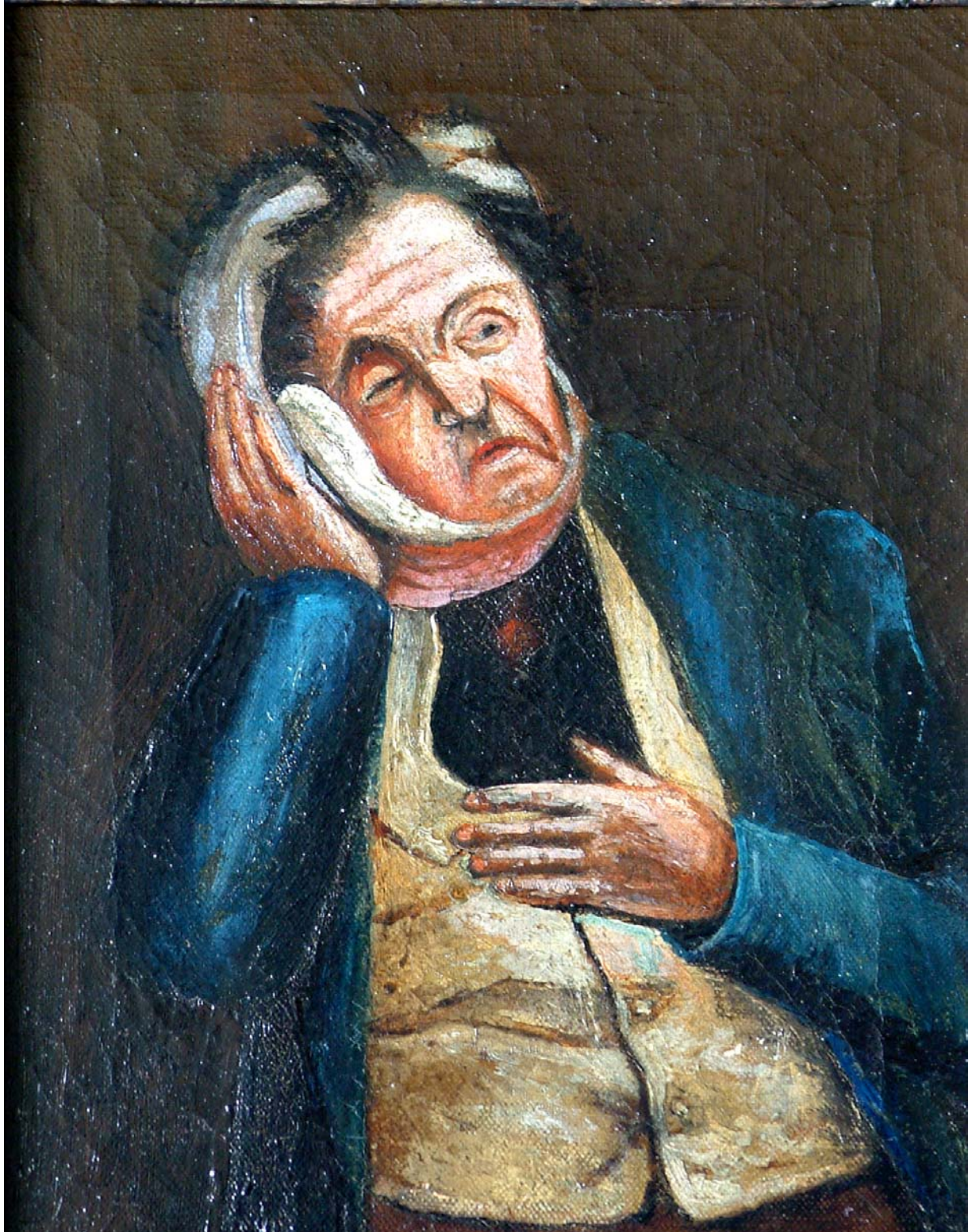
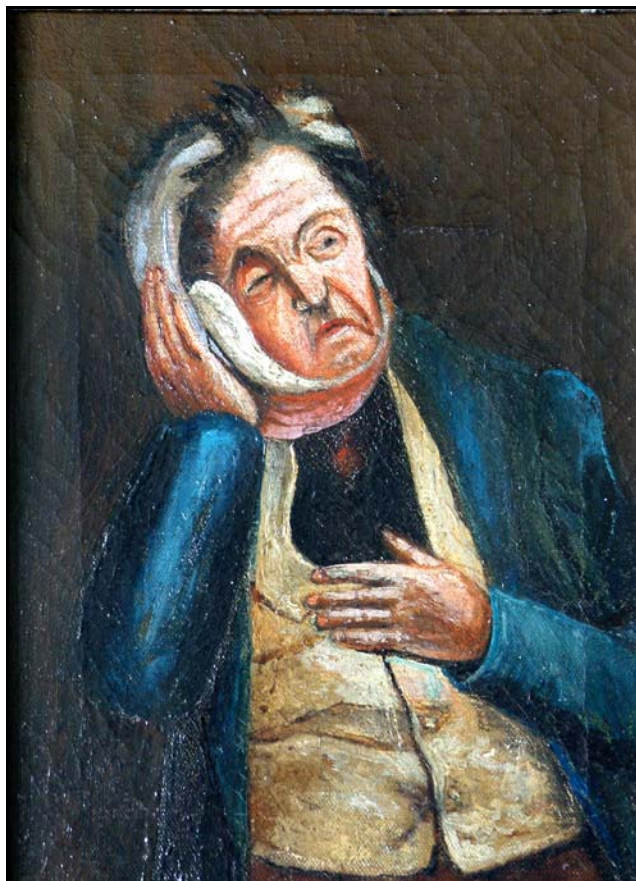


DENTAL HISTORY MAGAZINE



VOLUME 2 NUMBER 1

SPRING 2008



This issue's cover is again taken from the Menzies Campbell Collection at the Royal College of Surgeons of Edinburgh. It is a powerful and iconic image of a dento-alveolar abscess but there is no information in the catalogue about the picture which is listed simply as: 74 TOOTHACHE. Two dismissive comments do however accompany it, firstly, "Indifferent technique" and secondly, "Artist unknown." In addition Menzies Campbell suggests that, "The attire indicates mid-XIXth Century."

The round the head bandage probably retained a warm dressing-a palliative treatment which seems to be first represented in that century, and which persisted through to the children's comics of our youth. Has it yet disappeared from the contemporary experience?

Any information which readers could provide about the picture would be gratefully received by our Secretary.

Notes by Paul Geissler, Honorary Curator of the Menzies-Campbell Collection at the Surgeon's Hall Museum, Edinburgh, and the Editor.

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Excerpts and quotations are permissible providing the usual acknowledgements are made.

Contributions on the History of Dentistry from any source are welcomed.

Volume 2. Number 1.

Contents

- 4 Update
- 6 The earliest use of dental evidence in a courtroom: His Majesty's Advocate vs. Pattison et al.
- 7 Editorial notes on the background to His Majesty's Advocate vs. Pattison et al.
- 9 Child oral health improvement programmes in Glasgow and beyond: A thirty year journey.
- 14 Francis Brodie Imlach: Surgeon dentist and early pioneer of dental anaesthesia.
- 16 Dental Verses: The Shortage of Dentists.
- 17 The Life of Sir James Reid: personal physician to Queen Victoria. Some dental extracts.
- 18 Web News
- 19 Letters
- 21 Word of Mouth: Sauce for the Gander. An American humorist looks at dentistry
- 23 List of supporting members.

Update

Sherlock Holmes and the Spring Lecture

The Spring Lecture to the Henry Noble History of Dentistry Research Group was given in the Royal College, on 21 April 2008 by Dr Marie Watt of Glasgow Dental Hospital and School entitled, *Dental Detective: Finding Clues to the Past*. Dr Watt employed a witty “Sherlock Holmes” leitmotif as she described how she and her colleague, Dr Dorothy A. Lunt, used their practical skills and knowledge of dental anatomy to assist field archaeologists at sites in Scotland, Syria and Cyprus to reveal the communities who lived at these locations in centuries past. Using photographs and diagrams, Dr Watt explained how the quantity and condition of the teeth and jaw bones obtained from graves could yield a surprising amount of information such as the numbers of individuals living in a community, their ages at death, their health, diet and nutritional status, and rarely the sex of the deceased. It was interesting to learn that bands of enamel hypoplasia in molars which are suggestive of socio-economic stress of some kind, were rare in some of the medieval sites which Dr Watt investigated. This suggests that our ancestors may have suffered from less stress-related illness than modern man. Evidence of both periodontal disease and caries were present in all the communities under investigation but periodontal disease was more common than caries in the earliest settlements. Examination of dental and jaw remains for conditions such as taurodontism and torus mandibularis can also enlighten archaeologists about the genetic background of their subjects, enabling them to consider the distribution of various kindred groups. It was clear from Dr Watt’s lecture that dental archaeology demands meticulous excavation and observation of human remains together with painstaking collation of the data retrieved. She ended by discussing the latest biomolecular techniques, including isotope analysis and DNA testing which will allow archaeologists to develop ever more accurate and detailed insight into the lives of our ancestors. Holmes would be impressed.

Menzies Campbell Lecture and The Autumn Lecture of The Henry Noble History of Dentistry Group

The next Menzies Campbell Lecture will be combined with our Autumn Lecture. It will be held in the Royal College of Physicians and Surgeons Glasgow. The speaker will be Dr. Xavier Riauld of Nantes, France. Dr Riauld is the author of the book, *La pratique dentaire dans les camps du IIIème Reich*, in the Collection *Allemagne d’hier et d’aujourd’hui*, 2002. The lecture will be given in late October with the title and date to be announced later.

Glasgow Odontological Society

Bill Smith and Robin Orchardson of the Henry Noble History of Dentistry Research Group, have accepted the kind invitation of The Glasgow Odontological Society to speak on dental history at their meeting on 16th December 2008. Topics will be announced in due course.

Missing Dental Final Year Books

Do any readers have a Dental Final Year Book for the years between 1927 and 1943? If so our Secretary would be very grateful to hear from you. The Dental School Library holds an extensive but incomplete collection of these books which are an invaluable source of information on former students and staff as well as an entertaining read.

Dental Library Bookcase

Our thanks are due to Beverley Rankin, Librarian, James Ireland Memorial Library, Glasgow Dental Hospital and School for preparing a catalogue of the contents of “The History of Dentistry Collection” in the dedicated Bookcase in the Library. The catalogue is available in the Library. Online readers interested in viewing a list of contents of the Bookcase should e-mail Beverley at: B.Rankin@lib.gla.ac.uk to request a pdf file of the list as an e-mail attachment.

The earliest use of dental evidence in a courtroom

In this darkly fascinating rehearsal of a body-snatching case heard in the High Court of Justiciary, Edinburgh in 1814, Aletha Kowitz, former Director of the Bureau of Library Services of the American Dental Association, describes the night-time activities of the Glasgow Resurrectionists. “His Majesty’s Advocate versus Pattison et al.” is believed to be the first case in the United Kingdom in which dentists appeared as professional witnesses. Jo Cummins provides background notes on the case.

[We reproduce this article with the kind permission of the author, The American Academy of the History of Dentistry, and David A. Chernin, Editor, *Journal of the History of Dentistry*. However for copyright reasons it will not appear in the electronic version of *Dental History Magazine*.]

Child oral health improvement programmes in Glasgow and beyond: A thirty year journey

Professor MacPherson and her colleagues present an exhaustive and inspiring account of the enduring operation to improve the oral health of disadvantaged children in Glasgow and its environs. Successes and frustrations described include accounts of the 1972 *Cleft-Palate Project*, *The Woodside Project*, *The Glasgow Smiles Better* campaign, and the present *Childsmile* initiatives.

Francis Brodie Imlach

Paul Geissler reviews the career of Francis Brodie Imlach (1819-1891), the first surgeon with a purely dental practice to be elected President of The Royal College of Surgeons of Edinburgh. Imlach was a pioneer in the use of chloroform in dental anaesthesia. His practical notes on its administration and effects, which he published in an 1848 article, are reproduced here.

Sir James Reid, personal physician to Queen Victoria. Some dental extracts.

Rufus Ross draws our attention to *Ask Sir James*, a biography of Sir James Reid personal physician to Queen Victoria. Sir James reveals that professional relations between Victoria and her dentists were not always cordial.

Dental Verses: The Shortage of Dentists

Our occasional series of “oral poetry” returns in this issue with, *The Shortage of Dentists*, a humorous verse by T. Evans Johnston (1871-1948). David McGowan provides background notes.

Web News: Eye of newt, toe of frog.....and spider’s web

There is a hint of the witches’ cauldron in this issue of *Web News*. Carol Parry discusses sources for the history of herbal remedies for toothache.

Word of Mouth: Sauce for the gander. SJ Perelman: An American humorist looks at dentistry

If you were asked to name an American humorist of the first half of the 20th Century, the luminous intelligence and devastating but gentle wit of James Thurber might come to mind. But although of the same vintage, SJ Perelman was no James Grover Thurber. Malvin Ring has contributed this article in which Perelman turns his corrosive pen on the “hapless” dental profession.

Reminiscences: Sir David Mason, part II, postponement

Due to circumstances beyond our control, part II of our article on the career of Sir David Mason will not now appear until our next issue.

The Earliest Use of Dental Evidence in a Courtroom

**His Majesty's Advocate vs. Pattison et al, High Court of Justiciary,
Edinburgh, Scotland, June 6-7, 1814.**

Aletha Kowitz

**For copyright reasons this article is only available in the paper
version of *Dental History Magazine*.**

Background notes on the Pattison Case

Jo Cummins

Granville Sharp Pattison (1791-1851) was the son of a wealthy Glasgow merchant family. The Pattisons lived in bucolic high style in Kelvingrove House, an eight-bedroomed mansion on their estate about one mile from the centre of Glasgow. Young Granville attended The Glasgow Grammar, at that time, the only private school in the city but he did not distinguish himself there. In 1806, when Granville was fifteen, the Pattison business failed, Kelvingrove was sold and the boy was forced to consider his future.

Spellbinding Professor of Anatomy

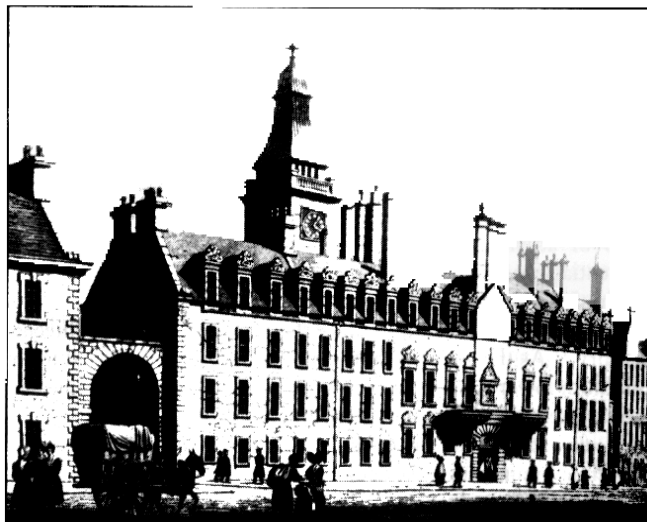


The Napoleonic Wars (1803-1815) were creating a need for military surgeons which may have prompted his enrolment in the Faculty of Medicine at Glasgow University. At that time new undergraduates of fifteen or even younger were not unusual. There were no entrance requirements beyond payment of fees. For the next six years Pattison studied humanities, chemistry, botany, materia medica and significantly, anatomy under the spellbinding Professor James Jeffray.

Resurrection Lane

In the early 19th Century, the University of Glasgow was not the exclusive provider of medical education in the city. The College Street Medical School was one of four private institutions. After completing his studies at the University in 1813, one year before the trial, Pattison formed a partnership with the surgeon, Andrew Russel to provide a course in anatomy at College Street. He was twenty-one years of age.

The College vicinity bustled with students living in upper flats on each side of the street. Ropes were passed from one tenement window to another for the conveyance of books and other items. Nearby, Inkle Factory Lane conveniently linked the school to the Ramshorn Churchyard. By the early 19th Century unclaimed bodies in hospitals and workhouses



Old College of Glasgow. From *Glasgow Illustrated in Twenty One Views*. (Mitchell Library, Glasgow)

could be used for dissection in most European countries but this was not the case in Scotland. Only cadavers of murderers executed on the gallows were legal specimens. This resulted in a dearth of bodies for universities and private medical schools alike. Anatomists were therefore prepared to pay from £2-20 for a fresh illegal corpse. Body-snatching was a lucrative business. (In the same period, a senior domestic manservant earned 21/- per week, and a parish watchman 16/ 5d per week for all-night winter shifts.)

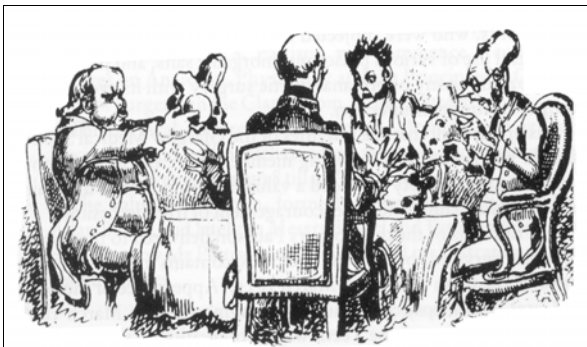
Deathwatch

Resurrectionists were known to watch for paupers dying alone in a workhouse whereupon they impersonated a long-lost relative of the unfortunate victim. Feigning concern, for these helpless ones they kept a ghoulish vigil until death came and the warden casually released the body to the fake mourners to avoid the cost of the funeral falling on the parish. If the corpse had white, sound incisors, they were brutally extracted and sold to dentists separately for as much as a guinea (21/-) per set. In the infamous murder of an itinerant Italian boy in 1830s London, in which the murderers subsequently tried to sell his corpse, one of the defendants, James May, admitted approaching the dentist, Thomas Mills with a set of twelve teeth to which shreds of gum and a small part of mandible were still

attached. When confronted with the attempted sale May replied:

“I admit all that and what does it amount to? I did use the brad and awl to extract the teeth from the boy, and that was in the regular way of business.”⁽³⁾

The more fortunate dead, blessed with genuine relatives, were protected by hired armed guards and mortsafes or iron slabs laid over their graves until they were safely decomposed beyond value. However the Pattison case indicates that even the resourceful middle classes were vulnerable. Lairs in the north-west part of Ramshorn Graveyard



Glasgow Medical Society, *Northern Looking Glass*, Mitchell Library.

were expensive. Pattison's own father was buried there (and later Pierre Emile L'Angelier, the victim in the Madeleine Smith Case.) Glasgow body-snatchers were not in general hardened criminals such as Burke and Hare in Edinburgh. They were more likely to be gangs of boisterous medical students, eager for beer funds and a thrill. Indeed when he was an undergraduate, Pattison himself was the celebrated leader of Glasgow's cunning, agile, student resurrectionists.

It is notable that in Scotland at this time carrying away a corpse was not a criminal offence. In law, the body of a dead person could not *belong* to anyone; thus there could be no theft. The crime involved in body-snatching was “desecration of a grave.” A *theft* occurred only when the shroud or other personal items placed in the coffin or the coffin itself was taken or badly damaged. This may explain why the resurrectionists in the Pattison case took the time, even in such freezing, nefarious, circumstances to remove the shroud leaving it, as recorded in the notes of the trial, in the coffin. A dainty pair of wool and leather gloves worn by the deceased had also been removed from the dead hands and returned

to the coffin.

A great suppression of urine

It is recorded in the Pattison case that the Court sat until the early hours of the morning. In this period it was not unusual for a Scottish Court to do so. Trials ran serially (in this case for 16 hours at a time) to prevent coercion of the Jury. The 18th Century diarist and biographer, James Boswell, records that Lord Braxfield, a Scottish High Court judge, famously complained of the damage to his health in, “the great suppression of urine” which such long sittings involved.

After the grim discovery at College Street, heroic efforts were made to “re-assemble” Mrs McAlister's corpse and contemporaries state that she was reburied in, “a handsome and expensive style.”

According to Pattison's biographer, the trial had: “remarkably little effect on Pattison himself, or on his professional career and position in society.”⁽¹⁾ He continued to teach anatomy and to practise as a surgeon in Scotland and in America, where he was a founder of the University of Maryland medical school. Scandal followed him. He indulged in duelling, he was named as a paramour in a notorious divorce and was arraigned for unprofessional conduct at Glasgow Royal Infirmary.

The anguish of the McAlister family troubled him not at all. On being questioned about the verdict, he replied: “An acquittal, which cost me £520 sterling.”⁽¹⁾ He died in his bed in America in 1851. His remains were later returned to Glasgow where they are safely buried in the Necropolis.

Readers wishing to learn more about the life of GS Pattison or the history of body-snatching, (including references to this case and other dental aspects) are directed to the following publications:

1. Pattison FLM. *Granville Sharp Pattison: anatomist and antagonist 1791-1851*. Canongate, Edinburgh, 1987. (The author is a descendant of GS Pattison.)
2. Ramsey T. *Don't Walk Down College Street*, Ramshorn, Glasgow, 1988.
3. Wise S. *The Italian Boy: Murder and Grave-Robbery in 1830s London*, Jonathan Cape, London, 2004.

Jo Cummins
Historian, Dentist
Glasgow

Child Oral Health Improvement Programmes in Glasgow and Beyond: A 30-year journey

Lorna Macpherson

Ken Stephen

David McCall

Yvonne Blair

In 1972, Ian Jackson, Consultant Plastic Surgeon (later of *The Boy David* TV series) and Brian Christie, Consultant Cleft Palate Orthodontist, approached Ken Stephen in despair about the appalling caries prevalence they were encountering in these unfortunate youngsters. Even by 12 months of age, disease levels were so severe as often to make intra-oral retention of oral orthopaedic appliances near to impossible. As a result, when Eithne MacFadyen was allocated rotational junior staff clinical duties in the Cleft Palate Unit within the Dental School, the opportunity was taken to initiate a comprehensive from-birth caries-prevention programme for these subjects.

Dental health education was provided to parents on an individual basis on their first visit to the unit, usually within 2 weeks of birth. This information was supplemented by an advisory booklet printed by the University of Glasgow, and contributed to by all members of the Cleft Palate Team, including the speech therapist. At this initial attendance, parents were provided with fluoride drops for daily administration. Oral health advice was reinforced at each subsequent visit (usually monthly). In addition, age-related fluoride dosage was increased at 8 month intervals until, at 24 months old, the child received 1mg flavoured, soluble F⁻ tablets for slow intra-oral dissolution last thing at night. Once the deciduous molars appeared, they were fissure-sealed as soon as co-operation permitted, and individual fluoride gel applicator trays were constructed from duplicate orthodontic study models to enable F⁻ gel applications for 4min per arch, weekly for six weeks, then once per month thereafter, in conjunction with the child's speech therapy appointments. These applications were undertaken by the clinic's dental hygienist, as was the fissure sealing, once GDC regulations were amended following a submission that it should permit such practice.

As it was deemed unethical to have a parallel non-treatment 'control' group, for comparative purposes a retrospective analysis was undertaken of caries data from age-related cleft-palate subjects who had attended the Unit and the Child Dental Health Department, prior to commencement of the programme. After a three-year period, both clinical and cost-comparison estimates were possible between 57 clefted subjects and 34 'controls', when data demonstrated dramatic benefits for the study children. While 100% of 'controls' had caries, 74% of cleft subjects were clinically and radiographically caries-free, the mean defs scores of the former being 8.94 as compared to only 0.12 of the latter, a defs difference of 98.7%. With regards

to overall pricing, it was found that to achieve such oral health benefits amounted to 65% less than those of the more diseased controls' cumulative costs for general anaesthetics, extractions and reparative care, to say nothing of the long-term oral, physical and psychological health-gains accorded to the prevention-based subjects.

County of Sutherland

As a result of the undoubted benefits demonstrated by this novel approach to caries prevention, and following publication of the outcomes in 1977, two separate projects were initiated shortly thereafter. The first of these began almost immediately throughout the County of Sutherland, where its Chief Dental Officer, Alex Bennie, established a "From-birth Well-baby Scheme". Here, fluoride supplementation and oral health motivation was introduced via all GMPs and their health visitors, to infants from 0-2.5yrs of age. However, when subjects reached 2.5-3 yrs, continuing F⁻ supplementation, F⁻ brushing and fissure sealant applications were delivered by the CDS and, as children matured, F⁻ rinses were also dispensed weekly at schools. Thereafter, in 1984, KWS was invited to monitor the clinical caries situation of 5-yr-olds throughout 31 schools in Sutherland (N=101); in Thurso (N=70), and in Wick (N=126), both the latter towns having, until the mid-1970s, benefitted from water fluoridation. In addition, bite-wing radiographs were taken, these being read separately from all clinically-recorded and geographically-related data by a calibrated staff member of the Dental School's Department of Oral Medicine (DRMcC). For Sutherland subjects, the mean deft was only 1.9 (with 70% radiographically caries-free); in Thurso the deft was 2.7 (30% caries-free), while in Wick it was significantly greater (p<0.001) at 3.9, with only 25% caries-free.

The Woodside Project

In parallel with commencement of the above 'outreach study', application was made to the then Scottish Home & Health Department for a 5 yr Project Grant to enable the Cleft-palate hygienist-delivered methods to be translated to everyday inner-city dental practice. Agreement was reached that, within Glasgow's Woodside Health Centre, a dental hygienist and her dental nurse would be responsible for the preventive dental care of young subjects recruited via adjacent dental and medical practitioners, but with only minimal 'legal' supervision from the two on-site general dental practitioners. As the overall objective was to keep newly-erupting dentitions caries-free, enrolment emphasis was towards very young children, albeit siblings up to seven years old were allowed to attend, the aim being to maintain their emerging permanent teeth disease-free. On entry to the subsequently approved programme, those aged 0-2 years were subjected to a 'Cleft-palate' regimen, although fluoride gel applications were reduced to bi-monthly. As before, molar surfaces were fissure-sealed as soon as they were wholly visible, and co-operation permitted. For elder siblings, the full preventive 'recipe' was provided from the outset.

At initial presentation, children were examined by either of the calibrated health centre general dental practitioners, with later annual examinations being conducted by

DRMcC who had no other study involvement, nor access to any prior records. Once interproximal contacts had been established, annual bite-wing radiographs were taken and assessed separately from the clinical record cards. Due to the ethical and logistic problems of conducting a controlled clinical trial in the above situation, the programme's influence on caries prevalence was assessed annually by comparing the mean deft / defs scores for 4-6yr-olds, and DMFT / DMFS scores for >6-yr-olds, with similar data for children of the same SES and age at programme-entry, or at comparable ages for nearby nursery school / school children examined subsequently. As before, DRMcC assessed all radiographic scores blind of their clinical records. Additional comparisons were also possible as, for the first time, Scottish national dental data were available via the Scottish Health Boards' Dental Epidemiological Programme. Furthermore, four years into the project, an economic evaluation was undertaken by a Research Health Economist, which included all relevant direct and opportunity costs. Thus, after this period, for 7-10 yr-olds, all of whose teeth erupted during the study, the DMFS benefit was 90.4% over that of the age- and SES-matched 'controls'. However, for 4-6-yr-old participants, many of whom entered the programme with irreversible caries already established in their deciduous dentitions, the benefits over their 'control' subjects was lessened, albeit there was still a defs difference of 70.0% in their favour.



Fig. 1 Glasgow Smiles Better

Soon after the above Woodside data were publicised, early in 1984 the decision was taken by Greater Glasgow Health Board that the Woodside Prevention Project would be taken-over by the Board for an initial three year period. In addition, it was also to be rolled-out to a further seven health centres in other socially-deprived districts under its jurisdiction. Thus, funds were authorised for the appointment of two dentally-qualified staff to supervise a team of eight dental hygienists, nine dental nurses and four dental health educators. However, for the first time since the prevention-from-birth concept was evolved via the 1972 Cleft-Palate Project, these programmes were to run without any active academic input, albeit university staff assumed an advisory role. As the target sites were in areas of traditionally low dental-expectation, initial client-recruitment problems were foreseen, and it was decided to attempt to capitalise on the then highly successful "*Glasgow's Miles Better*" publicity campaign. Hence KWS approached the Lord Provost's Office and permission was obtained to mount a recruitment campaign based on the modified "*Glasgow Smiles Better*" slogan! Furthermore, the renowned cartoonist, Roger Hargreaves, also agreed that his '*Mr Happy*' centre-piece character could also be employed.

(Fig. 1) Laminated A-3 sized '*Mr Happy-Glasgow Smiles Better*' banner-headlined information posters were then produced and placed on notice-boards, bus-shelters etc throughout each health centre's neighbourhood. In addition, publicity assistance was also sought via BBC Scotland and STV, with Sheena MacDonald, in particular, running several excellent clinical-filming and interview sessions. Furthermore, it was arranged that prior to each clinic acquiring its hoped-for complement of recruited youngsters, the hygienist, dental nurse and dental health educator staff would attend nearby publicity-postered crèches, nursery groups, pre-school play-groups, toy libraries etc where, by approaching accompanying mothers / carers, and by explaining the objectives of the programme with a series of high quality, book-bound A-5 photographic aids, they were persuaded to attend with their youngsters, and appointments issued there-and- then. Thereafter, should the agreed attendance not be honoured, the appropriate Health Visitor would be contacted and supplied with the child's name, address etc to pursue the missing individual and re-establish clinical compliance.

While it was expected that initial recruitment in such non-dentally-orientated neighbourhoods would be slow, following first attendances it soon became obvious to staff that accompanying adults were amazed when beaming youngsters exited a surgery. Thus the entirely atraumatic 'treatment' quickly encouraged re-attendance and also helped spread the word that '*kiddies' painless dentistry*' had indeed arrived close-by! In fact, so successful was this new approach that, at Easterhouse Health Centre, where the average pre-school non-extraction dental attendance-rate had been only 7%, between January 1984 and April 1985, this figure rose to 77%.

However, in spite of such initial success, administrative problems surfaced gradually as inevitable staff changes/rotations occurred, and the lack of a sufficiency of prevention-orientated replacement clinicians soon became apparent. As a result, team morale dissipated and, by late 1987, resignations left these Health Centre teams understaffed and apparently under-motivated. Hence, shortly thereafter, the Health Board decided to re-deploy remaining personnel to more 'normal' everyday duties of 'traditional' dentistry. In so doing, the Board abrogated its opportunity to impose a truly prevention-based approach to child dental care.

Unsurprisingly, by the early 1990s, the dental health of children in Glasgow was still very poor, with no improvement in 5-year-old oral health apparent since epidemiology surveys had commenced in the middle of the previous decade. Around this same time, studies of nursery children in the more deprived areas of the city revealed that the proportion of 3-year-olds with caries was higher than that of the national average at 5 years of age!

Unfortunately, no formal clinical preventive programmes had been running since the health centre-based initiative described above had been terminated, and it was apparent that the conventional methods of reducing dental caries incidence and prevalence in Glasgow, based on dental health education in nurseries, schools and clinical dental settings, were not proving effective. Such approaches did not take into account the very early age of childhood caries onset in the most 'at-risk' deprived population groups, nor the fact that these children were least likely to attend

asymptomatically at a dental practice. Furthermore, general dental practitioners appeared reluctant, perhaps through lack of awareness, to translate the aforementioned proven caries-inhibiting techniques to everyday practice. As a consequence of such short-sighted attitudes, in March 1994, Dr J S Rennie of SCPMDE commissioned KWS to liaise with Prof R M Harden of the Centre for Medical Education, University of Dundee, to produce a caries-prevention-from-birth pack. It was agreed this would be suitable for distribution to all dental practitioners & staff, all general medical practitioners, all community pharmacists, and all health visitors in Scotland. Thus, by mid-1996, the evidence-based “*Abolish Carious Teeth*” (ACT) Pack (Fig.2) was published and forwarded to every professional in the above groups in the country, with the respective component contributions and interactions expected of each being stressed throughout the package.

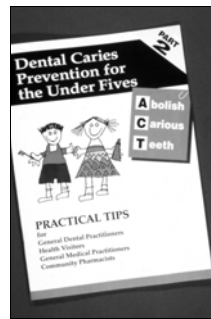


Fig.2 The ACT PACK

Pre-5 Oral Health Improvement Programme

Also, around this time, Ailsa Marrant, the then Consultant in Dental Public Health for Greater Glasgow Health Board, advised the Board that a new approach was required to improve child oral health, and a Pre-5-Year-Old Oral Health Gain strategic development programme was commissioned. This recognised the need for the adoption of healthy behaviours from birth, rather than address the need to change established behaviours at a later stage.

Yvonne Blair from the Community Dental Service was appointed as Project Leader, and the programme commenced in the Possilpark area of Glasgow, a district with extreme deprivation. Prior to the programme, fatalistic beliefs were prevalent i.e. “*nothing can be done!*” for the community. Therefore training and information sessions for parents, carers, workers from various disciplines, lay leaders, opinion-formers and volunteers were arranged via community networks. Communities were shocked by the reported levels of dental morbidity which their infants experienced. Many were surprised to learn that even small adjustments to day-to-day activities had the potential to bring about substantial cumulative improvements in the dental health of individual children and the local community.

Strategies, consistent with general health promotion messages, were devised and mini-programmes developed with the community, aimed at ‘*making the healthy choice, the easy choice*’. Numerous joint-interventions were developed with parents/carers, extended families, health visitors, nursery teachers, primary school staff, local authorities,

care workers, pharmacists, dental and dietetics practitioners, as well as voluntary retail and media organisations. Key objectives were to maximise opportunities for dental health promotion by a) sustained distribution of free consumables e.g. fluoridated dentifrice and toothbrushes to support daily brushing at home and in group settings from the time of eruption of the first tooth, b) advocating reductions in the frequency of consumption of sugars in children’s daily lives by substituting free fresh fruit, milk and cooled water for sugared foods and drinks and c) promoting asymptomatic dental attendances from the earliest age in populations with little understanding of the benefits of restorative/clinical preventive care options vs. dental extractions and for whom fear, anxiety about dentistry and cultural reliance on ‘crisis-care’ extractions under General Anaesthesia was widespread.

Interventions included: widespread and sustained distributions of free 1000ppmF dentifrice and toothbrushes to infants and siblings, for use at home and in nursery school, daily supervised toothbrushing activity in all nurseries seeking “Smile Nursery” accreditation; School Breakfast Clubs provided nutritious breakfasts at subsidised rates linked with daily toothbrushing activity; nurseries developed and implemented ‘Safe Snack and Meals’ policies aimed at sugars avoidance; distribution of in-season free fruit extended dietary diversity at Breakfast Clubs, nursery schools, primary schools and community events. Cooled water and milk were introduced as healthy alternatives to sweetened and carbonated drinks in sports centres, nurseries, Health Centres and schools. A ‘Change-to-Cup’ scheme and Weaning Fairs provided free infant drinking cups along with advice on ‘safe weaning’ and appropriate foods & drinks; “Get Cooking” classes supported skill development by parents/carers. These “Baby Clubs” resulted from collaboration between the programme, health visitors and the ‘*Save the Children Fund*’ and pioneered development of parenting skills via weekly informal facilitated workshops on diverse topics e.g. breast feeding, infant wakefulness, weaning, sun-safety, hidden-sugars, family dental visits, family toothbrushing, smoking cessation etc. A ‘Friendly Dentist Scheme’ enrolled the district’s General Dental Practitioners and their staff to accept any children for whom NHS dental registration was sought on to their practice lists. Dental registration incentive packs, “Smile Bags”, were provided free to dental practices for children aged 0-2 and 3-5 years of age.

The programme deliberately stimulated much wider “endorsement” of each community’s efforts by promotion/publication of locally produced dental health promotion artwork, with proactive features in the local press and displays in prominent local public building, e.g. local libraries, museums etc.

However, in spite of previous central and local initiatives, it was recognised that the traditional model of delivering children’s dental services continued unchanged in Possilpark practices. This may have been the result of there being little incentive for practitioners to modify their approach to delivering children’s dentistry.

In an attempt to overcome this perceived barrier, a novel incremental capitation scheme to provide comprehensive preventive and restorative dental care for children aged 0-7 years was developed in 1997 by DRMCC, follow-

ing his appointment as Consultant in Dental Public Health to GGHB. The proposal set-out clear specifications which were tailored to the age of child patients. For the 0-2 year age cohort, children would receive toothbrushing and dietary advice on a 4-monthly basis along with an annual oral examination. It was proposed that fluoride varnish application would commence at the age of 2 years and be repeated at 4-monthly intervals. The 3-4 year age cohort would continue a similar regimen with the addition of fissure sealants to lower second deciduous molar teeth. For the 5-7 year age cohort, it was suggested that the frequency of attendance would be increased to 3-monthly, when fluoride varnish would be applied to all erupted teeth and fissure sealants would be applied to first permanent molars, as and when their occlusal surfaces were exposed fully. Dietary and oral hygiene advice would be available to parents and children throughout the entire 8-year period.

In 1998, an application was submitted to the Scottish Office Health Department to achieve pilot status for dental practices in the Possilpark area of Glasgow to introduce this innovative model under the auspices of Personal Dental Services (NHS Primary Care Act 1997). However, this application was rejected on the basis of perceived affordability. This left the Oral Health Gain Project to continue without the much needed changes in the delivery of 'in practice' oral health promotion and clinical preventive techniques. The proposals for the pilot did have great potential to deliver marked improvements in the health of the deciduous dentitions of children aged 0-5 years, and in the permanent dentitions of participating children aged 6-12 years - all within 6 years of its introduction. But, sadly it was not to be.

OHAT's

Despite this setback, a combination of factors soon led to the pre-5 oral health improvement programme being extended. On hearing of the interventions which Possilpark families were receiving, local people from the East-end of Glasgow began to lobby for similar help for their area. In view of early favourable health outcomes, the Health Board felt it should not withhold the programme, which was thus extended into this second district. Initial results for the two areas were positive and led to incremental extension of the approach with the establishment of multi-professional Oral Health Action Teams (OHATs) in Glasgow's primary health care administrative areas (Local Health Care Co-operatives). The sequence of OHAT implementation was prioritised according to needs assessments of respective infant populations. By 2001, virtually all remaining severely-deprived communities (populations total, N = 287,600, birth rate - circa 3450 per annum) had active OHAT programmes.

In 2005, an evaluation of the OHAT activities was published. This demonstrated that in the original pilot area (Possilpark), the mean dmft had reduced from 5.5 to 3.6 between 1997/98 and 2003/04. The percentage of 5-year-olds with no obvious decay experience showed a significant increase from 11% to 29%. The proportion of children with missing teeth due to extraction decreased from 33% to 22%, and the proportion of children with untreated decayed teeth decreased from 82% to 59%.

Similar improvements in child oral health were seen also in the second pilot district following commencement of community interventions. Mean dmft decreased from 6.0 to

3.6 between 1997/98 and 2003/04, and the proportion of 5-year-olds with no experience of obvious tooth decay increased from 10% to 32%.

In the period prior to the introduction of OHATs in 2000, while the oral health of young children in the pilot districts was benefitting, there was no evidence of any statistically significant improvement in the dental health indices of the 5-year-old population as a whole across Glasgow. However, following the introduction of community programmes to all the Health Board's socio-economically challenged districts, a downward trend in mean dmft values from 3.7 to 3.1 was observed in Glasgow's 5-year-old population, and a significant increase in the proportion of infants with no obvious tooth decay occurred (from 34% to 42%).

While these improvements were very encouraging, there still remained a considerable burden of dental disease to be overcome in Glasgow's children, and clear differences in the levels of oral health remained between those in affluent and deprived areas. One disappointing aspect of the programme was that there was no obvious change to a more preventive- and restorative-orientated philosophy within dental practice. There was also no evidence of increased restorative dental treatment in any of the targetted 5-year-old Glasgow populations, and it was concluded that the reductions in mean dmft and increased proportions of children with no obvious caries experience were attributable to dental caries prevention behaviours being practised on a day-to-day basis in homes and community settings.

Thus it was felt that to maximise the oral health improvement potential, there was a need to combine the community-based approach with the clinical preventive philosophy adopted, 20 years before, in the original Woodside model.

Childsmile

In Spring of 2005, The Scottish Executive published its Dental Action Plan. (Fig. 2) One of the main components of the document was the acknowledgement, yet again, of the need to improve the oral health of young children. Health improvement initiatives for this group were recommended and, as a consequence of the publication, the "Childsmile Programme" was born, its main aims being to improve children's dental health and to reduce the oral health inequalities of youngsters in Scotland.

To-date Childsmile (www.child-smile.org) has consisted of a Core Programme and two demonstration programmes, one in the East of Scotland (Director: Graham Ball) involving nurseries and schools, and one in the West of Scotland (Director: Lorna Macpherson) involving health visitors, community-based dental health workers, general dental practices and salaried primary dental care services.

Important features of the Programme are the increased use of skill-mix within the dental team, with the extension of dental nurse duties to include oral health promotion and clinical prevention (fluoride varnish application) in both practice and nursery/school settings, the latter role having been approved by the GDC.

As part of the Core Programme, all children attending a nursery (local authority or private) in Scotland should have the opportunity to participate in a toothbrushing programme. This scheme operates on a daily basis in the nurseries. Additionally, in Glasgow, this activity has been extended into Primary 1 & 2 classes of all local authority primary schools.

Another feature of the Core Programme is the free distribution of fluoridated toothpaste and toothbrushes to all children attending a nursery, and as they start primary school.



Fig. 3 Childsmile

The West and East programmes are designed to give additional support to those children at increased risk of dental caries. In the East scheme (*Childsmile Nursery & School*), nurseries and primary schools situated in the most socially-deprived areas within each NHS Board receive an enhanced caries-prevention programme. In addition to daily toothbrushing, children are offered twice-yearly fluoride varnish application (delivered by specially-trained dental nurses). It is planned to extend the scheme to include the provision of fissure sealants by hygienists / therapists, and this is being piloted currently in one Board area.

The West component (*Childsmile Practice*) is at present located within the more socio-economically deprived areas of the West of Scotland NHS Boards. Here, health visitors conduct a caries risk assessment within the first few weeks of a child's life, and those deemed to be at increased risk of developing decay are referred on to a community-based Dental Health Support Worker (DHSW). Training has been developed for this new staff group by NHS Education for Scotland. The DHSW plays a key role in facilitating the link between health visitors and primary care dental services. They visit the family of the new-born in the home, provide health promotion advice, link the family to health improvement events in the local community e.g. weaning fairs, and facilitate attendance of the child and accompanying parents at dental practices / primary care salaried service dental clinics. Here, trained dental nurses provide appropriate evidence-based dental health promotion advice to the parents and, from 18 months, apply fluoride varnish to the child's teeth. Again, a specific training programme has been developed by NES for the dental nurses, and a care manual has also been produced, setting out the advice that should be given at different ages in a user-friendly manner. As the child gets older, other members of the dental team become more involved to ensure oral health assessments are conducted, and appropriate preventive and restorative care is provided. The Programme follows SIGN guidelines and is updated to include any newly published guidance.

Childsmile Practice will be developed further in the coming year to ensure that, in the future, Childsmile can be the new NHS primary care dental service for all children in Scotland. The role of the health visitor will be to

promote Childsmile amongst families of all new-borns and the ongoing support of dental health support workers in the community team. While, in the future, all children will have the opportunity to be part of the programme, the intensity of the support provided by DHSWs and the practice/clinic teams will be dependent on the needs of the individual child. Thus Childsmile Practice will take both a universal and targeted approach to health improvement activities, with the aim of improving oral health generally, whilst also reducing health inequalities.

In 2009/10 it is planned that all components of the Childsmile Programme will be introduced to each NHS Board in Scotland. Thus, in Greater Glasgow & Clyde the nursery and school elements will commence. At that stage an integrated programme will commence with close working between all members of the Childsmile team to try and ensure appropriate care pathways are in place for all youngsters in the area.

From the above paragraphs it can be seen that Childsmile is very much still 'work in progress'. Monitoring and evaluation are ongoing. The Programme evolves and adapts, based on feedback from this work and the steer from Scottish Government. It is too early to determine whether any positive health outcomes have been achieved, but this work, which combines much of that undertaken previously in Glasgow and other areas, has the potential significantly to improve the levels of oral health of young children, both locally and across Scotland, in spite of the lack of the introduction of much-needed water fluoridation.

Lorna Macpherson, Professor of Dental Public Health, University of Glasgow Dental School.

Ken Stephen, Emeritus Professor of Dental Public Health, University of Glasgow Dental School.

David McCall, Consultant in Dental Public Health, NHS Greater Glasgow and Clyde, Glasgow Dental Hospital & School

Yvonne Blair, NDIP Co-ordinator, NHS Greater Glasgow and Clyde, Glasgow Dental Hospital & School

Francis Brodie Imlach (1819-1891)

Surgeon Dentist and Early Pioneer of Dental Anaesthesia
President Royal College of Surgeons of Edinburgh, 1879-1882

Paul R Geissler

The son of George Imlach, W.S., an Edinburgh lawyer, Francis Brodie Imlach was educated at the Royal High School and became one of the foremost dental surgeons of his time in Edinburgh. He was the first surgeon with an exclusively dental practice to be elected President of a surgical college.

In the years before the Dentists Act of 1878, training in dental surgery was less formal. Imlach learned his dentistry in Edinburgh and in Paris and went on to develop a large dental practice at 48 Queen St, in the Edinburgh New Town. He was a friend as well as a neighbour of Sir James Y. Simpson, at the time chloroform was introduced into medical practice.

On the evening of Thursday, November 4 1847, Simpson and his two colleagues discovered the anaesthetic effects of chloroform by self-experimentation. On the Monday following, Simpson used it in an obstetric case and, four days later, he used it for general surgery. During that week (early November 1847) Imlach was the first person to extract a tooth using chloroform anaesthesia, the patient being one of his apprentices, James Darsie Morrison, who later practised as a surgeon-dentist. Within nine months, he had administered chloroform in nearly 300 cases and had, in 1847, devised an ivory dental prop, designed to open the mouth quickly during the short period of unconsciousness produced by the, "ten to twelve breaths" of chloroform which were customarily given.

The results were published (1. Fig.2) in 1848 and reviewed in the London Medical Gazette of December 1848 (2) which also summarised the article. Five main points were stressed when

employing chloroform in dental surgery:-



Fig. 1 Francis Brodie Imlach, c.1860s

"Firstly, I settle the patient in an easy and comfortable position, with the head supported by some firm object. I am also in the habit of requesting him to close his eyes, in order to avoid irritation of the chloroform vapour, and to prevent any accidental or physical excitement, as from the sight of an amusing object, or the glare of too bright light. Of course, all noise of every kind is strictly prohibited during the inhalation, and I think it advisable to warn him against being alarmed by extraordinary noises, as ringing in the head, or by flashes of light before the eyes, or a feeling of giddiness, or vertigo.

"Secondly. As to the dose. I am always in the habit of pouring a large quantity upon the handkerchief, and diffusing it over a surface larger than will cover the nose and mouth. The quantity I never measure, as I judge by the effects and not by the dose; but I believe I seldom begin with pouring, at first, less than three or four drachms upon the handkerchief. In fact, I pour upon it a quantity sufficient to moisten completely the required surface. Many of the supposed bad effects, doubtlessly, result from giving a small, imperfect, and consequently mere exciting, dose.

"Thirdly. The mode of administration. The chloroform is poured upon a thin white cotton handkerchief. An old one answers the purpose remarkably well. This I hold at first at the distance of two or three inches from the patient's mouth, and allow him thus to take two or three inhalations. I then approximate it more closely to the face, but never bring it into close contact. In this position the handkerchief is continued till the anaesthesia supervenes. In judging of this point, I depend upon no single circumstance, and the indications are of such a varying nature as cannot be described, but are easily perceived after some experience in the practice.

"Fourthly. The moment the handkerchief is removed, I apply the instrument (kept ready in my hand), and at once proceed to extract the tooth. If several teeth are to be extracted or punched, or if I require to change the instrument in use, it may be necessary to recommence the inhalation for a short time. This readiness at the proper time, and the rapid and immediate extraction, I consider the chief secret of

success.

“Fifthly. The great mass of patients becoming insensible, have their jaws so clenched, that there is no possibility of opening the mouth, and the operator keeps working away, tugging at the under jaw, or pressing upon the jaw externally with his knuckles, trying to force open the mouth. This again is easily remedied, by the very simple method of never allowing the patient to close his jaws at all, by placing a small gag of ivory or gutta percha between the teeth, before administering the chloroform. No patient objects to it, and it causes him no inconvenience whatsoever.”

He drew the following conclusions from his use of chloroform:-

- “1. That out of above 300 cases of dental surgery, in which I have employed chloroform, I have never seen the least deleterious effect result from its use, but the reverse.
- “2. I have seen or traced no after bad consequences of any kind whatsoever.
- “3. I have seen no case in which I have been afraid to give, and where I have not given it quite successfully.
- “4. It save the patient's present physical suffering and previous struggles of feeling.
- “5. It enables the dentist to perform his work with more satisfaction, certainty, and success.
- “6. Patients how have once had a tooth drawn under the influence of chloroform, invariably demand the repetition of the chloroform on requiring again the same operation.”

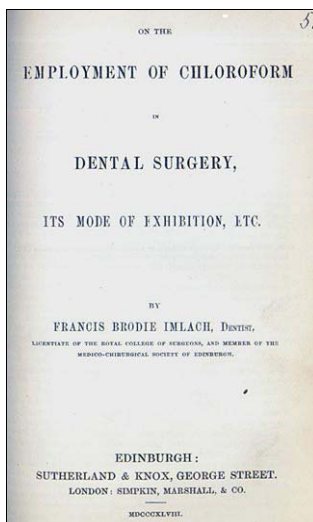


Fig. 2 Title Page, *Employment of Chloroform*, 1848.

. It is obvious, from this report, that Imlach was very successful (and fortunate?) in his practice.

Imlach was an influential medical politician and along with Robert Nasmyth, Robert Orphoott and John Smith, he founded the Edinburgh Dental Dispensary in 1860 to provide clinical instruction for student dentists and dental care for the poor. In 1878 it became the Edinburgh Dental

Hospital and School.

He was elected President of the Royal College of Surgeons of Edinburgh in 1879, just after the College first established the Diploma in Dental Surgery (Fig. 3).

An able administrator, he was for some years after he retired from practice, the manager of the Royal Infirmary and of Donaldson's Hospital for the Deaf, helped the Orphan Hospital and the Morningside Asylum. Outwith his dental practice he was President of the Royal Scottish Society of Arts, a member of the Royal Company of Archers and an elder in St Stephen's church.

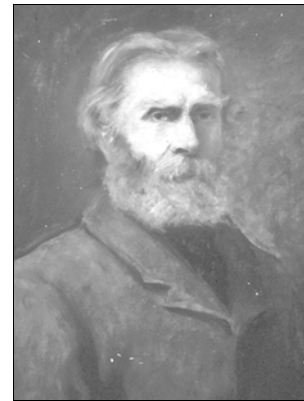


Fig. 3 Portrait, Royal College of Surgeons Edinburgh

Francis Brodie Imlach died suddenly in the street on the afternoon of 24th December 1891 from *angina pectoris*, when hurrying to attend a meeting at the Royal College of Surgeons of Edinburgh.

References

1. On the Employment of Chloroform in Dental Surgery, its Mode of Exhibition, Edinburgh, 1848.
2. London Medical Gazette, 1848, Vol. V11, 721-7
3. Dentistry Then and Now, J. Menzies Campbell, 1981.
4. Surgeons Lives, An Anthology of College Fellows over 500 years, RCSEd, 2005.
5. British Medical Journal, Jan 1892, 189.
6. Medical News, Feb 1892, 773-775

Paul R Geissler

**Hon. Curator Menzies-Campbell
Collection at the Surgeons' Hall,
Edinburgh**

Dental Verses
The Shortage of Dentists
by
T Evans Johnston

Said Malcolm Knott to William Guy
 In tones of great distress,
 "I'll tell you this without a lie
 I think old man we'll have to try
 To get more students by and by
 To take the L.D.S."

The dentists (nineteen twenty one)
 Are dying off so quick,
 We'll soon be in a fearful case
 There will be none to take their place
 Which is a very great disgrace
 And makes me feel quite sick."

Said William Guy to Malcolm Knott,
 In accents loud and clear,
 "I think you're talking utter rot,
 We've plenty students have we not
 (and doubtless others can be got)
 To last for many a year."

"Dear Sir, I know that I am right
 Because I am assured,
 And everyone must be agreed
 To satisfy the Public need
 We'll have to sow more dental seed,
 And have it well manured."

And so my friend I would suggest
 More students to attract,
 I'd take the old curriculum
 I'd boil it down, take off the scum,
 Reduce it to a minimum."

Said Guy "I think you're cracked
 For if we do as you suggest,
 Sir, it would come to this,
 That anyone of feeble brain,
 Could qualify without much strain,
 And practise dentistry for gain
 In ignorance and bliss."

"But my dear Chap" said Knott to Guy,
 "Its you that's talking rot.
 We must have numbers to supply
 The place of those about to die."
 "I hope it's neither you nor I."
 Said Guy to Malcolm Knott.

1. Thomas Evans Johnston (1871-1948). President Odonto-Chirurgical Society of Scotland, President North of Scotland Branch BDA, President Dundee Dental Club.

2. Malcolm Knott (1867-1940). President BDA 1929-30, First Chairman of the Dental Education Advisory Committee 1931-37.

3. Dr. William Guy (1859-1950). Dean of Edinburgh Dental School, President BDA. Author of the autobiography: *Mostly Memories—Some Digressions*, Edinburgh, CJ Cousland, 1948.

Editor's Notes on the background to the poem

This topic is a recurring theme in the politics of dentistry in the UK. Malcolm Knott, President of the BDA in 1929 was concerned at the loss of manpower which would result from the approaching retirement of a large number of unqualified practitioners included in the Register by virtue of the 1921 *Dentist's Act*. He advocated a shortened curriculum for dental students which he believed would be more attractive to potential entrants to the profession (and their families) and so stimulate recruitment. William Guy, who was the Dean of the Edinburgh Dental School and a member of the Education Committee of the Dental Board of the GMC, opposed any such reduction in educational rigour, as he said in a letter to the BDJ, "The institution of an inferior Dental Diploma, such as is proposed would be a disaster from which the profession might never recover." Knott was however a keen supporter of dental education in general, a long standing member of staff at Birmingham and also the first Chairman from 1931-37 of the Dental Education Advisory Council, the group of Dental Hospital authorities which still coordinates their support for dental education in the dental schools. The debate has echoes in present day Government initiatives in England, and now in Scotland in Aberdeen, to address the "shortage of dentists" by increasing the numbers being trained through the introduction of shortened courses, albeit for graduate entrants. William Guy himself produced a great quantity of verse and his autobiography devotes much space to its publication—and strangely, hardly any to his "day-job" as Dean of Edinburgh.

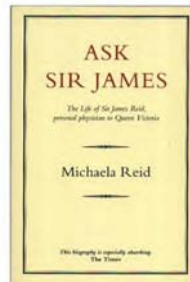
Some Dental Extracts

The Life of Sir James Reid Personal Physician to Queen Victoria

Rufus Ross



Queen Victoria



Ask Sir James, Reid M.,
Eland, New Edn., 1996.

In *Ask Sir James*, a biography written by his grandson's wife, Michaela Reid, recounts extracts from Sir James Reid's diaries, in which Reid describes his experiences as the Queen's physician. Queen Victoria often had trouble with her teeth and in the book Sir James relates a number of these occasions. On one occasion Reid received an urgent message from the Queen:

"The stopping having quite suddenly come out of the Queen's tooth she wishes him to bring up something to stop it with if possible this evening before dinner."

The Queen practically always spoke and addressed Reid in the third person. He hastened to the Chalet des Rosiers in Mentone, France where the Queen was staying and succeeded in stopping the tooth, with, according to him, "complete and permanent success."

The Queen expects impossibilities

His training as doctor cum vet and dentist in Ellon, his hometown, no doubt served him in good stead on this occasion. According to Reid, the Queen's relations with her dentists were not always easy and on one occasion, when a dental problem arose, she refused to have Dr Fairbanks, the Queen's dentist, "as he was so slow." Reid wrote to Jenner, Sir William Jenner, Physician-in-Ordinary to Queen Victoria and the Prince of Wales, "I fear H.M. expects impossibilities from the dentists."

In May 1897, Mr Charles Tomes, came to see the Queen about making 'some false teeth.' Reid noted that, "he gave a favourable opinion about her mouth, but H.M. would not allow him to take a cast of her mouth yet!"

A year later she called on the services of another dentist, Harry Baldwin, who took an impression of her lower jaw, and apparently had some type of lower denture fitted.

A year later, Reid noted that the Queen was having trouble with her artificial teeth and constantly called on Reid to alter them. There is no further mention of the outcome.

Romanovs at Balmoral

In September 1896, The Queen invited Nicholas II, Czar of Russia and the Czarina, Princess Alice of Hesse, her granddaughter, and also their baby daughter, the Grand Duchess of Olga to Balmoral. This visit had political motives and was suggested by Lord Salisbury (Prime Minister 1895-1902) in an attempt to have the Russians use their influence to support British exertions in the Sudan.

A golden thank-you

On 30th September of that year, Reid noted that he was called upon at 9.30 in the morning to attend to an illustrious patient in the person of Nicholas II. The Czar's cheek was badly swollen from irritation from a stump of a decayed molar. Reid showed that he had some basic dental knowledge; he applied Tincture of Iodine and instructed that the tincture be applied frequently "over the gum of the second left lower molar." The following day the Czar was much better and the swelling had subsided.



Czar Nicholas II

On his departure, the Czar presented Reid with a gold cigarette case with the Russian imperial arms in gold and diamonds as a "thank you" for his ministrations.

Rufus Ross

Dental Historian, Glasgow

Web News

Carol Parry

Archivist, Royal College of Physicians and Surgeons of Glasgow

e-mail carolparry@rcpsg.ac.uk



Herbal Remedies for dental problems

A unique 18th century book of herbal remedies from the archive of the Royal College of Physicians and Surgeons of Glasgow is now available on the College website. The manuscript was digitised by the Scottish Archive Network (SCAN) and has been transcribed by retired botanist, Dr Agnes Walker. The book is written in Lowland Scots and, from her expertise of plants and terminology, Dr Walker believes the work to have been a product of either Lanarkshire or Ayrshire. Such hand-written books of remedies and recipes were quite common at this period due to a lack of professional medical care in remoter areas. This work, however, is unusual in not appearing just to copy down other people's remedies – very often one finds remedies for a certain doctor's pills or potions in this type of work, but there are hardly any in this particular book which makes it very special indeed. The writer talks about "bolsums.....that I despenced when I was in the despencary office" This suggests a special room with medicines and herbs.

Physic gardens

Several of the herbs mentioned in the book are not native to Scotland and indicate the existence of a physic garden. Although some of the remedies in the book appear most odd and strange to those in the 21st century, the orthodox medicines of the time the herbal was written also contained some very bizarre ingredients. The Edinburgh Pharmacopoeia of the late 17th and early 18th century, for example, contains items such as bodies and eggs of ant, snakes' skins, spiders web, woodlice, powdered Egyptian mummy and ex-

tracts from the skulls of those who had met a violent death. Hence we should not be surprised to see mentioned in the manuscript remedies such as rubbing teeth with mercury in order to make them fall out or a powder consisting of ground earthworms, mice droppings and hare's teeth for the same purpose.

Gunpowder pain relief

Several remedies are suggested for toothache and plants indicated as providing relief include ivy berries, bruised and boiled in strong white wine vinegar, sage, the roots of red nettles and the bark of the elder tree combined with pepper. A little gunpowder in a rag placed next to the teeth is also suggested. Motherwort and vervain waters are suggested as aids for rotting teeth. To preserve teeth from rotting or aching, the mouth should be washed every morning with the juice of lemons and afterwards the teeth rubbed with either sage leaf or else a little nutmeg powder. The mouth should be washed out after every meal with water for "the only way to keep the teeth sound and free from pain is to keep them clean." Vinegar of quinces is suggested for whitening the teeth and sweetening the breath. For making children's teeth cut, the manuscript suggests hanging a colt or calves' tooth around the child's neck. If available, the teeth of a dead man is best of all for this purpose.

The book of herbal remedies can be accessed from the website of the Royal College of Physicians and Surgeons of Glasgow at: <http://www.rcpsg.ac.uk/FellowsandMembers/ArchiveServices/Pages/Herbal.aspx>

The remedies in the College's manuscript can be compared with other texts available on the internet. Nicholas Culpepper's work, the *Complete Physician*, 1652, is available online from the Historical Library, Cushing/Whitney Medical Library, Yale University website at: <http://www.med.yale.edu/library/historical/culpeper/culpeper.htm>

Herbal folklore

A Modern Herbal by Mrs M Grieve, first published in 1931 contains medicinal, culinary, cosmetic and economic properties, cultivation and folk-lore of herbs. It cites the works of John Gerard, Nicholas Culpepper and other 18th century herbalists. Grieve's work, for example, confirms the use of sage for teeth stating that "The fresh leaves, rubbed on the teeth, will cleanse them and strengthen the gums. Sage is a common ingredient in tooth-powders." Grieve's *Modern Herbal* is available online at: <http://botanical.com/botanical/mgmh/mgmh.html>.

Release from debtor's prison

On the topic of herbals, Elizabeth Blackwell's *Curious Herbal* has been chosen by the British Library as one of its 'turning the page' texts. The herbal was compiled by Blackwell as a means to raise money to secure her husband's release from a debtor's prison. It was issued in weekly parts between 1737 and 1739, each with four plates and a page of text. Blackwell not only drew, but also engraved and coloured the illustrations, using specimens from the Chelsea Physic Garden. Selections from Blackwell's work can be accessed from the British Library website at: <http://www>.

bl.uk/onlinegallery/themes/landmarks/blackwells.html.

Editorial note: The treatment of wounds by the application of spiders' webs gathered in a dewy dawn appears from-time-to-time in medieval manuscripts. Since a spider requires to keep an insect caught in its web moist and fresh until it can be consumed, the "saliva" of a spider contains a natural anti-coagulant and has antibacterial qualities. Fresh dew as a carrier would be the nearest medieval equivalent to sterile water. It would not therefore be unreasonable to apply a newly-spun spider's web as part of a poultice to a wound.

JC



LETTERS

Please write to: The Secretary, HNHDRG, c/o The Library, Royal College of Physicians and Surgeons of Glasgow, 234-242, St. Vincent Street, Glasgow, G2 5RJ.

The authors of the letters printed here would be grateful for information from readers on any aspect of the subjects discussed. Please write to our Secretary at the address above.

Dear Professor McGowan,

I am researching a typhus epidemic in Greenock in 1864-65 during which 5 young doctors (or one third of the profession in the town) died. The dental connection is that the father of [one doctor] was Ebenezer Telford Dowie, who is interesting in himself. [Dowie], the son of printer in Glasgow, set up in dental practice in Greenock circa 1834. Subsequently in his late forties, he acquired an M.D. degree from Glasgow University and thereafter practised as a dentist, surgeon and physician. What I am wondering is: was this common? What were the

training arrangements in dentistry before 1878? Would it be simply a case of apprenticeship?

I would be glad of any help especially if accompanied by direction to verifiable sources.

Yours sincerely,

Dr. J.E. Thomson FRCP

Professor McGowan replies: There were no formal training courses for dentists in Scotland in the early part of the 19th century but while most were apprenticed to established dentists, there were always some who trained as doctors and or surgeons and then practised as dentists and even some who went to continental Europe for training.

Continued overleaf

Dear Professor McGowan,

Coupland chisels

I wonder if you could assist me with any background to the development and evolution of the Coupland chisels/gouges?

[I have found] a Coupland series of aspirators while [it has been suggested] that C. Ash and Coupland were instrument manufacturers.

Best wishes,
John Lowry

for his patients. In the 30's and up until the 70's the main work was making dentures but also some orthodontic appliances, crowns and bridges. There was no legal control of entry so some technicians may have had prior engineering experience in a related field. There is currently a Dental Technology association but I have no knowledge of older organisations.

I hope this is helpful – I imagine that local sources in Norwich would be the most productive for any further enquiries, particularly if you can trace the employing Dentist's name.

Dear Professor McGowan,

Dental apprenticeship

I am researching my family history and discovered that a distant cousin (now deceased, the last of his particular line) was employed between the 1930s and 1970s as a dental mechanic and later, a dental technician in Norwich, Norfolk. I imagine that his job would have required him to make dental apparatus such as dentures and braces.

The questions which I would like to ask are:

Is it more likely that he would have served an apprenticeship in this specialised field or could someone with, say, a surgical engineering background have adapted to the role of dental technician? Secondly, would he have had to have been registered/licensed in any way? If so, with which society?

Thank you,
Alan Homes

Dear Alan,

Your cousin would most likely have worked and been apprenticed. Your cousin would most likely have worked and been apprenticed in a dental practice. Formal training was rare in those days though there may have been evening classes at a local technical school. While the dentist would have been on the UK Dentists' Register, registration for technicians only becomes compulsory this year. The term "Dental Mechanic" was current till about 30 years ago when the term "Dental Technician" came into use but the work was no different. The 'lab' produced whatever the dentist needed

Latin Puzzle

Our thanks to Steven Cochran of Brandon, Florida USA who buys and sells old manuscripts for drawing our attention to a letter written in Edinburgh in 1780. The author of the letter was seeking patronage for a newspaper published by his son. However Mr. Cochran was surprised to find a Latin text written on the obverse of the letter which appears to be a treatise on dentistry.

The piece begins with a simple description of the human dentition and jaws. Later the writer mentions, "Gulielmus tertius quendam Britannicus et Hibernia Rex." (King William III of Britain and Ireland.) [1650-1702] The text was not therefore medieval as first thought. Notably history records that King William III often suffered dental pain.

Word of Mouth

Malvin E. Ring

*Sauce for the Gander**

S.J. Perelman

An American Humorist Looks at Dentistry.

S. J. Perelman (1904-1979) was one of America's most popular humorists in the 1920s and 30s. In addition to numerous books and screenplays, he wrote several of the Marx Brothers comedies and also the screenplay for *Around the World in Eighty Days*. But he was mostly known for his short, humorous pieces, which he called *feuilletons* (little leaves) and which appeared in popular magazines, most notably the *New Yorker*.

Witticisms

His references to himself were generally self-deprecatory, but witty, as when he said, "before they made S. J. Perelman they broke the mold." His own description of himself nicely sums up his personality:

"Button-cute, rapier-keen, wafer-thin and pauper-poor is S.J. Perelman, whose tall, stooping figure is better known to the twilight half-world of five continents than to Publishers' Row. That he possesses the power to become invisible to finance companies; that his laboratory is tooled up to manufacture Frankenstein-type monsters on an incredible scale; and that he owns one of the rare mouths in which butter has never melted are legends treasured by every school-boy."

Dental Lampoon

In 1927 he wrote a short piece for a popular magazine which lampooned dentistry after he came across a widely circulated proprietary magazine of the day. *Oral Hygiene* was sent gratis to just about every dentist in the United States and was known for its simple articles and hints on dental practice. The following piece is reprinted from L. Untermeyer's, *A Treasury of Laughter*, 1946:

Nothing But The Tooth, by S. J. Perelman

I am thirty-eight years old, have curly brown hair and blue eyes, own a ukulele and a yellow roadster, and am considered a snappy dresser in my crowd. But the thing I want most in the world for my birthday is a free subscription to *Oral Hygiene*, published by Merwin B. Massol, 1005 Liberty Avenue, Pittsburgh, PA. In the event you have been repairing your own teeth, *Oral Hygiene* is a respectable smooth finish technical magazine circulated to your dentist with the compli-

ments of his local supply company. Through its pages runs a recital of the most horrendous and fantastic deviations from the dental norm. It is a confessional in which dentists take down their back hair and stammer out the secrets of their craft. But every time I plunge into its crackling pages at my dentist's, just as I get interested in the story of the *Man With the Alveolar Dentures* or *Thirty Reasons Why People Stay Away From Dentists*, the nurse comes out slightly flushed and smoothing her hair to tell me that the doctor is ready.

Lipstick and giggling

Last Thursday, for example, I was head over heels in the question-and-answer department of *Oral Hygiene*. A frankly puzzled extractionist, who tried to cloak his agitation under the initials "J.S.G," had put his plight squarely up to the editor: "I have a patient, a woman of 20, who has a full complement of teeth. All of her restorations are gold foils or inlays. She constantly grinds her teeth at night. How can I aid her to stop grinding them? Would it do any good to give her a vellum rubber bite?" But before I could learn whether it was a bite or just a gentle hug the editor recommended, out popped Miss Inchbald with lipstick on her nose, giggling, "The Doctor is free now." "Free" indeed—"running amok" would be a better way to put it.

Sadist or fumble-bunny?

I had always thought of dentists as of the phlegmatic type; square-jawed sadists in white aprons who found release in trying out new kinds of burs on my shaky little incisors. One look at *Oral Hygiene* fixed that. Of all the inhibited, timorous, uncertain fumble-bunnies who creep the earth, Mr. Average Dentist is the worst. A filing clerk is a veritable saber-toothed tiger by comparison. Faced with a decision, your dentist's bones turn to water and he becomes all hands and feet. He muddles through his ordinary routine with a certain amount of bravado, plugging a molar here with chewing gum, sinking a shaft in a sound tooth there.

Nasty little innuendos

In his spare time he putters around his laboratory making tiny cement cup-cakes, substituting amber electric bulbs for ordinary bulbs in his waiting room to depress patients, and jotting down nasty little innuendos about peoples' gums in his notebook. But let an honest-to-goodness sufferer stagger in with his

face out of drawing, and Mr. Average Dentist's nerves go to hell. He runs sobbing to the "Ask Oral Hygiene" department and buries his head in the lap of V. C. Smedley, its director. I dip in for a typical sample:

Question—A patient of mine, a girl of 18, returned from school recently with a weird story of lightning having struck an upper right cuspid tooth and checked the enamel on the labial surface nearly two-thirds of the way from the incisal edge toward the neck. The patient was lying on a bed looking out an open window during an electric storm, and this one flash put out the lights of the house, and at the same time, the patient felt a burning sensation (like a burning wire) along the cuspid tooth. She immediately put her tongue on the tooth which felt rough, but as the lights were out she could not see it so she went back to bed. (A taste as from a burnt match accompanied the shock.)

Next morning she found the labial of the tooth black. Some of the color came off on her finger. By continually brushing all day with the aid of peroxide, salt, soda and vinegar she removed the remainder of the black, after which the tooth was a yellow shade and there was some roughness on the labial surface. Could the lightning have caused this and do you recommend smoothing the surface with discs? R.D.L., DDS, Oregon.

A tooth or a venetian blind?

Well, Doctor, let us take your story step-by-step. Miss Muffet told you that the sensation was like a burning wire, and she tasted something like a burnt match. Did you think, by any chance, of looking into her mouth for either wire or matches? Did you even think of looking into her mouth? I see no mention of the fact in your letter. You state that she walked in and told you the story, that's all. Of course it never occurred to you that she had brought along her mouth for a reason. Then you say, "she removed the remainder of the black after which the tooth was a yellow shade." Would it be asking too much of you to make up your mind? Was it a tooth or a yellow shade? You're quite sure it wasn't a Venetian blind? Or a gaily striped awning? Do you ever take a drink in the daytime, Doctor?"

Clearly a babbling hysteric

Frankly, men, I have no patience with such idiotic professional behaviour. An eighteen year old girl walks into a dentist's office exhibiting obvious symptoms of religious hysteria (stigmata, etc.) She babbles vaguely of thunderstorms and is patently a confirmed drunkard. The dentist goes to pieces, forgets to look in her mouth, and scurries off to *Oral Hygiene* asking for permission to smooth her surface with discs. It's a mercy he doesn't take matters into his own hands and try to plough every fourth tooth under. This is the kind

of man to whom we entrust our daughter's dentures. There is practically no problem so simple that it cannot confuse a dentist. For instance, thumb-sucking. "Could you suggest a method to correct thumb and index finger sucking by an infant of one year?" flutters a Minnesota orthodontist, awkwardly digging his toe into the hot sand. Dr. Smedley, whose patience rivals Job's, has an answer for everything: "Enclose the hand by tying shut the end of the sleeve of a sleeping garment, or fasten a section of pasteboard mailing tube to the sleeping garment in such a position as to prevent the bending of the elbow sufficiently to carry the thumb or index finger to the mouth." Now truly, Dr. Smedley, isn't that going all the way around Robin Hood's barn? Nailing the baby's hand to the high-chair is much more cozy, or, if no nail is available, a smart blow with a hammer on baby's fingers will slow him down. My grandfather, who was rather active in the nineties (between Columbus and Amsterdam Avenues—they finally got him for breaking and entering) always used an effective method to break children of this habit. He used to tie a grenade to the baby's thumb with cobbler's waxed thread, and when the little spanker pulled out the detonating pin with his teeth, Grandpa would stuff his fingers into his ears and run like the wind. Ironically enough, the people with whom Grandpa now boards have the same trouble keeping him from biting his thumbs, but overcome it by making him wear a loose jacket with very long sleeves, which they tie to the bars.

Dentists rough-shod the mildest of men

I have always been the mildest of men, but you remember the old saying "Beware the fury of a patient man." (I remember it very well and put my finger on it instantly, page 269 of Bartlett's book of quotations.) For years I have let dentists ride rough-shod over my teeth; I have been sawed, hacked, chopped, whittled, bewitched, bewildered, tattooed and signed on again; but this is cuspid's last stand. They'll never get me into that chair again. I'll dispose of my teeth as I see fit, and after they're gone, I'll get along. I started off living on gruel, and, by God, I can always go back to it again.

* **Editors's note:** In this article, Perelman ridicules the magazine, *Oral Hygiene*. This was entirely in keeping with his style. He was known to comb the output of the 1930s pulp magazine press, such as *Jitterbug* and *Spicy Detective* in order to find material for his own work. He referred to these magazines as: "Sauce for the Gander." JC

Malvin E Ring
Dental Historian
New York

List of Supporting Members

Lesley Barbenel	Dorothy Lunt
James Beaton	John McCrossan
Josie Beeley	Mary MacDonald
Stewart Blair	Stuart McDonald
Michael Broad	David McGowan
Laetitia Brocklebank	Beth McKechnie
David Brunton	James Maclean
Donald Cameron	Lorna Macpherson
Hugh Campbell	David Mason
Jimmy Campbell	Khursheed Moos
Bernard Caplan	Willie Neithercut
Sandy Cockburn	Audrey Noble
Tim Cooke	John C O'Neill
John Craig	Robin Orchardson
Josephine Cummins	The Osler Library, McGill University
John Davies	Carol Parry
Michael Dawson	Ian Rattray
Ekaterina Fabricant	Edna Robertson
Kieran Fallon	Stuart Robson
David Fong	Rufus Ross
Geoff Garnett	Len Schwartz
Stanley Gelbier	John Shankland
Michael Gow	Eddie Simpson
Robin Graham	Matthew Simpson
Susan Hammersley	Margaret Slotsvik
Ross Hood	Bill Smith
Bill Hutton	Stuart Taylor
John Kerr	Alastair Tough
Robert Kinloch	Ian Watson
Aletha Kowitz	Marie Watt
Thomas Leggat	Archie Whitelaw
Pat Lilly	

Both pictures are from the collection of Bill and Jenny Smith



*Brasilia at Caladh,
Kyles of Bute*

Water Colour 35x 25cms, by Iain S Cook LDS Glasgow, 1937, DDS Toronto. Signed Iain Cook and captioned: "Brasilia RSMYC"

Painted in the late 1980s combining two of his hobbies, painting and motor sailing. Also a keen golfer, Iain was a member of the R&A., Buchanan Castle and Whitecraigs Golf Clubs.

He was in Private Practice in Glasgow and a Visiting Surgeon in the Department of Conservation at GDH&S. Iain died on July 14th 2001.



*Peasant Cottage in the
Peloponnese*

Water Colour, 51x 30cms, by Russell A. McMillan LDS Glasgow, 1941. Signed, McMillan.

Painted during a visit to Greece in the late 1980s and purchased in 1994 during a joint exhibition with Ian Melville FRCS in the JD Kelly Gallery. Russell was a member of the R&A Golf Club, St Andrews, Crail and Glasgow Golf Clubs.

He was in Private Practice in Glasgow and a Visiting Surgeon in the Department of Conservation, GDH&S. Russell died on 20 March 1998.



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