**Fig. 1 Netherlandish Proverbs**, Pieter Bruegel The Elder, 1559

oil-on-panel, 117cm x 163cm

Gemäldegalerie, Berlin

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**Fig. 2** Detail from Fig. 1 Netherlandish Proverbs, ‘To Have Toothache Behind The Ears’ (to be a malingerer) and ‘Pissing At The Moon’ (wasting time in futile activities.)

**Fig. 3.** An earlier illustration of ‘Pissing At The Moon’ by the same artist, Pieter Bruegel the Elder, 1558. Musée Mayer van den Bergh, Antwerp

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Figure 1. *The Netherlandish Proverbs*, also known as *The World Turned Upside Down*, is an oil-on-oak panel by Peter Bruegel the Elder (c. 1525-1569) which features humans and animals illustrating Dutch Proverbs and idioms. The work is essentially a catalogue of human folly. Bruegel the Elder painted different versions of this popular work and his son, Peter Bruegel the Younger, produced at least another sixteen. Approximately 112 Proverbs are illustrated in each panel but the same Proverbs are not always shared in the different versions. Some Proverbs would still be familiar to modern viewers such as, ‘Armed To The Teeth’ and ‘Belling The Cat’ (bottom left) others are less recognisable, ‘To Be A Pillar Biter’ that is to be a religious hypocrite and ‘The Herring Hangs By Its Own Gills’ to be responsible for one’s actions (both lower left). The cover picture of this issue of *DHM*, (Fig. 2), is a detail showing a man at an upper window with his head wrapped in a cloth, indicating toothache. The man has the dull features which Bruegel used to portray stupidity. The man is pointing at an Inn sign showing a crescent moon with droplets of moisture in the background. The Proverbs here are, ‘To have Toothache Behind The Ears’, that is to be a malingerer, and ‘Pissing At The Moon’ to waste time in fruitless activity. The latter Proverb is one to which Bruegel often returned; another version is shown in Figure 3. See Wikipedia.org ‘Netherlandish Proverbs’ JMC
DENTAL HISTORY MAGAZINE

Published by the Henry Noble History of Dentistry Research Group

Formerly The History of Dentistry Newsletter

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ISSN  1756-1728

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The Magazine can be read online at the Group’s web site: http://www.historyofdentistry.co.uk/ (ISSN 1756-1736) HNHDRG is on facebook

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

Contributions on the History of Dentistry from any source are welcomed. Word and JPEG files by e-mail are preferred but some other formats are acceptable.

Printed by Admin Systems Design and Print Ltd, Helensburgh.


Contents

4  Update:  Includes Full Reports On The Goodall Symposium, RCPSG and The Lindsay Society Conference, Lincoln, 2015

11  DNA From Teeth Is Used To Name First World War Battle Victims

12  Dr Oscar Amoëdo y Valdes: The Founding Father Of Forensic Odontology

15  ‘We Want The Public To Know’ William Henry Waite, BDA Midlands Branch Dinner, 1890

19  Reminiscences: Rufus M Ross, Student And Dentist: The Transition 1947-1950

21  The Royal Canadian Dental Corps During The Second World War

24  Word Of Mouth: To Rise Again At A Decent Hour  by Joshua Ferris

25  Web News: ‘Why We All Fear Dentists Are Natural Born Killers’ And Unusual Pursuits

27  List Of Subscribers
The Goodall Symposium,
Royal College of Physicians and Surgeons of Glasgow June 11th, 2015.
Report By Robin Orchardson

Frank Dunn CBE, President of the RCPSG, opened the proceedings and the Honorary Librarian, Mr Roy Miller said a few words about the Goodall Memorial Lecture. It was named after a fellow of the College, Dr Archibald Lamont Goodall, who was the Honorary Librarian from 1946 until his death in 1963. There were 72 people present at the symposium. The first speaker was Prof Richard Welbury, (Vice-President (Dental) and Dean of the Dental Faculty, RCPSG). Professor Welbury’s subject was:

Child Protection in the UK (19th to 21st century)

He gave a quick summary of Child Protection landmarks from the 19th century. Mary Ellen McCormack was the first person to be protected by law in 1874 in the New York Supreme Court. The case was brought by the American Society of Cruelty to Animals because, remarkably, there was no equivalent for children. Thereafter the New York Society for the Prevention of Cruelty to Children was formed. There were no further significant developments until the mid 20th century when a paediatrician, Henry Kempe, published ‘battered child syndrome’ (1962) in the Journal of the American Medical Association. In the 1970’s terminology changed to ‘non-accidental injury’ in recognition that there was not only physical abuse but also emotional abuse and neglect. After the Cleveland Inquiry (1988) highlighted sexual abuse, the preferred term to encompass all types of abuse was ‘child abuse’. The Children’s Act (1989) has become the basis on which all child protection legislation today is based. It describes the following five principles:

... The welfare of the child being paramount
... Parental ‘responsibility’ not ‘right’
... No order principle
... No delay in court proceedings
... Corporate responsibility.

Following the death of Victoria Climbié in 2000, the current National Guidance for Child Protection and Assessment Framework was developed. He then went on to talk about the document ‘Child protection and the dental team’ published in 2006: he itemised the five chapters: responsibility, recognition, responding, reorganisation and resources. In this document dental neglect in the UK was defined for the first time. Dental caries is a sign of dental neglect and as a measure of the problem, the number of general anaesthetics given to children in the period 2013-15 are: 46,500 England, 11,455 Scotland (23% of all general anaesthetics for children in Scotland), 8,900 Wales. There is much work yet to be done.
The next speaker was Dr Kevin Jennings, Consultant, Restorative Dentistry, Glasgow Dental School, on:

A brief History of Tooth Replacement

He first described how the Etruscan and Chinese were the first real ‘dentists’ and then he went on to describe the gold- and silver-smiths and ivory turners. He described George Washington’s dentures and then he talked about Paul Revere and Doc Holliday (dentist and gun-fighter).

When people lose all their teeth, the support areas are greatly reduced: 22 cm² in the upper jaw and 12 cm² in the lower. Modern techniques with rubber and silicone impressions have greatly enhanced the surface details, although the maximum force generation is quite modest, about 1/3, compared with dentate individuals. He described clinical cases to show various designs of removable appliances and obturators for dealing with cleft palates. Then he went on to describe fixed appliances, firstly the enamel etching techniques and bridges and then implants. He described the early sub-periosteal and blade implants and then the more familiar endosseous implants and osseointegration devised by Brånemark. Finally, he described sinus lifts and alveolar augmentations.

The final speaker was Prof Stanley Gelbier, who spoke on:

From a Trade to a Profession

Professor Gelbier is the first UK professor of History of Dentistry in King’s College London. He is the President of the History of Medicine Society at the Royal Society of Medicine and a former Chairman of the Lindsay Society and former Editor of the Dental Historian.

Dental disease has been known for a long time, and the earliest signs of dentistry go back 13,000 years. He provided a table which detailed the landmarks beginning with cavity cutting with bow drills (Pakistan); fillings with bees-wax (Slovenia) and dental amalgam (China); Egyptian and Phoenician tooth replacement; Etruscan metalwork fixed bridges; Roman dentures; Mayan ‘bling’ with ornate jewellery inlaid teeth. A Sumerian text in 5000BCE described a ‘tooth worm’ as a cause of caries; Homer also endorsed the tooth worm. He drew attention to the work of Judy Miller, who studied the biomedical aspects of the ancient Egyptians. She found obvious problems with teeth and tooth wear and that a third of the teeth were carious. Bread with impurities wore the teeth down, and caries was prevalent as honey and cane sugar were introduced to the diet.

In 1540, Henry VIII established the company of barber-surgeons, but most people had to make do with quacks and mountebanks or the village blacksmiths. (Today this can be seen in rural parts of India.) In the 18th century, Claudius Ash went from gold-and silver-smithing to making porcelain teeth. By the 1840s the ‘Trade’ became a ‘Profession’. Professor Gelbier summarised the surgeons’ training from the barber-surgeons to the origins of the Royal College of Surgeons in London in 1800. He also dealt with Scotland. In 1505, James IV established the Barber-Surgeons of Edinburgh, and in 1778 it became the Royal College of Surgeons in Edinburgh. In Glasgow, James VI granted the royal charter to form the Glasgow Faculty of Physicians and Surgeons in 1599. In 1962, it became the Royal College of Physicians and Surgeons of Glasgow. The Royal College of Surgeons of Ireland was established in 1784. The tooth-drawers of the 14th century became the ‘Operators for the teeth’ in the 17th century and ‘dentists’ from the 18th century. In 1858 the Medical Act was passed and LDS was established and two years later saw the first candidates for the exam. The three examiners were the first ones to sit the examinations. In 1878, the Dentists Act and Register (1879) were formed, although 90% of the practitioners did
not have the LDS (they were called ‘dental experts’). In 1860, the Edinburgh Dental Dispensary was formed, and in 1875 the Edinburgh Dental Hospital and School was established. In 1879, James Rankin Brownlie formed the Glasgow Dental Hospital and School. The British Dental Association was established in 1880. In 1867, the Odonto-Chirurgical Society of Scotland was formed, and one hundred years later it became the Royal Odonto-Chirurgical Society of Scotland. Glasgow was slower again, and in 1902 the Glasgow Odontological Society was formed. Lillian Lindsay (nee Murray; 1871-1960) was the first woman dentist to qualify in the UK. She was an Edinburgh graduate, because she was not welcome in London. She worked for the British Dental Association beside her husband, and became the sub-editor of the *BDJ* in 1931. In 1946, she became the first lady president of the *BDA*.

Professor Moos bought the meeting to a close and thanked all the speakers for their endeavours.

**All Our Yesterdays: The Menzies Campbell Lecture, 11th September, 1998.**

In the Menzies Campbell Lecture of 1998, which was given as part of the BDS Jubilee Celebrations in that year, our former chairman, Rufus M Ross, (who is a recent recipient of the Lindsay Society Medal, (See this edition, p.10.) recalled life as a final year dental student in 1947, subsequently searching for a job in the turbulent post-war period and eventually joining the dental branch of the Royal Air Force in 1948. After he was ‘demobbed’ in 1950, Dr Ross set up his own practice in Partick, Glasgow. This wryly humorous article describes his experiences in the services and the early days of the NHS.

**DNA From Teeth Is Used To Name First World War Battle Victims**

In an absorbing article on the ongoing effort to name unknown soldiers from the First World War, Robin Orchardson relates how the bodies of men who were laid to rest in a War Grave associated with the Battle of Fromelles in July, 1916 have been identified by examining their dental DNA together with artefacts from the graves. Dr Orchardson rehearses the process used by forensic anthropologists in this kind of work and discusses some surprising facts about the dentition of the men who fought at Fromelles which the researchers work there also revealed. The article goes on to consider the events leading up to the formation of the Army Dental Corps in 1921.

**Dr Oscar Amoëdo y Valdes (1863-1945): Founding Father Of Forensic Odontology**

Oscar Amoëdo y Valdes was born in Cuba and began the practice of dentistry when he was still only a teenager. Xavier Riaud examines his life, his dental education in Havana and New York and his eventual acknowledgement as one of the founders of forensic odontology, which was a new science at that time. Dr Riaud also considers the effect of Valdes’ career on the changing attitudes to dentists; he argues that Valdes’ work enhanced the profile of the profession. Oscar Valdes involvement in the seminal forensic case arising from the aftermath of the fire at The Bazar de la Charité in Paris, in which 124 people lost their lives is given particular attention in this account of Valdes work. Dr Riaud refers candidly to the resentment which this gifted Cuban sometimes faced from his French colleagues.

**‘We Want The Public To Know’: Speech By William Henry Waite, BDA Dinner, 1890**

Dr Mike Gow draws our attention to the opinions of William Henry Waite (1839-1919) which were expressed at a British Dental Association, Midlands Branch Dinner in 1890. Dr Gow was impressed by the modern attitudes which Waite outlined in his after-dinner speech to the assembly of provincial dental surgeons. A reformer by nature, Waite shows remarkable prescience in some areas, calling for the continued improvement of dental education to bring dentists level with their medical colleagues and arguing that they should be regarded as specialists in their particular area of surgery. He appeals for a
strict code of professional ethics and emphasizes the necessity of communicating with the public. He wanted patients to be encouraged to understand that prevention was better than extraction. Most of all, Waite wanted the public to know that dentists were humanitarians; experts in the art of healing whose purpose was to diminish human suffering. Unfortunately, although much of what Waite hoped for the profession has come to pass, recent events and reports in the media suggest that dentists are still far from being regarded as benign. (See this edition, ‘Web News’, p. 25.)

The Royal Canadian Dental Corps

Xavier Riaud traces the history of the Royal Canadian Dental Corps from its formation during the Boer War of 1899-1902 until World War II and beyond. He describes the innovative use by the Canadians of mobile dental unit lorries and considers the role of women in the dental services from 1941.

Word of Mouth: To Rise Again At A Decent Hour By Joshua Ferris

Jo Cummins discusses the Man Booker and National Book Award listed novel, To Rise Again At A Decent Hour by Joshua Ferris. Paul O'Rourke is a successful, forty-year-old, New York dentist but his life is stunted by his curmudgeonly attitudes and a pathological fear of his own mortality; he is an atheist who cannot quite bring himself to let go of God. Although he is addicted to his i-phone, he distrusts the internet, so when someone impersonates him by setting up a rather good Facebook Page and Twitter Account in his name, he is horrified. Paul is eventually forced to confront his troubled past. A dark read in some ways but also a witty book with dental situations which readers of DHM will recognise and enjoy.

Web News: ‘Why We All Fear Dentists Are Natural Born Killers’

Article by Quentin Letts, Daily Mail, 31 July 2015

The shooting and prolonged death of ‘Cecil’ a mature, male lion whose habitat was The Hwange National Park of Zimbabwe by American tourist, Walter Palmer, in July of this year has caused international outrage with perhaps an unprecedented media furore. It would be very difficult to find one item of press coverage of the affair which fails to mention that Walter Palmer is a dentist.

Should the profession be concerned about this relentless association in the public mind which seems casually to bracket dentists with blood sports and cruelty?

Dr Palmer’s activities can be regarded as heinous but there is no rational connection between the practice of dentistry and killing for pleasure.

This edition of ‘Web News’ considers the media phenomenon surrounding the incident, including commercial enterprises which have taken advantage of the market engendered by the killing such as the production of Halloween costumes. (See left for an example of one costume.)

Also In This issue Of Web News: Unusual Pursuits: Zane Grey, Dentist and Novelist
Forthcoming Article On Dental Prosthetics Instructor, Hugh Peebles

A set of three, prosthetics laboratory, teaching manuals which were devised and illustrated by the remarkable Hugh Peebles (c. 1903-1989), who was a prosthetics instructor at Glasgow Dental Hospital and School until his retirement in 1968, have been donated to The Henry Noble History of Dentistry Research Group. Dental History Magazine will be publishing a selection of Peebles unique, beautifully detailed illustrations in future issues in addition to considering his work as a maker of model ships and other methods of transport.

Pat Lilly, former prosthetics instructor in the same laboratory where Peebles worked, will begin with an overview of the manuals in the next edition of Dental History Magazine.

Opening Of The First Dental Museum In Africa, In Ile-Ife, Osun State, Nigeria

Writing in The Nation, Edozie Udeze has described a groundbreaking, private museum on dental health and history in Osun State, Nigeria. The purpose of the institution is to ‘document and preserve the relics of various ages and time used for oral dentistry.’ In a fascinating article, Udeze emphasizes the importance of recording and protecting the heritage of the Nigerian people. The new museum is the brainchild of Eyitope Ogunbodede, a Professor of Dentistry at the Obafemi Awolowo University (OAU). The object, was to ‘use the historical approach to preserve the relics of dental materials that have been of immense use to the people.’ The new facility is the repository of the history of dentistry in Nigeria, with examples of materials and instruments. The collections to be seen chronicle the history of modern dentistry in Nigeria from 1903 to the present day. Some of the items date from 1926, the year in which Nigeria had its first dental doctor, Dr Sydney Obafemi Philips. One of the early dental chairs on view was used by the Baptist missionary, Dr Ewan Gladstone Maclean, thought to be the first dental practitioner in Nigeria. The museum also houses a collection of life-size, model heads which bear the various tribal marks of Nigeria. However, to record and display these marks is not the only purpose of the models. Some of the complications of receiving the marks are considered, such as distortion of the recipient’s natural facial features and dentition. A dance drama written by Arnold Udoka and performed by The National Troupe of Nigeria, Director Akinsola Adejuwon, was commissioned to advise the public of the oral problems which can be connected with tribal marks. In keeping with this, Professor Ogunbodede has said that his intention in founding the project was to expand the frontiers of dental and general health and to ‘inform and help the society.’ The Professor has written a book entitled, History of Dentistry In Nigeria , the proceeds of which will help to support the museum.

The full version of Edozie Udeze’s article in The Nation can be read online at: http://thenationonlineng.net/facial-marks-in-a-dental-museum/
Just under sixty delegates gathered at the Lincoln Hotel on Friday the 2nd of October for an informal supper to launch the 53rd Annual Meeting of the Lindsay Society. Following a welcome from the Society’s President Rachel Bairsto, (Head of BDA Museum Services), the Saturday morning session began with papers on ‘Waterloo teeth’ from Rowland Hopwood, a longstanding BDA Museum volunteer, and on the story of the new Birmingham Dental Hospital and School from Prof. Philip Lumley, Head of the School. Peter Frost related the history of the South London practice in which he succeeded Ron Gain, and then Dr Erik Grigg set the scene for the group’s afternoon tour of Lincoln Castle (Fig. 3) with an entertaining account of the city’s Roman and Medieval past. The Society’s Annual Dinner was held in the Judge’s Lodgings (Fig.1) transformed from the morning lecture room into an elegant evening dining venue.

The Sunday morning session opened with a paper on self-publishing by our local host Andrew Sadler, retired Consultant Maxillofacial Surgeon and textbook author. Prof. Stanley Gelbier shared his research into the family history of three dentists with distinguished politician fore-bearers and then Prof. Margaret Kellett told us the story of ‘Corsodyl’. After coffee, we heard a thoroughly researched and beautifully presented paper from Stewart Anderson on the pharmacists and chemists who provided dental services from the 19th century right up to the founding of the NHS, when free dental treatment became available to all - a story of which most of us were largely unaware. Up to the 1957 Dentist’s Act chemists were legally permitted to extract teeth - but without anaesthesia!
The Society conducted an EGM to ratify formally the presentation of the Lindsay Memorial Medal to our own Dr Rufus Ross; the medal was presented by Rachel Bairsto, to general acclamation and graciously received by Rufus.

The Society’s AGM followed and a number of forthcoming events were noted:

4th November 2015 - Celebration of the 80th birthday of the BDA Museum and marking Stanley Gelbier’s retirement from the Honorary Curatorship of the BDA Museum.

5th February 2016 - Joint evening Meeting with the Odontological Section of the RSM, London.

28th May 2016 - Lindsay Memorial Lecture at the BDA Annual Conference in Manchester.

7th-9th October 2016 - Lindsay Society’s 54th Annual Conference - Joint Meeting in London with the American Academy of the History of Dentistry.

March 2017 - Invitation to the 150th Anniversary Celebrations of the Royal Odonto-Chirurgical Society of Scotland, Edinburgh.

October 2017 - 55th Annual Meeting and Joint Meeting with the French Society, venue to be arranged. The minutes, officers reports and accounts were received and approved, and Khursheed Moos reported the recent activities of the Henry Noble Group. Peter Frost, former Treasurer, was thanked for his long contribution to the Society committee.

BDA President Nairn Wilson described a visit by a delegation to the grave of Sir John Tomes at St Mary’s Church, Caterham, Surrey, on the 3rd June 2015, a few weeks after the bicentenary of his birth. Following an appeal initiated by Dr Barry Berkovitz, Honorary Curator of the Odontological Collection at the Hunterian Museum of the RCSEng, the grave has been restored through funding from the Faculty of Dental Surgery RCS Eng, the Odontology Section of the RSM, the BDA and the Lindsay Society.

David McGowan was nominated President Elect. to take office in October 2016. Professor McGowan thanked the Society for the compliment.

The Lindsay Society meetings are open to all, as is membership to anyone interested in Dental History, whether dentist, BDA member or not. The meetings are notably friendly and informal and are held in venues of historical interest across the UK.
In July 1916, the Battle of Fromelles was a disaster for the allies. In one day, 5,500 Australian and 1,500 British soldiers were wounded, killed or reported missing. Bhattacharya (1) tells the story of one mass grave in the First World War and reveals how DNA from the teeth and other artefacts led to a lot of them being identified from living relatives. The bodies were found in a mass grave that had been dug by German troops in Pheasant Wood outside the village of Fromelges in northern France. The graves were laid out meticulously. The bodies were wrapped in blankets or tarpaulins and were laid north-south in two layers, one above the other with a layer of soil in between. The Germans had removed the soldiers’ identify badges and sent them to the Red Cross. (1) So, how were the bodies identified?

Fortunately, the DNA inside the soldiers’ teeth was largely protected from bacteria in the surrounding soil. Scientists at LGC Forensics traced the paternal line using markers on the Y chromosome. Also, they looked at mitochondrial DNA, which is passed on solely via the mother. Then, they looked for something to match it against. The researchers sent out DNA kits and obtained nearly 1,800 individual profiles. The DNA tests were supplemented by photographs, hair samples, and personal effects left in the graves. (1)

In an earlier investigation, Robb (2) reported: ‘Out of 250 bodies, DNA tests have identified 96 Australian dead by name, with a further 109 known to be Australian nationals.’ Now, in 2014, thanks to DNA techniques and a study of personal effects, a total of 144 soldiers were identified, and the latest named dead laid to rest in a ceremony in Fromelles in 2014. (1)

The article gives some information about the state of the teeth. The leader of the team, forensic anthropologist Professor Margaret Cox said: ‘We were flabbergasted by the sophisticated dentistry the soldiers had, and the amount of gold in the mouths. Some had root canal work done and a few had white fillings.’ Although not specified, much of the dental work was probably from the Australian victims. By the turn of the 20th century, modern dentistry was more or less established, and in 1905 Alfred Einhorn formulated the local anaesthetic procaine. So it’s not surprising that some of the soldiers have a high standard of dental care. Robert Arthur originated the cohesive gold foil method for fillings in 1855, and Sanford Barnum invented rubber-dam in 1864. James Morrison patented the first foot treadle dental engine in 1871, and his inexpensive machine cuts though enamel and dentine quickly, thus revolutionizing the practice of dentistry. (3) Thus, Europe, America and Australia had a good standard of dentists and dental care by 1914.

There was a time when a soldier’s teeth were a vital part of his kit. Grenadiers had to have sufficient front teeth to bite open the fuse of the grenade before lighting it. Musketeers also needed good front teeth to pull the wooden caps off their powder cartridges before pouring the charge into their muskets. (4)

In 1886, George Cunningham, President of the BDA, lambasted the government over its neglect of servicemen’s teeth. In contrast, the army had laid on the best of medical care. Shamed by the losses to disease and infection in the Crimean War (1853-6), by the start of the Boer War (1899-1902), it recruited hundreds of civilian surgeons to staff its 10 field hospitals. But the army saw no need for dentists. (4) In the Boer War, over 2,000 men were evacuated back to the UK on dental grounds, whilst almost 5,000 were unfit for duty in the field because of the lack of dentures. (5) An inspection of the Cheshire regiment revealed that hardly any men had molars, prompting an urgent request for mincing machines.

Twenty years later, it had not improved. In August 1914, facilities for dental treatment in the army were negligible, no provision had been made for treatment in the field and not one dental surgeon accompanied the expeditionary force to France. (4) During the disastrous Gallipoli campaign in 1915, 600 men from a single infantry division had to be evacuated on account of their teeth. (4) Fortunately, things got better, mainly because in December 1914, around the time of the First Battle of Ypres, General Douglas Haig, the commander-in-chief of the British Expeditionary Force in France, suffered terrible toothache, forcing his staff to send to Paris for a dentist. (4, 5) The dentist was Charles Valadier, who was the first dentist to provide treatment for the British soldiers. (6) One year later, in 1915, 12 dentists arrived in France and by the end of the war it had more than 800 dentists. Three years later, in 1921, the Army Dental Corps was established. (5)

References
5 http://www.ams-museum.org.uk/museum/history/ radc-history/
Oscar Amoêdo y Valdes was born in Mantazas, a village near Havana in Cuba, on November 10th 1863. He began to practise dentistry early, while still teenager, at a local dental surgery run by dentist, Ricardo Gordon. Gordon encouraged the young man to further his training at Dr Florencio Cancio Zamora’s Central Academy of Dentists in Havana where he graduated with the highest honours. In October 1884, Valdes approached the Dean of the university in the capital city of Cuba and requested permission to take a diploma in dental surgery; he was accepted and duly gained the Diploma at the age of 21.

The possessor of a very inquisitive mind, Oscar Valdes continued his education by enrolling at the New York Dental College in the USA where he graduated in 1888. Afterwards, he returned to Cuba where he set up his own practice. In 1889, he attended the first dental congress in Paris. He was well received in the French capital and after the symposium he settled in the city, enrolling in the Faculty of Medicine. In 1897, he was asked to carry out a dental examination in order to identify a body which was thought to be that of King Louis XVII of France. After the examination of the dentition, he concluded with confidence that the remains were not the son of the former, beheaded king.

On May 4th 1897, Valdes was asked to contribute in another forensic case; this was the fire of the Bazar de la Charité where 124 people died due to the mishandling of the projectionist’s equipment (using a system of ether and oxygen rather than electricity) which caught fire. Many of the victims were women of the aristocracy, the most notable of whom was the Duchess of Alençon, Sophie Charlotte of Bavaria, sister of ‘Sissi’ the renowned Empress of Austria. Sophie Charlotte had refused rescue attempts, insisting that the women working with her at the Bazaar were saved first. The Duchess’ body and those of the other victims were badly burned. By noon the day after the fire, about thirty bodies had still not been identified.
identified. The consul of Paraguay suggested that the authorities should ask the victims’ dentists for assistance. Three dentists were then summoned to carry out the identifications: Dr Charles Godon, Dr Isaac Davenport and Pr Ducourneau, teacher at the Odontotecnical School of Paris. Dr Isaac Davenport, Sophie-Charlotte’s dentist, attended with his patient’s medical card: he had recorded 17 consultations with her, completed over at least a two-year period, the last one dating back to December 15th, 1897. Davenport subsequently identified the Duchess’ body and his statement was supported by the investigating authority. It was a first for France; in the end, only five bodies were not identified. The practitioners’ work was reported by Oscar Amoêdo y Valdes during the 12th international congress of Moscow in a presentation entitled ‘The dentists’ task of identifying the bodies of the disaster of the Bazar de la Charité’.

On July 7th 1898, when he was 35 years of age, Valdes defended his medical thesis entitled, The dental art in legal medicine for which he obtained the title of ‘Doctor Of Medicine’. Professor Brouardel, author of the ground-breaking legislation of 1892 which had conferred professional status on dental surgeons as we know it today, was president of the committee which awarded Valdes the doctorate’. He said of the candidate’s work:

‘This is not a thesis but a study of odontology. He filled in all the great gaps which remained in the field of forensic identification’. His colleagues’ experiences and fieldwork as well as his own knowledge allowed him to defend his work successfully. This work of 608 pages was published by Masson & Cie Editions and was acknowledged as the authoritative source on this subject by the whole dental profession. This is when dental identification, which had been nonexistent until then, was founded.

A great number of pages were devoted to the techniques [involved]: bites, tooth abrasion and post mortem examination of the dentition. In the interests of thoroughness, he also studied dental jurisprudence. He concluded his research with 52 observations devoted to dental identification. In addition, on August 4th, 1899, he confidently presented a treatise entitled ‘The identification of corpses by a dental expert’ to the American Dental Society of Europe:

“The role of the dental expert in carrying out identifications cannot be called into question nowadays. The
observations that we make are convincing... Sometimes, the dentist uses anomalies [of the dentition] as the cornerstone of his conclusions; sometimes, he uses [the presence of] restorations to the same end... [The role of the dentist in this field] cannot be in question and we think that in future, [the services of dentists will be called upon in difficult [forensic] cases.”

After completing this written study, he taught at the ‘Ecole odontotechnique’ of Paris, where he was successively appointed instructor, supply professor, and finally, full professor. He worked there on a voluntary basis for 15 more years. In order to make a living, Amoêdo also established his own dental practice. Even though, he started slowly, he eventually relocated to 15, Avenue de l’Opéra where he remained until the end of his career.3 Eventually, he wrote more than 120 articles about the various technical aspects of dentistry. As a member of 14 learned medical societies, he attended 57 professional conferences.

But Valdes professional life was not without its difficulties; at times he faced the resentment of colleagues and xenophobia. On July 24th 1900, the Minister of Education found it necessary to sign an order upon the request of the Dental School of Paris, stipulating that Amoêdo was allowed to practise - despite being a foreigner. This had its effect, on January 26th 1902, he was unanimously elected as an academician . Thus, while living in Paris, this Cuban dental surgeon contributed to the liberating revolution of his own country. Valdes felt greatly honoured when he was nominated as President of the French Odontological Society. His inaugural address showed his enormous respect for the dental profession.

During World War I, Valdes was one of the first dentists to enlist in the Red Cross as a dental practitioner. He always remained at the disposal of the medical authorities, serving wherever his skills were needed most. On August 5th 1914, a relief committee was created. Its aim was to treat the soldiers who had maxillofacial and facial injuries. The committee was composed of civilian dentists whose task, in addition to providing treatment, was also to raise funds for the development of a health care infrastructure for the injured soldiers. Oscar supported the effort immediately and as he was a recognized authority in the dental profession, he became a leading member of the committee. Amoêdo y Valdes was eventually promoted to the rank of captain for his devotion to the injured of WWI. He was also made a knight of the Legion of Honour in France and was awarded a commemorative medal of the Great War. Sadly, during World War II, the Germans arrested Valdes and incarcerated him in a camp. Oscar Amoêdo y Valdes died in Toulouse, on September 27th 1945. He was 82 years old.

Thanks to Amoêdo y Valdes’s work on forensic odontology, the status of dental experts was recognised and enhanced. His contribution continued to be influential throughout the 20th century, notably in the field of judicial proceedings.

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We Want The Public To Know

William Henry Waite (1839-1919)
British Dental Association, Midlands Dinner, 1890

In the second article in our occasional series recording the activities of the British Dental Association in the 19th century, Dr Mike Gow has drawn our attention to a remarkably forward-thinking speech which was given by the dental reformer, William Henry Waite (1839-1919) at a Dinner organised by the Midlands Branch of the BDA in 1890. Dr Gow writes that Waite was either ‘astonishingly ahead of his time or perhaps the content of his speech reveals that our concepts of modern dentistry are actually what was intended from the start.’

Biography
Dr William Henry Waite received the qualification of DDS in the United States of America. He later came to Great Britain and set up practice in Liverpool where he worked for the next twenty-two years, from 1865-1887. Unfortunately, his eyesight deteriorated, forcing him to give up general practice. Up until that time, he had also served as a Consulting Dental Surgeon at Liverpool Dental Hospital where he zealously attended staff meetings; it is noted that his advice and opinions on those occasions were highly valued by his hospital colleagues. Waite continued to be active in other areas; he was one of the founders of The Liverpool District Odontological Society and became their President from 1894-5. He took his turn as President of the Midlands Branch of the BDA and became president of the Association in 1910.

Reform Propaganda
The outstanding work for which Waite is known is his seminal influence in the formation of the North Midland Branch of the BDA and his part in the ‘Reform’ propaganda of the 1870s. The Dental Reform Movement had begun in 1875 at a meeting in the Clarence Hotel, Manchester on August 31, 1875. Waite was one of the speakers on that occasion and thereafter was a prominent agitator in furthering the reforms which culminated in the Dentists Act of 1878. Having achieved their aims, the reform committee was dissolved and the BDA was launched. But Waite continued to hold the North Midlands Branch of the BDA and its members in great regard. He was the patron and originator of their Benevolent Fund and friends often spoke of his ‘kindness of heart’ his ‘sterling integrity’ and his penetrating advocacy. He was known as a man who stood ‘four-square to all the winds that blew.’

Lay preacher
One city father who heard Waite speak was so impressed that he remarked that he should be a preacher. ‘He is that’, replied one who knew him well, ‘For his life is a sermon.’
The Dinner

The members of the Association had dined together at the Midland Hotel. Their President, Mr. G. Brunton, occupied the chair and called for the National Anthem to be sung which was followed by the toasts. Dr. Curgenven proposed ‘The British Dental Association and the Midland Branch.’ He referred with regret to the unavoidable absence of the Mayor and congratulated the members upon the fact that there were now connected with the Midland Branch 140 members, and that there were between 800 and 900 members of the parent Society. This was most creditable, considering that it had only been in existence ten years. He understood that one of the objects of the Association was to uphold the dignity of the dental profession. Secondly, it sought the protection of those who were on the Register, while it also enabled the members to hold such pleasant gatherings as they had held that day, and to extend their knowledge to one another.

Long might the dental profession flourish

Curgenven went on to say that the members ought to be congratulated because they were really specialists who devoted the whole of their time and energies to one particular branch of surgery, and he congratulated them upon the rapid strides they had made in their art. They deserved the gratitude of the whole community, for they not only relieved, but prevented human pain and suffering. Long might the dental profession flourish.

The toast was received with enthusiasm.

Waite responds to the toast

Waite begins: Mr. President and Gentlemen: my first duty is to thank you all very sincerely for the kind manner in which the toast has been proposed and received. I have a sort of suspicion that the architect of the toast-list had some design in the construction of this toast, and that he intended it as a challenge to me to say something to you about the relation of the British Dental Association to the Midland Branch. Well, gentlemen, I frankly confess the theme is decidedly tempting, but I must not yield, because the subject would scarcely entertain our visitors, besides which, it might take up more time than I have any business to occupy this evening. I think it extremely likely the question will have to be thoroughly discussed before very long, unless there is a change of attitude, and when the time comes, I would say with the writer of John Gilpin, ‘May I be there to see.’ Waite reassures his audience that, unlike the unfortunate Gilpin, he will keep a tight rein on his remarks, directing them to both the Midlands members and their guests.

Long might the dental profession flourish

[Waiter was referring to The Diverting History of John Gilpin, Shewing How He Went Farther Than He Intended by William Cowper, which was a popular comic ballad of the time. Gilpin is carried away on a runaway horse.]

Waite begins his speech

“The Midland Branch, whose anniversary we celebrate to-day, is at once the oldest, the largest, and, I am proud to say, the most active Branch of the British Dental Association. During the ten years of its existence the Branch has held about thirty professional meetings, in fifteen of the principal cities and towns of the district: Manchester, Liverpool, Leeds, Shrewsbury,
Sheffield, Nottingham, Bradford, Chester, York, Lancaster, Darlington, Bolton, Halifax, Warrington, and now at Derby.

**The object of branch meetings**

The object of these meetings has been two-fold: First, we strive to improve ourselves. As self-preservation is said to be the first law of nature, so, self-improvement may be said to be the first law of human progress. By papers, communications and discussions on all manner of professional topics, by practical and clinical demonstrations in every branch of our work, by a free inter-change of ideas, experiments, opinions, and methods of practice, &c., we seek to benefit ourselves and each other, and I am certain I only utter the settled conviction of those who have attended our meetings, when I say that this part of our aim has been achieved with marked success. Second, we desire to inform the general public as to the true position and possibilities of Dental Surgery, and here our task is not so easy. We invite leading members of the medical, and other professions, to attend our meetings, to acquaint themselves with our movements, so that we may prove our right to be regarded as fellow-labourers in the relief of human suffering and the promotion of human happiness. We want the public to know that within the past thirty years Dental Surgery has emerged from the comparative darkness of a mechanical handicraft, to the morning dawn of a most needful, useful and beneficial speciality of the ‘art of healing;’ that, the education of a dental surgeon is as complete in his department as the education of a medical practitioner, and that the examination for the Dental License is as thorough and searching as that required for any other professional degree. Wherefore, that the educated dental surgeon is entitled, professionally speaking, to the fullest confidence and respect, in regard to the treatment of those organs to which he devotes his attention.”

**‘We want the public to know that toothache is by no means an inevitable item of human experience’**

“We want the public to know that the grand aim of modern dental surgery is the preservation of natural teeth; that it is rarely, if ever necessary to extract teeth in order to relieve pain (a most able and excellent article on this point appeared in The Lancet for December 28th, written by our worthy ex-President, Mr. Quinby); that toothache can be cured as surely, nay, more surely, than many of the pains to which the body is liable; and that extraction of teeth is the last operation the educated dental surgeon desires to perform. We want the public to know that toothache is by no means an inevitable item of human experience; that it may be avoided in the majority of cases by a little timely attention and care; but that the highest services dental surgery can render are denied to those who never take any care, and who never think of the dentist till they are overtaken by a raging toothache. We want the public to know that in proportion as they learn to bestow a little attention on their teeth — to have them periodically examined, so that the ravages of disease may be confronted by dental skill — in that ratio toothache will gradually become less frequent and less severe. We want the public to know that, where through ignorance or other causes parents have suffered from dental derangement, they may (if they are so minded) save their children, to a considerable extent, from a similar experience; that it is a terrible mistake to allow young people’s teeth to be recklessly removed, because, forsooth, it is easy to obtain artificial substitutes; that a little money laid out in taking care of the natural teeth would, in the end, prove a far more profitable investment than money spent in artificial substitutes. We have no wish to disparage the fair value of artificial teeth, far from it; we do want the public, however, to estimate them aright; to regard them as they would a cork leg, needful and valuable only when misfortune or accident has rendered them necessary.

**Modern dentistry in the interests of the people**

We want the public to know that the advance of modern dentistry is all in the interests of the people; that its development tends ever towards widening and increasing the facilities of service, so that the resources of dental surgery are daily becoming more possible to the many, although they are by no means so lucrative to the few. In proof
of this we might refer to the vast amount of work daily performed at our dental hospitals, to be found in nearly every large town in the kingdom. We want the public to know that the educated dental surgeon does not seek to attract patients by inducements of ‘low fees’ or by claiming for himself superior knowledge or skill above his fellows. He relies for success on the simple recommendation of those for whom he has performed useful operations, sure that if his work prove beneficial they will spread his fame among their friends and acquaintances. These are some of the grounds on which we claim a place among the learned professions, not alone by reason of our educational advantages, but because it is our constant endeavour to wage war with disease and to assuage human suffering.

We enjoy a vantage ground of opportunity, whenever our patients will permit us, in that we can foresee and hinder, if not entirely prevent, the progress of dental disease; therefore, we want the public to understand, so that they may co-operate with us in the ministry of physical benefits to themselves and their offspring. We have no secrets from each other, and nothing to conceal from the public Our methods are simple, though our operations are often difficult. There is nothing the educated dental surgeon desires more from his patient than that he should take an intelligent interest in every step of the process by which he is treated; and this because it is impossible to work along the higher lines without the earnest assistance of our patients. I believe the time will come when the forceps, with its attendant evils, will become an instrument of comparatively rare employment, and the educated dental surgeon will rejoice to find its use diminishing year by year. I believe this point of advance is being already realised in the experience of some of our transatlantic brethren, and we will do all we can to bring about a like happy result. Thus we shall be recognised as benefactors to our kind, and so also we shall achieve the noblest ambition of the true physician, which is not only to restore but to prevent disorder and disease.

The dinner is brought to a rousing end

Allow me to congratulate you, Mr. President, on the position you occupy to-day. From the beginning you have been a faithful and earnest worker amongst us, and you well deserve the honour conferred upon you. I hope that during your tenure of office, the Midland Branch will maintain its reputation for independence and activity; persevering in the grand work of self-improvement and the equally necessary work of public instruction. Let me say I trust we shall never be deterred by fear or favour from any course which commends itself to our judgment as wise or beneficial in the pursuit of these worthy objects. Opposition is a certain quantity in certain quartets; let us resolve that opposition shall only stimulate our zeal and quicken our activity. What we have won we mean to retain, and most jealously of all let us guard our liberties. We know something at least of the peculiar conditions of our district, and we are able to judge how to meet its requirements without the unsolicited opinions of those who live under vastly different conditions and who are quite unable to comprehend our position. The day of dictation has gone; a brighter day has dawned — a day of full and free and fair discussion... a day of individual effort because it is also a day of individual responsibility. The Midland Branch is not an oligarchy! Much less is it a despotism! It is a federation of professional brethren united for the purposes to which I have referred. The banner first raised aloft by our brave old friend Sidney Wormald in 1875, still floats above us in the Midland Branch, and on it are inscribed our grand old watch-words: ‘Liberty and Progress.’

References
1947 was a year to forget...and to remember. One would expect that the final year in dentistry or in any course would be traumatic, but the last few months before the final dental examinations was one long, hectic period of feverish activities.

The System
This was brought about by the system then in use which specified that the student would not be allowed to sit the final examinations until he or she had satisfactorily completed a certain number of dental operations. These comprised gold inlays, pluggings, amalgam fillings, root treatments and a variety of other restorations which I can’t remember. Vetting of work was strict and the student was not allowed to proceed until each stage had been inspected and a signature obtained from a visiting surgeon. When there was only one or two of these rare specimens on duty a crocodile of students developed and snaked its way from chair to chair across the hall until you reached the head and had your work inspected. Is it any wonder that a simple occlusal filling took two hours to complete?

What One Would Do For One’s Friends
The quota system meant that in the weeks before the finals, students were rushing around trying to achieve their targets. As a result it was common practice for students to approach their colleagues and plead with them to have a plugging or an inlay done. How could one refuse when to do so might mean that the student would not be allowed to sit their finals? Having a plugging done meant that an undercut retention pit had to be cut at the start and this was carried out without an anaesthetic, it was quite painful. What one would do for one’s friends!

Finding A Job
After qualification in October 1947 and a suitable period for celebration, finding a job was next on the agenda. However this was almost impossible as dentists did not want to take on assistants for a couple of months and then lose them to the forces. Also, there was great uncertainty about how the new NHS would work when it came into force in January 1948.

After numerous applications for a dental associate position were rebuffed, I finally landed a job as a temporary postman over the Christmas period. I must have been the only postman in Glasgow with a dental qualification. Like many of my contemporaries, we were called up for the forces and in January 1948 I found myself in the RAF dental branch as Flying Officer Ross. When asked at my interview, why I had chosen the RAF in preference to other services, I was dying to say that my cousin had just been demobbed and his greatcoat fitted me, which was true, but instead I mumbled something about
the RAF being more up to date than the other services. I was accepted and on 18 January 1948 was on my way to my first RAF station.

**Square bashing**

After a fortnight’s tour of several bases in the South of England I was sent to West Kirby, near Liverpool for a period of six weeks ‘square bashing’ and training in an RAF dental organisation. This was where I discovered just how ill prepared I was to undertake dental treatment for patients outwith the dental hospital environment. Fortunately my Senior dental officer was on hand to advise and help me to deal with patients, most of whom were young fit men in the age group 18-21. It must seem peculiar today that we were sent out as qualified dentists but had never given a ‘block’ anaesthetic.

Theory we had in plenty but when it came to the practical it was a different matter. My first task was to carry out initial examinations of recruits and when I enquired which surgery and chair I should use I was amazed to hear my superior say, ‘You sit on that radiator and the lads will pass in front of you with their mouths open. Just call out to your orderly, ‘extraction’ or ‘fit’.

Eventually I was posted to RAF Station Abingdon where my assistant was a male orderly dental nurse, commonplace in the RAF at that time. Latterly the WAAF took over these duties.

At Abingdon I was on my own and during the next two years gained confidence and learned how to apply the art and science of dentistry to patients. I often wonder how those who went straight into practice without the benefit of some form of apprenticeship fared. In January 1949, I married and moved out of the RAF Station to a flat in Harrogate, travelling in every day by 8:30 am to RAF Dishforth in Yorkshire, my second and final posting.

**Squatting in Partick**

In 1950, two years after the start of the NHS, I was ‘demobbed’ and set up my own practice in a flat in Partick, Glasgow ‘squatting’ which was common then. Due to planning regulations my wife and I had to live in the flat, so cooking and casting plaster models shared the same kitchen. Because we lived in the flat my door bell would ring at all times of the day and night. Once, after midnight, a woman arrived at the door pleading that I should see her ‘wee boy.’ When he arrived the ‘wee boy’ turned out to be a strapping lad in his twenties with severe toothache which was not surprising considering that practically every tooth in his head was broken down to gum level.

When informed that he really needed a complete clearance he replied, ‘Ah well just go ahead.’ Needless to say I told him to come back another time.

My first cheque received under the NHS amounted to 14s 6d for the month of February 1950. I wondered where these dentists were who were ‘making a fortune’ from the NHS.

Looking back fifty years I realise just how inadequate I was to cope with the practicalities of dealing with the public and managing a practice. Fortunately this shortcoming was recognised later and students at Glasgow were trained in a general practice clinic which must have given them a sound basis to face the hard facts of earning a living as general dental practitioners.

There is no doubt in my mind, that one of the most significant developments in the past fifty years was the introduction of vocational training, one of the best things that ever happened both for dentists and their patients.

I wonder what the next fifty years will bring?
The first Canadian, military dentists served in the Boer War (1899-1902). The Decree #98 of July 2nd 1904 was signed under pressure from the Canadian Dental Association and helped with the creation of 18 dental surgeon positions within the army. Following the Decree, dentists were promoted to the rank of Honorary Lieutenants. On May 13th 1915, Decree #63 allowed the creation of a dental corps within the Canadian army, 30 officers served in the new Corps, assisted by 74 non-commissioned officers and other officer-rank personnel. In the same year, the first services dental clinic was set up in Toronto. At the end of the war, 223 officers were still serving assisted by 459 non-commissioned officers and other ranks.

During the war, dental treatment was provided 2.2 million times. Afterwards, 60,000 soldiers were demobilised within a month of the end of hostilities. During their time in the services, a substantial effort had been made to improve their oral health but once the demobilisation was over, the Dental Corps was formally dissolved. However on June 15th 1921, the Dental Corps of the Canadian Army was re-instituted, this time, as a non-permanent active militia (Jackson, 1956; Becker et al., 2004). Until 1939, this second Dental Corps was run by a few dental officers scattered throughout the units of the health service (Jackson, 1956). This inefficient situation came to an end when the The Dental Corps of the Canadian Army was dissolved once again and re-constituted as the Canadian Dental Corps (CDC). This time, the unit was placed under the authority of the high-ranking Director of Dental Services. The new CDC had vital work to do in preparing recently mobilised soldiers at the beginning of World War II.

In October 1941, a donation of $1,750 allowed the Corps to buy the first of its 184 dental care vehicles. Each of these comprised a mobile dental clinic built inside a three-ton lorry which operated across the battle fronts wherever it was needed. The standard of equipment in the vehicles and their ability to be deployed almost anywhere was much admired by the other allied forces (Jackson, 1956). The first dental unit to be set up in an operational sea-going vessel was established in 1943. The next summer, a contingent of dental staff was transferred to the Canadian hospital ship Letitia as it headed to Manila with the objective of treating recently released prisoners of war. The following year, a rotation system of dental teams was created so that as many staff as possible from other vessels could gain experience of practicing while at sea. (no author, no date; Jackson, 1956). Dental records were...
often used to identify war victims for legal proceedings. This new process became important during World War II. Similarly dental records were used to identify deserters or those who had enrolled irregularly.

When women enrolled in the Canadian army in 1941, female dental assistants were inducted. Several hundred subsequently practised in clinics in Canada which allowed male dental assistants to go abroad. During the war, the Canadian Dental Corps deployed dental services throughout Canada during the recruitment and demobilisation of their troops but they also operated throughout the United Kingdom in support of the Royal Canadian Air Force, and in the army training camps in North Africa and Sicily and in Italy as part of the D-Day landings in Normandy and throughout Northwest Europe.

In 1944, the Feuille d’érable, the armed-forces newspaper, described the experience of the Dental Corps during World War II:

The Canadian Dental Corps is unique among the other armies of the world with regard to its staff, its equipment and its organisation. These professionals and their assistants had been tested in Caen, Vaucelles, and Falaise, during the long march across France from Belgium to Holland and finally to the Nijmegen salient. They administered the latest dental treatment to the combatants and they knew what it is was to work under shell and mortar fire. Throughout the Canadian breakthrough to Europe, they treated their fellow citizens, English, American, Czech, Dutch, Belgian and Polish soldiers, civilians and many others. They made and repaired enough false teeth for the whole nation... They treated dental injuries on the spot or through medical channels; each of them had a good knowledge of the [surgical approach to the treatment of facial injuries.]

(Crawford, 2002)

Canadian dentists continued to practise their profession even when they were in captivity; it appeared to bring out the best in them despite some extremely adverse conditions, such as those to be found in Oflag VIIb, a German prisoner-of-war camp for officers. Captain Greenslade from the New Zealand Dental Service, Captain Neal of the American Dental Service and Lieutenant Brick, a Canadian dental student were imprisoned there and found that the Germans were failing to honour their obligations regarding the rights of their captives:

‘Prisoners were being denied access to dental care by the Germans, except [in some cases] where dental materials were provided by the English [British] Red Cross. [But even when equipment was sent by this organisation, not all prisoners received dental care, despite the fact that soldiers urgently needed medical treatment.] After four months, only three devices out of twelve were repaired by the German dental mechanics. The remainder were never repaired. On June 5th 1943, they were allowed to make devices in the camp. On June 18th, during a German medical officer’s inspection visit, 53 officers stated they needed complete dental equipment Many prisoners’ had dentures needing repair. Some of them needed [new] partial dentures. ’

(Anson, 1960)

At the end of World War II, the Dental Corps of the Canadian army had more than 5,000 members, including 2,500 serving abroad. The Corps’s efficiency and effectiveness during the conflict persuaded the government to keep it after the demobilisation (Jackson, 1956). Fourteen officers and nineteen dental technicians died on the front in the Canadian Dental Corps’s war effort. (Sutherland, 2013)

In October 1946, the army was restructured and for the first time, the Dental Corps was part
of the operation. It consisted of 88 dental officers, 5 officers who were not dentists and 147 non-commissioned officers. In 1947, King George VI granted a royal commission to thank the Canadian Dental Corps for the services it had provided. Thus, the CDC officially took the name of the Royal Canadian dental corps (RCDC). In October 1950, the RCDC was partnered with Royal Dental Corps of the British Army (Jackson, 1956). Brigadier Frank Melville Lott was the Commandant of the Corps from 1939 to 1946.

After the war, less attention was given to the RCDC and it began to face recruitment difficulties. The post-war economy had grown and as civilians were gradually demanding more dental care, staff drifted away from the service into private practice. However, the Corps only had to maintain places for a total of 22 dentists who essentially worked at the unit’s headquarters so it responded with a compromise. At the end of the 1940s RCDC dental surgeons agreed to work within the army unit for a set period but at the same time, they would have the opportunity to complete specialist postgraduate training which would later stand them in good stead in civilian life. This new measure was successful and has continued to be so today. (Protheroe 1989)

Xavier Riaud, Nantes, France

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If a comic novel about dentistry and the meaning of life appeals, and you don't mind some ripe language, then To Rise Again at A Decent Hour is for you.

Paul O’Rourke is a grumpy dental surgeon who runs a single-handed practice in Manhattan assisted by a staff of female hygienists and chair-side assistants. He is a good clinician but his employees and patients are his main social connections; except for his professional life, he is unfulfilled in every other sense. Paul O'Rourke is a frightened man who worries about his health so he is passionate about good oral hygiene as the first line of defence in staving off mortal diseases. His mind is poisoned by the idea of mortality and the thought of oblivion following a pointless existence. Every day, as he stares into the mouths of his patients which are in various states of decay, he is reminded of the tomb; the end of all flesh. He longs for meaning and has tried to find relief by adopting the religion of two former girl-friends: one Roman Catholic, one Jewish, but Paul does not believe in God and soon stands out as a sad fake. He finds that he cannot use his girlfriends and their families to anaesthetize his existential dread; he cannot truly belong. Paul’s situation might well be a meditation on the poem by Emily Dickinson, called, ‘The World Is Not Conclusion’ in which she writes, ‘Narcotics Cannot Still The Tooth That Nibbles At The Soul.’

All this sounds a dense and dreary read but the Booker Prize listed, To Rise Again At A Decent Hour is a witty book. The closed routine of the upmarket, New York practice is sparkling, light comedy. Many practitioners of the Art and Mystery of Dentistry will recognize some of Paul's more quirky patients: like the man who refuses an anaesthetic for an extraction because he is an adept of Buddhist Meditation and has placed his mind three weeks into the future; the consultation does not end in Zen-like calm or with a conscious patient. Also, the image of an extracted molar, lying bloody and displaced from its singular, numbered place in the jaw where it belongs, its 'nerves still wiggling' as it dies on the sterile tray is an inspired metaphor for Paul's own desperate intimations of isolation and death.

This fraught dentist cannot sustain real relationships and he is equally wary of online communities and social media. Apart from his mobile phone, which he calls his ‘me-machine’, he shuns the internet and despite pleas from his staff, his dental practice does not even have a website. His anxiety is not lessened therefore, when some unknown person sets up a Facebook page and a Twitter account in his name. Paul is outraged; his impotence in finding the culprit and his inability to confront the digital world by conventional means will resonate with many readers. It emerges that the online identity thief appears to be a more confident version of Paul himself and as his frustration mounts, his staff begin to suspect that he is really the author. The content of his impersonator’s posts and tweets darken and eventually the identity of Paul’s alter ego is revealed but will this revelation lead to a sense of belonging for the tortured dentist? One recalls the final lines of Christopher Hampton’s play, Les Liaisons Dangereuse:

‘Just keep on playing the game.’
In July 2015, Walter Palmer, a fifty-five year old American tourist, travelled to Zimbabwe where he paid agents in that country to enable him to hunt and kill a lion. The creature which they selected was a thirteen-year-old, male lion named Cecil (after the British magnate and politician Cecil Rhodes). Cecil lived in the Hwange National Park, a wild animal reserve, where he was a major attraction; he was also being tracked by the University of Oxford as part of an ongoing study.

Palmer wounded the big cat with an arrow and thereafter pursued the injured animal for forty hours over a considerable distance before killing it with a gun. The manner of Cecil’s death was widely reported via the internet and terrestrial media; it naturally attracted international outrage from conservationists, politicians, celebrities and the general public. But there was one feature of the storm of media attention which was common to every report of the incident: this was the fact that the perpetrator, Walter Palmer, was a dentist. Some protesters dressed in lion costumes demonstrated outside Palmer’s dental practice, holding placards reading ‘Killer’.

Whatever one might think of the execrable pursuit and killing of a wounded animal for pleasure, there is no rational connection between the dental profession and Palmer’s choice of recreation. Nevertheless, in the public mind it seems appropriate that he is a dentist and also a cruel killer. In an article in the Daily Mail newspaper on 31st July, 2015, the journalist Quentin Letts described the situation well when he said:

“Any tale of a sadistic dentist has a strange draw on our imagination. We look to one another and say: ‘Told you so.’ When we heard that Cecil, the pride of Africa, had been mercilessly exterminated by some dentist, were we surprised? Or did we think: ‘Yep, that sounds all too believable.’”

Mr Letts speculates on why this should be in an age when the quality of dentistry is better and more comfortable than it has ever been in the past. Is it because we wear masks as highwaymen once did, or do the public resent their apparent powerlessness in the dental chair, the feeling that they are helpless victims of one who has license to inflict pain? Whatever the reason, the response to the killing of Cecil the Lion has proved that there is a clear public appetite to see dentists as sadists. The internet is awash with cartoons linking the profession to the killing and a sickly market in related Halloween costumes is flourishing.

The costumes can be seen here:
The full article by Quentin Letts can be read here:
http://www.dailymail.co.uk/debate/article-3180682/QUENTIN-LETTS-fear-dentists-natural-born-killers.html
Dentists engage in many kinds of leisure pursuits but sometimes these interests develop into unexpected second careers. Dentist Zane Grey became one of the most acclaimed writers of Western novels of all time.

Grey was born in Zanesville, Ohio USA in 1872. His father, Lewis M Grey, was a farmer, a preacher and a dentist. His mother was Josephine Zane Grey of notable Quaker and Danish ancestry. The town of Zanesville had been founded by Zane’s maternal great-grandfather, who was a patriot of the American revolution. Young Zane was conscious of his distinguished ancestry and became fascinated with history. He was a natural writer and produced his first story, ‘Jim of the Cave’ at the age of fifteen. Alas, his dentist father did not approve of writing as a career; the elder Grey destroyed the boy’s manuscript and gave its author a sound beating. As an adolescent, Zane developed a temperament as fiery as his father’s and suffered a good deal of physical chastisement from his parent for getting into fights but the boy found a kind mentor in a neighbour, an old man who rejoiced in the name, ‘Muddy Miser.’ Muddy encouraged Zane’s love of history, writing and the outdoor way of life.

The Greys fell on hard times due to a bad business investment and, to avoid social disgrace, the whole family relocated to Columbus, Ohio where Lewis Grey struggled to re-establish his dental practice. Zane contributed to the reduced family income by making rural house calls to carry out extractions according to the method demonstrated to him by his father. Eventually the State Board put an end to this unlicensed practice.

Fortunately Zane was good at sports and later won a baseball scholarship to the University of Pennsylvania to study dentistry. After qualifying, he set up practice in New York but he found dentistry unbearably tedious. He suffered bouts of depression and began to write novels in the evening to relieve the tension. At first, his work was not good enough to be published. His formal education had been rudimentary so his grammar was weak and his storytelling rather stiff but after he married the formidable Lina Elise Roth, (Dolly) his fortunes improved. Dolly was the daughter of a physician and before her marriage, she had studied to be a schoolteacher. She was a clever woman, a naturally skilled editor and business manager who, in addition to bearing three children, guided her husband’s career to the heights of success. Zane’s Westerns touched a popular nerve and became bestsellers, especially Riders of the Purple Sage. They were filmed for the cinema 112 times and eventually a television series, was dedicated to them called, Dick Powell’s Zane Grey Theatre.

Despite Dolly’s support, Zane continued to be a victim of depression. He kept a stable of mistresses but his wife regarded this behaviour as a sign of his illness and the couple remained firmly attached to each other on a level deeper than the physical. [See link below for Dolly’s letter to her husband.] Zane Grey died of a heart attack in 1939. Dolly lived another twenty years.

More about Zane Grey at the internet sites below:
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Two Aspects of Mercury

Amalgams of Mercury were used by medieval alchemists.

Fig. 1 A three-headed eagle, in an alchemical flask representing the sublimates of mercury, three times, after Solomon Trismosins, watercolour, 40.6cmsx19.7cms.

Fig. 2 A three-headed creature in an alchemical flask, representing the composition of the alchemical philosopher’s stone; salt, sulphur and mercury. Solomon Trismosins, Splendour solis, watercolour 40.6cmsx19.6cms.

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