up in an 1870 illustration from Punch. (Fig. 1). The door to the consulting room leading off from the shop bears the legend L. Grimsdale. Dentist. (Woodforde calls him an apothecary-dentist, but by this later date chemist is more probable.)

The last remnants of these dentist chemists were swept up only as late as the Dentists Act of 1921, when the Chemist's Dental Society was fully content that any member who wished to register as a Dentist had been given every facility to do so by the Bill. 10 Section 3(3) of the Act provided for the admission to the dentists register of registered pharmaceutical chemists or duly registered chemists and druggists, who had had 'a substantial Practice as a dentist' including all usual dental operations.

THE NUMBERS

The relative numbers of true dentists and of chemists (pharmacists in the wording of the Act) practising dentistry are known for 1879, following the Dentists Act of the previous year, which enabled and required dentists to register. 11 The record⁶ states that at that time there were 483 Licentiates in Dentistry, 2,707 dentists in bona fide practice, and 2,049 'Persons, on their own Declaration, in bonâ fide practice of Dentistry In Conjunction with the practice of Pharmacy'. This last figure can be compared and contrasted with the numbers given in the first paper, of apothecaries who presented themselves for examination, over 4,000 in the 10 years between 1823 and 1833.12

EDUCATION OF DENTISTS AND AN END TO APPRENTICESHIP

It is not surprising in view of the very poor quality of a lot of the intake to the dental profession following the Apothecaries Act that long before the Medical Act of 1858

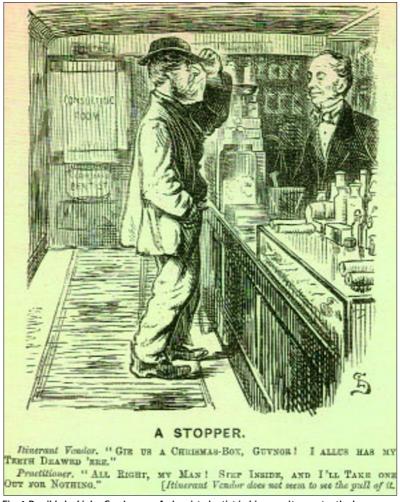


Fig. 1 Possibly by Linley Sambourne. A chemist-dentist in his capacity as a tooth-drawer. *Punch*, or the *London Charivari*. January 15th 1870. Vol 58 p.18. By courtesy of the Athenaeum Library

the genuine and concerned practitioners of dentistry had started to agitate for reform. For which pattern this should take, the reformers had the model, for good and bad, of the post-Act apothecaries.

What had proved to be the downfall of the Apothecaries Act was the inclusion, at the express insistence of the physicians, of the requirement for a five-year apprenticeship before a candidate was to be examined before the apothecaries. By this, the general medical practitioner was locked into trade, however much his surgical qualifications made him a professional, and if these distinctions seem absurd and offensive now, they were certainly offensive to the practitioner at the time. John Davies, who was physician to the Hertford General Infirmary in 1844, stated that the Act had 'always been regarded with great dislike by the profession' and 'owing to the executive under the Act being essentially a trading body, the certificate of the company has never been looked on with respect by general practitioners'.13

Whatever else may be conjectural in these papers about the effects of the Apothecaries Act, it is certain that it spelled the end of the apprenticeship scheme as the entry for medicine. That the rancour of the profession was directed solely at compulsory apprenticeship with an apothecary did not matter, in effect the whole scheme was condemned as a result.

Apprenticeship, a social structure which, when undertaken voluntarily, was benign and beneficent, as another paper shows in the context of the dentists,14 became an obnoxious15 imposition when mandatory. For a trainee dentist, entering a profession which was one-third learned, one-third technical and one-third trade, an apprenticeship was entirely suitable, and it took the century to fade completely in dentistry. (Fig. 2) However, for a surgeon wanting to enter general medical practice to find that he could not visit and prescribe for patients even after he had obtained the MRCS, without submitting to 5 years under an apothecary in his shop, and be examined not by surgeons but by the Society of Apothecaries, and for the very highly qualified graduates of the Scottish medical schools to find themselves disqualified overnight, generated a storm of protest; 'It does not seem ... reasonable that, because the apothecaries have ceased to be grocers, they should be forthwith invested with the entire regulation of the practice of medicine in England ... Even if we had no colleges and universities where medicine was taught as a science, and no incorporated societies of the practitioners of its higher branches, it would seem to be sufficiently absurd to give the right of licensing its practitioners to the Company of Apothecaries.' 16

When the group of reforming dentists in the nineteenth century, who wanted a College of Dentistry to match the Colleges of Physicians and Surgeons, looked towards dental schools on the American pattern, they did so in order to follow a completely different educational scheme from that required by law of the Apothecaries. Something more modern than apprenticeships, perhaps, but it has already been suggested that apprenticeship voluntarily entered into suited the dental profession rather well as a path to trained practice, but the dental reformers did not accept it.

Holloway gives a 'modernist' reason for this, indirectly, in his paper on medical education in England,¹⁷ which he summarises by saying: 'The emergence of regular medical schools in London and the provinces was not the direct result of raising the standard of entry into the profession nor of the increased demands of the medical curriculum. These developments were merely symptoms of more fundamental and widely spread compulsions within the structure of society itself. They have to be seen as part of the totality of social change.' To substitute dental schools for medical in this statement is appropriate, but for an explanation of the zeal of the dental reformers for the establishment of dental schools, and for qualification through them rather than apprenticeships, we have other statements of a far more forceful kind: 'The apprenticeship clause of the 1815 Act frustrated all the Society's (of Apothecaries) attempts to raise the level of general education ... "the tendency of the apprenticeship is always to throw a great impediment in the way of obtaining a good general education: and in a great number of instances to prevent it altogether"'18, or this, that apprenticeships were: 'more frequently the nurseries of idleness and ignorance, than of industry and knowledge'19 and 'to pretend that this (the distinguishing, measuring and mixing of the materia medica) cannot be done without standing behind a counter for five years, is nonsense. One year ... is all that is necessary.'20 'Even in the most favourable circumstances ... where an apprenticeship may be supposed calculated to promote a young man's medical studies, the arrangements of the Apothecaries' Act is obviously one in which the interests of those who are in

LIST OF DENTAL STUDENTS REGISTERED.			
Name.	Preliminary Examination in Arts, with Date thereof.	Date of Registration,	Place and Date of Correspondent of Medical or Berial Study, as roritised by a Master, or a Toucher, or an Official in a Medical or Dental School or Hospital.
Banner, John James	Exempt	1879, Aug. 6	Nat. Dent. Hosp., Aug. 1, 1877.
Bave, Frederick William	Soc. Apeth, Lond	1879, Aug. 6	F. H. Weiss, 7, Montague place, Russell sq., W.C., April 1877.
BRAMSEN, Ejner Octavius	Excespt	1878, Dec. 30	
BREWSTER, Robert	Exempt	1878, Dec. 20	
Barnez, John Alfred	Exempt	1878, Dec. 30	
Beock, James Harry Ernest	Matrie, Lond,	1879, Feb. 10	Univ. Coll. Land., Feb. 2, 1879.
BROWSE, Locien Edward	R. Coll. Surg. Eng. Sept. 1877.	1879, Aug. 6	H. Rose's, 61, Albany st., Regent's pk., N.W., Aug. 1817.
Chnast, Henry Sully	Exempt	1878, Dec. 23	Nat, Dent. Hosp., May 1, 1877.
Darsir, William George	Exempt	1879, Mar. 4	
Hanr, Samuel	Exempt	1879, Mar. 28	
Farrestra, Walter	Exempt	1879, July 9	T. J. Greatrex, 62, Tithcharn
Foot, William	Exempt	1878, Dec. 1	atreet, Liverpeol, Jan. 1878. A. G. Hambly's, 178, Union atreet, Flymouth, Dec. 17,

Fig.2 The Dentists Register 1879. List of dental students registered (top portion of page 186 is shown). This list of 39 dental students includes 14 at dental or other hospitals, and 25 with a named master or teacher. Two had started their education with the Society of Apothecaries of London, and five with the Royal College of Surgeons of England

training to the profession are sacrificed to the interests of those who are already engaged in practice.'21

Holloway's most damning quotation comes from G J Guthrie, President of the Royal College of Surgeons, in a memorandum submitted to a Select Committee of the House of Commons in 1833. '1. By the old Apothecaries' Act, no doctor in medicine of any University can practice as an apothecary ... unless he has been for five years an apprentice to an apothecary ... he is, by this oppressive and tyrannical Act, precluded from getting his bread. 2. By this same Act, a surgeon, however highly educated, or competent he may be, to act as an apothecary, cannot do so, unless he has been apprenticed to an apothecary in a similar manner: and ... the physician and surgeon, of the highest possible attainments, are thus treated by the Apothecaries' Society, like toads under a harrow...'22 As Holloway says, 'the College of Physicians had successfully diverted a movement, which sought to advance the status of the general practitioner, into an Act which chained him to the lowest order of the medical profession'.²³

At all costs the dental reformers wished to avoid the same fate for the general dental practitioner, and in the end succeeded, but they had to follow the new medical model to do so.

STATUS AND REFORM

The creation of space for the true dentist had two further crucial effects on the advance of dentistry as a learned profession, not just as a craft. First, the reforming dentists who wished to establish a College of Dentists, and a School for Dentists, on American lines²⁴ and to keep the profession independent from the surgeons, could see for whom they were acting, could cultivate an impressive *esprit de corps*, and see very clearly from whom within the profession they were wishing to differentiate themselves. There was, after the Apothecaries Act, no insensible blending of one group of operators for the teeth with another.

Second, those Members of the Royal College of Surgeons who wished to see dentistry recognised by examination and affiliation with the Royal College could act without running the risk of being fatally degraded by association with 'trade', that association which so enraged those in general medical practice.

Edwin Saunders who took his MRCS in 1839, and FRCS in 1855, was the first dentist to be knighted,²⁵ and he may be taken as the archetype of the dental surgeon at the top of the profession who did so much to improve the status of the profession from within the Royal College of Surgeons. There is no suggestion of such a man being concerned with the impositions of the Apothecaries Act, and thanks to the omission of dentistry from the terms of the Act he did not have to do so. The most indicative group, however, are those whom Hillam, studying provincial dentists, identifies as taking the MRCS, and intending only to practice dentistry, or ending up doing so.²⁶ By limiting their practice in this

way they did not have to worry about the Apothecaries, but that by itself would not have been enough if dentistry was irredeemably tainted. It is the strongest indication possible that dentistry was becoming an occupation fit for gentlemen. Later in the century Lilian Lindsay in her *Personalities from the Past* even identifies one physician-dentist, John Smith of Edinburgh,²⁷ dentist by appointment to Queen Victoria and King Edward VII.

If any taint of trade was unacceptable to the surgeons, how much more would have been any hint of association with the quacks and mountebanks on the wilder fringes of pre-Act operators for the teeth. However, thanks to the Apothecaries Act, the Surgeons could negotiate with the Dental Surgeon reformers within their ranks, and the dentists could negotiate with the Government. The very important result was the Charter of 1859²⁸ which followed the Medical Act of the previous year, by which the Royal College of Surgeons gained the power to 'institute and hold examinations for the purpose of testing the fitness of persons to practice as Dentists who may be desirous of being so examined, and to grant Certificates'. At last, the qualification absent in 1808 at the time of Dr Harrison's Bill was supplied to those who sought it.

The Surgeon-Dentist Members of the Royal College of Surgeons who were devoted to the improvement of the profession of dentistry had still faced severe prejudice, as *The Forceps*, a fortnightly journal published between 1844 and 1845, noted; 'A pure surgeon ... can scarcely be expected to pay any attention to a subject of such minor importance as the teeth, or soil his aristocratic fingers by touching a key instrument²⁹ (the 'key' was an instrument used for extractions).

Hill also makes this attitude of the surgeons clear in his comments on the reply from Mr White, the president of the Royal College of Surgeons, to a deputation in 1843 where the president stated that: 'the members of the college practising exclusively the dental profession were, in strictness, seceders:30 This comment could only have been made with meaning following the Apothecaries Act. It would not previously have been adequate, for the lack of any real definition of dentists would have allowed White to say they had abandoned rather than seceded from the Royal College. Even as it was, Hill says 'seceded ... if it means anything, means retrograded, or, in simple phraseology, the individual has lost caste ... this idea has been, all along, very pronounced, and it has not yet become extinct. ... we have a very clear evidence of the jealousy with which the sacred table of the governing body in Lincoln's Inn Fields was quarded:31 It is inconceivable that the College would have had anything to do with the amorphous dental mass existing before 1815.

In the end, both groups of dental reformers, the Surgeon-Dentists and the College of Dentists faction came to see that they were fighting for the same cause, and, by co-operating, won what they sought, respectability, qualification and a measure of autonomy.

Following the institution of LDS examinations after the 1859 Charter, the official eye of the State could now begin to light on the outcasts, and know that they could be forced by law to conform or leave the profession. It took two attempts to succeed, in 1878 and 1921, but at least, thanks to the Apothecaries Act, it was a realisable aim.

CONCLUSION

This paper demonstrates in its story of unintended consequences, that the legislation which resulted in the development of the general medical practitioner catalysed the process which led to the shaping of the modern general dental practitioner.

It offers in the Apothecaries Act of 1815 a reason for the expansion of the dental profession in the early nineteenth century, additional to the pressures of demand and fashion put forward by Hillam.³²

It also shows why the institution of apprenticeship was lost for dentistry as a direct consequence of the effect of the Act on general medical practice. Lost with it was the possibility of bright youngsters entering the dental profession for whom, even if not well off, a place as an apprentice could be found. Only the well-to-do middle class could afford dental school, and the ethico-social position of dentistry shifted as a result.

In its ethico-professional educational development the result was a real advance, and the dental profession has good reason to be grateful for the sufferings endured and eventually surmounted by the apothecaries. 'The Physician may hold himself a little higher than the Surgeon, though both may be Baronets; ... but the Apothecary ... neither doubts nor hesitates about his rank – he is the servant of all'.33

In the ultimately successful ethico-legal development of the profession, the indirect effect of the Act was crucial. The great men who emerged as the leaders of the new profession of dentistry shaped that profession as free men, the servants only of their peers.

The paper by S W F Holloway is strongly recommended as further reading, and acknowledgement is here given to it as a source in depth for the medical background for this paper. Also Christine Hillam's account is much to be recommended. Mr Christopher Liddle, late of the College of Law, assisted with advice and the location of legal documents essential to the paper.

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