Fig. 1 ‘Le Charlatan’, caricature of a French mountebank at a village fair, by an unknown artist, HC.J.16.X.97, a modern copy of an old coloured print. Date uncertain, but the paper is watermarked 1900. The extraction technique was to fire the pistol at the moment of maximum distress to suppress the victims shrieks – and perhaps also to serve as a distraction from the pain. Such distraction is still employed as a useful clinical tool though using less dramatic methods!

There are three other pictures in the collection showing similar al fresco performances, another French, by Raffet (1831), HC.J.16.X.92, one Flemish, by Maulpersch (1785), HC.J.16.X.24, and one English, by Davison (early 19th century), HC.J.16.X.68.

Such practices must therefore have been widespread in Europe at the end of the 18th and beginning of the 19th centuries. The late 19th century French cartoon ‘Ordonnance de Police concernant les dentistes’, by ‘Cham’, HC.J.16.X.89, referring to the threat of a legal ban (eventually imposed in 1892), suggests that the fairground extractors may have provided a useful service to those who could afford no better – or perhaps its tone of regret is simply ironic.

Menzies Campbell Collection at the Surgeons’ Hall Museum Edinburgh, reproduced with permission of The Royal College of Surgeons of Edinburgh
DENTAL HISTORY MAGAZINE

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

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Spring Lecture 2011: The Father of Dentistry: Sir John Tomes (1815-1895)
The Henry Noble History of Dentistry Research Group were delighted to receive Melanie Parker as our guest lecturer at the Royal College of Physicians and Surgeons of Glasgow on 14th March. Ms Parker is the Education Officer of the British Dental Association Museum in Wimpole Street, London. She confirmed her reputation as an insightful and accomplished speaker in her lecture on the life and times of the eminent and occasionally controversial 19th century dental surgeon and Fellow of the Royal Society, Sir John Tomes. Ms Parker analysed Tome’s complex career in five parts. Beginning with a biographical sketch she put flesh on her subject by considering his profile as a scientist, inventor and reformer alongside his practice of dentistry.

Born in Weston-on-Avon, Gloucestershire, Tomes was apprenticed to an apothecary in 1831 at the age of sixteen. Four years later he became a medical student at King’s College London where his dual aptitude for the practical and the academic emerged. He presented his first paper to The Royal Society in 1838 while he was still an undergraduate. The subject of the paper, ‘the microstructure of human an animal teeth in relation to bone’, revealed that the brilliant young student’s interests had already focussed on dentistry. As no qualifications were required at the time to become a dentist, he gave up general medical studies for employment as a dental surgeon at King’s College Hospital and later at The Middlesex. He also established a private practice in fashionable Marylebone where he made the modern equivalent of £150,000 in the first year. Ms Parker was candid about Tome’s abandonment of his medical course, possibly in part for the attractive financial rewards, which he envisaged and realised. However if the audience’s opinion of her subject had mildly darkened as a result of this behaviour, Ms Parker redeemed her subject by drawing her listeners attention to Tome’s subsequent pre-eminence as a dental educator and reformer which revealed him without question as a humanitarian of stature.

It is easy to warm to Tomes as the quintessential Victorian inventor of the marvellously-named Dentifactor Machine. This contraption copied ivory dentures quickly and accurately by a process of blunt tracing. Unfortunately for its inventor, infinitely more manageable methods and materials for the reproduction of dentures, such as vulcanite, were already on the horizon. Tomes had more success in his collaboration with Jean Marie Evrard, the manufacturer of surgical instruments, in developing and popularising a line of dental forceps adapted for use on different teeth.

It is arguable that it was his efforts in dental education and politics which best earn Tomes the title of ‘Father of Dentistry’. We learned from Ms Parker that he encouraged the teaching of dentistry as an independent discipline and his tireless, successful promotion of the 1878 Dentists Act with its requirement that all who called themselves ‘surgeon dentist’ held an LDS degree, transferred dental practice from the medical sidelines to the vanguard of registered professions. John Tomes was the first name to appear on the new register. He died, aged eighty, at Caterham in Surrey leaving an estate of £25 million.

Editor’s Note: For an article on the genealogy of the Tomes Family, ‘The Tomes of Long Marston’ by Audrey Noble, see HNHDRG Newsletter, Issue No 18, May 2006. In some respects, the career, educational and humanitarian interests of Sir John Tomes mirror those of another eminent 19th century dentist, that of the American Tom Evans (1823-1897). For articles on Evans by Jo Cummins and Xavier Riaud, see DHM, Vol.2 No2, Autumn 2008, and DHM, Vol.3 No.2, 2009.

Autumn Lecture
This year’s autumn Lecture will be replaced by a symposium in association with the Lindsay Society for the History of Dentistry entitled: ‘Apprenticeship to Life Long Learning-Dental Education Through the Centuries.’ The event will be held on 7th October 2011 at Easterbrook Hall, Crichton Campus, Dumfries. Please see the enclosed sheet for details of the programme and registration or contact Dr Angus Ferguson, Lilybank House, University of Glasgow, G12 8RT, tel: 0141 330 6071, e-mail: Angus.Ferguson@glasgow.ac.uk

Witness Seminar
The current issue of DHM includes a complementary special insert of the proceedings of the Witness Seminar which was held at The University of Glasgow on 12 May 2010. (See DHM, vol.4 no.2, 8-9.)
Flood Damage to Historical Items Stored at Glasgow Dental Hospital and School
One of the prime functions of the HNHDRG is the preservation of local material relevant to the history of dentistry. A recent severe flood in the Glasgow Dental Hospital and School has brought this responsibility to the fore. Sadly, artefacts, papers, and photographs in the care of the group and meticulously conserved by the late Dr Noble, were badly damaged. Thanks to the efforts of Rufus Ross, Khursheed Moos and Pat Lilley some material was rescued and the authorities agreed to provide a van to transport it away for sorting and preservation. The material was stored temporarily at the editor’s house in Rhu, where some initial sorting has been completed. The water damage was so severe that some items were destroyed and have had to be dumped, but others may be restored or at least photographed for the record. The Group executive met recently to consider the problem and agreed that the prospect of a displayed collection was currently unrealistic, and that we should try to ensure that items are conserved in secure storage, or loaned to other organisations for display. Items which are neither unique nor have a strong local association may be disposed of either by sale, or if irreparably damaged, photographed and discarded. Offers to help either by interim storage, or assistance with conservation, would be welcomed by the secretary.

Dental Problems During the Heroic Age of Antarctic Exploration
This exceptional article reveals how dental disease was managed during early explorations of the Antarctic, including the intrepid expeditions of Scott, Amundsen and Shakleton. The author, Dr Henry Guly FRCP FCEM has spent most of his medical career as a consultant in Accident and Emergency. He is part of the team that provides medical services to the scientists in Antarctica through the BAS Medical Unit based at Derriford Hospital, Plymouth. Dr Guly has visited the Antarctic three times. In association with the Wellcome Trust, he has been researching the medical problems of early explorers.

The Salamander, Sir Bernard Cyril Freyberg (1889-1963): Knight and Dental Hero of Two World Wars
In another engrossing article, Xavier Riaud continues his series on dental war heroes. In this edition, he reviews the life of New Zealander, Bernard Cyril Freyberg, who was given the sobriquet, ‘Salamander’ by Sir Winston Churchill on account of his indifference to danger in the line of fire.

Editors’ note: The Henry Noble History of Dentistry Research Group are delighted to congratulate Dr Xavier Riaud on his elevation to ‘Knight of the Academic Palms’ by the French Academy in recognition of his services to the history of dentistry.

Treasure in Kircudbright. W. H. Clarke (1882-1924) Dentist and Artist
David McGowan unfolds his serendipitous discovery of a collection of paintings by the Scottish dentist and artist W. H. Clarke at the Stewartry Museum, Kirkcudbright.

Word of Mouth: Born on a Blue Day
Eugene Feldman reviews the remarkable autobiography of the autistic savant, Daniel Tammet. Dr Feldman highlights the development of the author’s complex dental hygiene regime.

Web News: King James VI and the ‘bottomlesse pit’
King James VI of Scotland (1566-1625) called smoking tobacco a, ‘loathsome custome’ and likened the black stinking fume which it produced to nearest resembling the horrible Stigian smoke of the bottomless pit of hell. Carol Parry explores James’ colourful writing on the habit in his tract, ‘The Counterblaste to Tobacco’ with particular reference to the King’s views on the effect of smoke on the teeth.

Caveat emptor
In a letter to the Editor, Paul Geissler, Curator of the Dental Museum of The Royal College of Surgeons, Edinburgh, warns us of the perils of buying dental ‘antiques’.

Jimmy Campbell
Jimmy Campbell died after a short illness, surrounded by his family, in the Prince & Princess of Wales Hospice, Glasgow on 12th January 2011. He was aged 92. His life as a dentist, Army P.E. Instructor, footballer and athletics coach was the subject of a verbal history article in the History of Dentistry Newsletter, Number 13, October 2003, which was the basis for an obituary which appeared in The Herald on 24th January 2011. Jimmy was a unique and much loved member of the profession, and will be long remembered by all those who knew him.
After a debilitating illness, stoically borne, Edna Robertson died in The Beatson on November 9th 2010, at the age of 75.

Edna was one of the HNHDR Group’s precious ‘lay’ members. Her connection with history of dentistry came through her great friendship with the late Professor Dorothy Geddes, and indeed it was she who arranged for the Group to receive a substantial donation from Dorothy’s estate, a most valuable endowment which has been a great support for our activities.

We were unusually lucky to have a member who was such a distinguished journalist and medical historian – the author of three books, the first a history of the Royal Hospital for Sick Children, The Yorkhill Story, and the other two on distinguished Glasgow public health doctors, James Burn Russell Glasgow’s Doctor, and Christie of Zanzibar. She was just able to see the last one through to publication though it took all her reserves and tenacity to do so.

Edna’s profession for most of her life was as a journalist on The Herald. She had a special interest in foreign affairs, and in particular the politics of the USA, where she had spent two years on a Master’s course at Michigan State following her Glasgow MA in history. At the time of her retiral to full time study and authorship she was assistant editor and chief leader writer at The Herald, but generously made these professional skills available to us as editor of the HNHDRG Newsletter from 2000-2004. To this rather less prestigious role she brought the same high standards of writing – and punctuation! As Lesley Duncan says in her appreciation in The Herald, (16th November 2010), ‘language used fastidiously and with flair was central to Edna’s professional life’.

To her wide circle of friends whether at the Glasgow Art Club, roaming the hills in Scotland or abroad, or at home in the cottage and garden at Cove, Edna was a ‘good companion’ who will be sadly missed. We were fortunate to have known her.

David McGowan
Bill Smith remembers ‘A Most Endearing Lady....’

In the June 2007 issue of this magazine, [then called The Newsletter] I had the pleasure of completing an unfinished article by the late founder of the History of Dentistry Research Group, Dr Henry Noble, entitled: ‘Refreshment and Catering in the Glasgow Dental Hospital and School.’ In that article, I wrote of a lady who played a major part in hospitality and catering at Glasgow Dental Hospital, namely Mrs Sadie Etherson.

Sadly, on a snowy day last December, my colleagues and I joined Sadie’s family and her many friends at St. Gregory’s Church, Maryhill to pay our respects to a lady for whom we felt a deep affection and who had played a large part in our lives.

Sarah, or Sadie, as she was known, Etherson né Gillespie was born in 1922 in the Cowcaddens area of Glasgow. She was the youngest of five children, all girls. On leaving school Sadie trained as a textile machinist, at which she excelled and continued as a hobby well into her 70s. She married Thomas Etherson and had three children; Patsy, Isla and Tom. When Tom, the youngest, reached school age, Sadie embarked on a career change.

At that time, The Glasgow Dental Students Society (G.D.S.S.) were looking to appoint someone to dispense tea and biscuits in their student staff room. Retired Consultant Oral Surgeon Hugh Campbell was one of the students on the selection committee who offered Sadie the post. He often says that decision was one of the best he ever made! Some years later when I was a member of the G.D.S.S. Committee, my colleagues and I persuaded the Dean, Prof. James Aitchison, to allow Sadie to provide hot snacks during the lunch hour and thus began the pie, beans and sausage roll years of the student canteen. These delicacies, the subject of many jokes and anecdotes, sustained us through our student years. Their systemic effect on us was offset by the superb home made soup, made and dispensed by Sadie herself.

During morning and afternoon ‘tea breaks’, Sadie, ever mindful of the impecunious state of many of her extended undergraduate family, would provide a ‘wee tea’ as opposed to a ‘normal tea’ which cost a few coppers more and even a single ‘fag’ could be purchased, ‘on tie’ if funds were really low. The affection which Sadie showed to her student customers was returned in large measure and so no one took advantage of the system. In any case, Sadie had a superb memory for names and all financial transactions. The story goes that when a former student (who had since obtained professorial rank) returned to his Alma Mater for the Centenary Celebrations enquired of Sadie while buying a coffee: ‘Are those pies part of the same batch you used to sell when I was a student?’ She replied using his old student nickname, with a riposte advising him not to be cheeky as he still owed her for a fag and a cheese special! All of us who studied or worked at Glasgow Dental Hospital between 1951 and the late 80s had reason to hold Sadie in high regard. She treated staff and students alike, always cheery and solicitous of our welfare. She not only dispensed food and drink but was always ready with compassionate good advice if asked. Many a student was grateful for having had a wee chat with Sadie, a discourse which could range from advice on the behaviour of boy or girlfriend to future career prospects. In all these occasions Sadie took a motherly approach.

I was delighted when in 1980 on the recommendation of Dean Professor James Ireland, Sadie was awarded a ‘British Empire Medal’ (B.E.M.) for her services in The Dental Hospital. I was equally pleased when she was made an honorary member of the Glasgow Dental Alumnus Association. Later I wrote in the alumnus news letter that on that occasion, Sadie was, for once, speechless! She retired from her long and successful career in 1987 age 65.

As we stood outside St Gregory’s after a moving service, my friends and I shared some of the many reminiscences we had of Sadie, then went our respective ways, knowing that the lady in question, would retain a special place in our hearts for the rest of our lives.

Bill Smith
Dental problems were common during the early Antarctic explorations and were usually dealt with by the expedition doctors though some expeditions and ships did not have doctors. This article describes the approaches to dental screening before the expedition and dental hygiene and also describes the equipment taken, and some of the treatment given including the management of gum disease resulting from scurvy.

During the Heroic Age of Antarctic exploration which is usually described as being between 1895 and 1922, expeditions were usually away from home for at least 18 months and often for much longer. Dental problems were common and my aim, in this article is to describe the approach to dental problems and the problems that occurred.

**Dental screening**

Alexander Macklin, surgeon on two of Shackleton’s expeditions, said:

“The chief work of the surgeon of a polar expedition is done before the ship leaves England … [by] careful examination of personnel and insistence on absolute physical fitness” and went on to say “The following points should be specially looked for: bad teeth, pyorrhea, … any chronic disease about the mouth, nasal passages or the accessory sinuses. … Any of these conditions should absolutely rule out all new applicants.”

This was also emphasized by Hans Gazert, surgeon on the 1st German expedition (1901-3) and by Ernest Gourdon who went on the two French expeditions (1903-5 and 1908-10) who said that ‘One cannot recommend too highly to travellers to have their teeth examined and put right before the expedition. Maintaining the teeth well is also a necessary measure because of the risk of scurvy”. Another reason was that ‘dentistry is, of necessity, rudimentary during the expedition.”

However when he took his own advice, he complained that he had been charged too much for being told that his teeth were in an excellent condition!

The only records of dental examinations that I have found are from Scott’s *Discovery* expedition (1901-4). Sir Clements Markham wrote:

“The teeth were examined by dental surgeons from Guy’s Hospital in July 1901. 178 teeth were stopped, and 92 pulled out. Bill £62.4.5d. 41 examinations at a rate of 30s [shillings] a man.”

We also have details of individuals for example, James Dellbridge ‘had 9 teeth stopped and 1 pulled out’.

Despite these examinations in July, Reginald Skelton, the chief engineer, developed a dental abscess in August and required an extraction. Markham does not report on the officers’ dental inspections and so perhaps the officers did not have them or were expected to organise their own.

Dental screening was also useful for another reason. William Shackleton, (no relation to Ernest Shackleton as far as I am aware) was appointed a physicist on the *Discovery* expedition but proved unpopular. Scott had an adverse report on his teeth and used this as an excuse to dismiss him despite a report from Shackleton’s dentist that his teeth were all right. Shackleton was persuaded to accept
£50 as compensation. It seems that not every expedition was as diligent in providing dental examinations. On the Australian expedition (1911-4), the leader complained that ‘Close has been laid up with a severe gumboil. He should never have thought of coming to the Antarctic with such remnants of teeth.’

**Doctors as dentists**

At this time the dental profession was still relatively new as in the UK, it wasn’t until 1878 that the title ‘dentist’ became protected and 1921 when it was required that all who practised dentistry should be on the dental register. Doctors were legally permitted to practise dentistry and would have had some training: while a medical student, Dr. Edward Wilson (surgeon to both Scott’s expeditions) had written home the he had ‘nearly drawn three teeth (by mistake) in one go. A lower molar came out so suddenly that the impetus nearly brought two teeth out of the upper jaw…’ In the Antarctic the doctors had to manage the dental problems which were one of the commonest reasons for consultation. Antarctic expeditions were not alone in this as the Army at this time did not employ dentists outside the UK and the first dentist was not appointed to the whaling stations on South Georgia until the 1950’s.

Not only did the doctor need to practise dentistry but others had to be taught the skills either to treat the doctor, if required, or to support expeditions with no doctor. Amundsen (1910-12) did not take a doctor and wrote:

> “Lieutenant Gjertsen, who had a pronounced aptitude both for drawing teeth and amputating legs, went through a ‘lightning course’ at … the dental hospital. He clearly showed that much may be learnt in a short time by giving one’s mind to it. With surprising rapidity and apparent confidence Lieutenant Gjertsen disposed of the most complicated cases — whether invariably to the patient’s advantage is another question, which I shall leave undecided. He drew teeth with a dexterity that strongly reminded one of the conjurer’s art; one moment he showed an empty pair of forceps, the next there was a big molar in their grip. The yells one heard while the operation was in progress seemed to indicate that it was not entirely painless.”

One of the rules made for the second French expedition was that everyone should clean their teeth with a brush, every day and the expeditions took tooth powder with them (Scott’s *Terra Nova* took 12 lbs), including Colgate tooth powder and Rose tooth powder. The major problem arose when slogging or when a party was marooned as the only way to obtain water in the Antarctic is to melt snow and lack of fuel meant that, while slogging, there was not enough water to wash or clean teeth. Edward Evans said that many people, while slogging, went 100-150 days without washing, shaving, cutting hair or cleaning teeth and that

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**Cruel Work**

Dental extractions were not always successful in the hands of non-dentists. On one of Shackleton’s expeditions Joseph Stenhouse, (captain of the *Aurora*) wrote in his diary:

> “Have just returned from an unsuccessful attempt to draw one of Larkman’s teeth. He has been much suffering lately and asked me to have a shot at pulling it out. Had two heaves and after nearly heaving his head off desisted as he was at the point of swooning. It is cruel work…”

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**Fig. 2 Scott’s Ship Terra Nova**

Courtesy Royal Geographic Society with IBG
Ernest Joyce on the Ross Sea party went 200 days. The *Terra Nova* Northern party was dropped by ship in January 1912 with supplies for six weeks, expecting to be collected after that time but they were unable to be relieved because of ice. They spent the winter in a snow cave and did not reach the expedition hut until November after a 230 mile march. Dr Murray Levick wrote:

“Our allowance [for washing] is a teacupful of water daily. I dip my toothbrush in this and clean my teeth: then pour half the water over the toothbrush and rinse my mouth, then dip a towel into what remains and rub over my face and neck.”

Later, Raymond Priestley wrote:

“Campbell is the only member of the party who still possesses a toothbrush, and the present diet is eminently suited to cause the collection of small shreds of meat between our teeth. In spite of this we are able to keep them in as good condition as we can at home by the judicious use of bamboo toothpicks with sharp points to remove the meat and of small pieces of soft wood to rub the front of the teeth. These latter instruments are made from the white wood of Fry’s chocolate boxes, and their blunt chisel ends are moistened and chewed first to secure pliability. They are rather better than a toothbrush. The hard biscuit, of course, looks after the grinding surfaces for us.”

Dr. Macklin who was stranded on the ice for six months after Shackleton’s ship, the *Endurance*, sank, made improvised toothpaste but preferred the real thing:

“I also got out a tube of Kolynos Tooth Paste – I have been saving it for some time – and what a pleasant thing it was to have a fine fresh feeling in one’s mouth again. Before this I have been using galley-soot and snow, and this does not have a very stimulating effect, though the best one could do.”

**Dental disease and treatment**

Dental problems were (and are still) common in the Antarctic. Gourdon said of the first French expedition:

“Dentistry is, of necessity, rudimentary during the expedition. Tincture of iodine for inflammation of the gums, creosote for painful caries, and extraction as the last resort are the only treatments that we used.”

Creosote for the treatment of toothache was on the Board of Trade list of drugs to be carried on ships with no doctor. Iodine was also used for toothache. Macklin’s diary reports: “Wordie has had toothache tonight. I gave him some iodine, but recommended ‘cold steel’ which he refuses.”

The inventories of drugs taken include ‘toothache tincture’ and ‘toothache..."
Sledging expeditions by Shackleton’s Ross Sea Party presumably had no such medicine. Joyce reports that he:

“Heard Mack [Mackintosh] groaning during the night. [He was] in agony with toothache. In the medical case there was nought to ease him. My thoughts could only think of methylated spirit, a bottle of which we kept for starting the primus. This I passed to him together with cotton wool. … He placed the cotton wool on his tooth, a second elapsed, and then a yell the sound of which must have penetrated to Cape Crozier giving the emperor penguins a shock, the toothache was cured, the inside of the mouth was raw but Mack’s Billingsgate language was supreme.”23

The equipment taken is not completely clear. The dental equipment recommended to be carried on passenger ships by the Board of Trade was a leather roll containing the following forceps:

- Upper molar right
- Upper molar left
- Upper bicuspid
- Upper incisor
- Lower hawksbill bicuspid
- Lower molar
- Hawksbill stump

An account for medical equipment for the *Discovery* expedition includes24:

- Dental forceps in case 8/4d (42p)
- 1 straight forceps 6/8d (33p)
- 1 pair bent right angles forceps 6/8d
- 1 lower molar 6/8d
- 1 upper molar left 6/8d
- 1 upper molar right 6/8d
- 1 pouch 8/4d

The Endurance expedition took three pairs of tooth forceps. 1 upper bayonet pattern and 2 lower Hawkes Bill pattern.25

One of the common treatments was dental extraction. On board ship with two doctors and appropriate equipment, Wilson describes a straightforward extraction: “Skelton had bad toothache and a swollen face for nearly a week. He will not undergo any treatment at all – simply will not stand the pain of having his gum lanced or a stump drawn. So today we had a sail rigged up on deck to make a small room. In it we put the carpenter’s bench a mattress and pillow and then in Murray’s presence I gave him ether, and Koettlitz [the senior surgeon] drew a tooth and we made a job of it. He was under nearly 25 minutes and the whole thing was very successful. He knew absolutely nothing of what had been done, went off almost immediately. There was much amusement on deck over his loud and amusing songs and unparliamentary remarks as he was recovering from the effects of the ether. He was only sick once, and had practically no after effects. I gave it him on the practical experience I had gained by receiving it myself last year.”26

This is the only dental extraction that I know of that was done under general anaesthesia but because general anaesthesia was much more routine 100 years ago and might readily be done in a patient’s home, it is quite possible that it was used on other occasions. Things were even less easy when dental problems occurred while sledging. On the march towards the South Pole on the *Nimrod* expedition (1907-9), Shackleton reports:

“We were rather long at lunch camp, for we tried to pull out Adams’ tooth which has given him great pain, so much that he has not slept at night at all. But the tooth broke and he has a bad time now. We were not equipped on this trip for tooth pulling.”

The following day Dr. Marshall succeeded in pulling the tooth.27 Local anaesthesia was, I am sure, used at times but I have found no mention of it though cocaine, eucaine and tropacocaine were taken and Dr. Levick (on the *Terra Nova*) took 100 Novocaine dental tablets and a dental syringe.28 Drugs for injection did not come in ampoules, as now, but rather as solid ‘tabloids’ which needed to be dissolved. The instructions read:

“Draw about 10 minims of sterile water into the syringe, remove the nozzle and drop a ‘Tabloid’ hypodermic product into the barrel. Replace the nozzle … expel all air … shake gently … solution takes place almost immediately … the needle is then fitted…”29

Doctors also performed fillings but the circumstances were unlike those in a dental surgery. Evans reports that ‘Levick’s medical duties’ … included the stopping of one of Campbell’s teeth, and the latter says, ‘As he had been flensing a seal a few days before, his fingers tasted strongly of blubber.’30 Material for fillings was taken and cement from Claudius Ash.

After Shackleton’s *Endurance* sank in 1915 and they were camped on the ice, Macklin’s diaries say:
“Yesterday pulled a tooth for Bakewell, and today attempted to stop a tooth for Clark, but the stopping would not stop in the tooth.”31

When a single-handed doctor needed a filling, this had to be done by a non-medical person. Thus on the Australian expedition (1911-4), Frank Bickerton did a filling on Dr. McLean.32 We are not told how successful it was!

There were obviously no dental laboratories in the Antarctic. Dr. Jean-Baptiste Charcot, leader of the French expeditions, described how he:

“dug out some tablets of chocolate from my pocket. Alas! My greed cost me the loss of a tooth, my only false one, which broke in two leaving in my mouth the metal plate, which threatened to cut my tongue off! Once I was back on board it needed all the resources of my toolbox and all my ingenuity to repair this disaster in the most aesthetic way I could manage.”33

It was thought that the cold itself caused damage to teeth and fillings to shrink and fall out. Apsley Cherry Garrard, in a famous quotation, said, ‘all my teeth, the nerves of which had been killed, split to pieces.’33 However, more recent research, while confirming a high incidence of dental caries, has shown that this is due to poor dental hygiene and high carbohydrate intake rather than the cold.35, 36

The cold does, however, have an effect on foods. Louis Bernacchi, on the Southern Cross expedition (1898-1900) described:

“considerable hilarity was caused at breakfast, when one of the party was avidously eating some frame food jelly which, being partly frozen and very viscous, clung tenaciously to his teeth. On pulling it away, behold, much to his horror and our amusement, a large front tooth came away with it. The occurrence disturbed his mental equilibrium for some time afterwards …”37

Dr. Levick wrote that:

“cheese at -20°F is peculiar stuff, & cracks in your mouth like toffee, and the emergency biscuit is so hard as to require very careful worrying, and I realised then, with months of sledgeing before me, how lucky I am to have a magnificent set of teeth. I shall always be most particular in future, if ever I have to examine candidates for these expeditions to see that their teeth are strong”38

Gingivitis

Scurvy was the major cause of gum disease on Antarctic expeditions and occurred on both of Scott’s expeditions, in Shackleton’s Ross Sea Party and also on Charcot’s second expedition.

When scurvy broke out on Scott’s Discovery expedition, an examination the gums and teeth, the hamstrings, popliteal space, calves and ankles was made of everyone on board. Dr. Koettlitz listed his findings and noted that:

“… of a company of 46 men 22 only can be said to have unmistakably healthy gums, 6 of these have marked congestion of them, one at least typically so, while 16 have some slight turgidity.”39

Scurvy among the Ross Sea party was more severe. After Arthur Spencer Smith died while sledgeing, the other five made it back to Hut Point and Richard Richards wrote:

“With all of us, the teeth were barely visible owing to the gums coming down over them, and indeed in the latter stages of sledgeing it was impossible to eat biscuit without first soaking it owing to this.”40

As noted above, the French used tincture of iodine to treat gum disease but we are not told how the British treated it. For scurvy, there is mention of massage with methylated spirits but this probably related to the bruising of the legs rather than the gingivitis. However the common treatment for oral ulcers and gingivitis at the time was either potassium permanganate or potassium chlorate, probable as gargles. The former was used for scurvy on the...
Dundee Whaling Expedition to the Antarctic (1892-3) and was also used by Shackleton on the Discovery expedition for a bad throat and cough. Not all gingivitis was due to scurvy. On the Discovery, after a routine examination of the ship’s company for scurvy, Wilson wrote:

“The gums of many are red and swollen, but it is the redness and swelling of slight inflammation, rather than scurvy congestion and to my mind it is to be attributed to clay pipes, strong tobacco, coarse feeding, neglect of the toothbrush and the constant use of foul language.”

The pathophysiology by which foul language causes gum disease is unclear!

Acknowledgements

This research was funded by the Wellcome Trust who gave me a Short Term Research Award in the History of Medicine for Clinicians and Scientists for a study on ‘medicine during the Heroic Age of Antarctic exploration’. I would also like to thank Dr Paulina Witt for translating parts of Dr Gazert’s medical report from German.

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*All photographs courtesy of The Royal Geographic Society With The Institute of British Geographers.

Author: H.R Guly
Bernard Cyril Freyberg was born in London on May 21, 1889, two years before his family emigrated to New Zealand. In due course, the boy attended New Zealand’s prestigious Wellington College from 1897 to 1904 where his sporting prowess soon became evident. An excellent swimmer, he became the New Zealand 100-yards champion at both junior and senior levels.¹

A qualified dentist

Once graduated, he studied dentistry and became the apprentice of J. S. Fairchild of Wellington. He gained formal registration as a dentist on May 22, 1911. He worked as an assistant dentist in Morrinsville for Dr A. L. Yule. He later practised in Hamilton. On January 18, 1912, he rose to the rank of lieutenant in the Territorial Force unit of the Hauraki 6th Regiment which he left a month later when he accepted a dental post in Levin. However, in 1914, he left for San Francisco.²

When the First World War broke out, he travelled to England and enlisted in the British army. He joined the 7th Hood Battalion of the Brigade Royal Marines. In September 1914, he was sent to the Belgian front. In April 1915, Freyberg became involved in the Dardanelles campaign. During the night of April 14, 1915, Freyberg voluntarily swam ashore in the Gulf of Saros in order to distract the defending Turkish forces from the real landings taking place at Gallipoli. Despite coming under heavy fire, he returned safely from this outing, and he received the Distinguished Service Order for his feat.³

After the Gallipoli campaign, Freyberg was sent to France. On November 13, 1916, during the final stages of the Battle of the Somme, when he was in command of the 7th Hood Battalion, he so distinguished himself in the capture of Beaucourt village that he was awarded the Victoria Cross for ‘his exceptional bravery’.⁴

A war hero

The text of the citation was the following:

‘The personality, the bravery and the scorn of danger of this officer enabled the position of the corps to be permanently held, and on this point the front line was eventually formed.’

During his service in France, Freyberg was wounded nine times. He continued to lead by example. At the end of the war, he gained promotion to the rank of temporary Brigadier and took command of a brigade in the 58th Division in April 1917, which made him the youngest general officer in the British Army. He was also awarded a ‘Companion of the Order of St Mi-
Michael and St George.’ At the end of the war, he was severely injured when a shell exploded at his feet. In January 1918, he commanded the 29th Division performing with distinction during the German offensive of March–April 1918. He won a bar to his DSO in tribute to his action, eventually receiving three of them. He lead a squadron which seized a bridge at Lessines minutes before the armistice came into effect. Already nominated six times to the order of the army, he earned his second DSO.³

Between two wars
From 1921 to 1925, he was named officer at the headquarters of the 44th Division but he suffered health problems arising from his many wounds. In 1929, Freyberg was appointed to command the 1st Battalion of the Manchester Regiment. In 1934, he was promoted major-general at the age of 45. While he seemed headed for the highest echelons of the army, heart problems obliged him to retire. He was declared unfit for active service in 1937.²

The New Zealand army
In 1939, he approached the New Zealand government to offer his services. He became commander of the 2nd New Zealand Expeditionary Force and of the New Zealand 2nd Division. During the retreat in Greece in 1941, Freyberg commanded the Allied forces during the Battle of Crete and organized the withdrawal of the troops. Promoted to Lieutenant-General and Knight Commander of the Order of the British Empire, Freyberg continued to command the New Zealand 2nd Division in North Africa and Italy.

Freyberg did not get along with General Auchinleck and often disagreed strongly with him. He questioned and even refused some of his orders because, according to him, those orders ran counter to the New Zealand national interest. However, Freyberg enjoyed a good relationship with General Montgomery, who thought highly of the experienced New Zealander. During the Battle of El Alamein in October–November 1942, the New Zealand troops therefore played a vital part in the Allies’ final victory.¹

European campaign
In Italy, in 1944, he was part of the Allies’ High Command during the battle of Monte Cassino. Indeed Freyburg was the officer responsible for ordering the bombing of the ancient monastery. That same year, he was seriously injured in an aircraft accident. After six weeks in hospital, he returned to command his men in the final moments of the war. When they had reached Trieste, having regulated a tense standoff with Yugoslav partisans, he earned a third bar to his DSO. He left his regiment on November 22, 1945.²

Governor-General of New Zealand
Freyberg served as Governor-General of New Zealand from June 17, 1946 to August 15, 1952. In 1951, the Crown raised Freyberg to the peerage as Baron Freyberg of Wellington in New Zealand and of Munstead in the County of Surrey. After his term as New Zealand Governor-General had finished, Freyberg returned to England, where he sat in the House of Lords. On March 1, 1953, he became the Deputy Constable and Lieutenant-Governor of Windsor Castle. In 1955, Freyberg High School in Palmerston North, New Zealand opened. He died at Windsor on July 4, 1963.¹

A salamander
When he was a soldier, Freyberg became a legend. His men found him tremendous and were devoted to him, not only because he was living the same dangerous and uncomfortable battles, but also because he took great care of their well-being. He liked to be in the thick of action, so much so that Churchill called him ‘the Salamander’ due to his love of fire as well as his indifference to danger, standing erect in the middle of the bullets flying around.³

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Author’s Note: Many thanks to Professor Stanley Gelbier, the former chairman of the Lindsay Society for the History of Dentistry (UK), whose help was most valuable to me.

Author: Xavier Riaud, France
While planning a visit to ‘The Glasgow girls’ exhibition in Kirkcudbright in August 2010, I was made aware of an exhibition at the Stewartry Museum of the work of W. H. Clarke, an artist who had trained and practised as a dentist. William Hanna Clarke was born 1882, the son of Alexander Clarke, a Glasgow grocer, and the sixth of their seven children. His paternal uncle James who had emigrated to the USA and become a wealthy businessman, invited his nephews to join his textile manufacturing business but William preferred to stay in Glasgow. Though having a passionate interest in art, he bowed to his parents’ advice and became a medical student. The family story is that he fainted while observing his first surgical operation and transferred to the dental course, qualifying in 1904, and first appearing in the Dentist’s Register of 1907. The class photograph (Fig 1) shows him seated in the middle of the front row. Amongst his classmates are AP Husband, later a teacher at the Glasgow dental school who is commemorated by an annual eponymous essay prize, and Charles Reid who became a leader in the field of dental radiology and a founder member of the ‘Oral Surgery Club’.

According to his daughter, the late Mrs Margaret Wimbush, at the time of his marriage in 1908, he had a “lucrative dental practice” but was also studying at Art School, and “always painting”. She writes that around about 1912 he gave up the practice to devote all his time to painting, and they moved to a “primitive (and cheap) cottage” near Milngavie, and then on to Kirkcudbright after their daughter was born in 1914.

They lived first at Number 9, High St. (Fig 2), directly across the street from the much more imposing Broughton House, the residence of E. A. Hornel, a prominent member of the “Glasgow Boys” group of painters, which is now in the hands of the National Trust for Scotland.

Clarke was able to sell his pictures and make a living as an artist, but was also subsidised by rich uncle James and it was while building a larger house with a studio he was killed in a tragic accident. His daughter recalls “On the 1st of May 1924, a beautiful sunny day (as I remember) my father decided to apply stain to some doors for the new house which were stacked in the loft of the builders yard - thinking to save time, The loft had no rail- ing, and there were no witnesses to the accident, so
no one knows what caused him to fall, but he did, on to a concrete floor, fractured his skull, and died that afternoon in the Cottage Hospital.

“"The Dumfries and Galloway Standard”, 3rd of May 1924, recorded the circumstances of his death in great detail and describes the shock felt in the town at the sudden loss of a popular local resident. It also refers to one of his pictures being on exhibition at the Royal Scottish Academy at the time of his death and quotes from a laudatory review previously published in “The Studio”.

The house ‘Skairkindale’ was completed and for a few years was occupied by his widow and daughter, and the studio was used for Mrs Clarke’s piano tuition. It subsequently became the residence for the Rectors of Kirkcudbright Academy, one of whom was the father of the late Robin Cook MP. A later owner was David Gulland, an artist working in coloured glass, and he organised a Centenary exhibition of Clarke’s paintings in May 1982, held in what would have been his studio and opened by Mrs Margaret Wimbush, Clarke’s daughter. In the catalogue he describes Clarke as “An artist of the Glasgow school “ and “ a frequent exhibitor at the Glasgow Institute (now the Royal Glasgow Institute). He goes on to say that “his fellow artists recognised in him a painter of strong individuality and one who had studied earnestly to perfect his technique in oil-painting and watercolours. His move to Kirkcudbright in 1915 where there was a lively community of painters amongst them Hornel, Walton, Gould and Oppenheimer, gave him the opportunity to develop his talent.”

Clarke had been judged unfit for military service in the First World War but required to undertake farm work. “He cycled six miles each way every day and returned exhausted every evening”. The crayon sketch (Fig 4) dates from this period, and to the author is reminiscent of J F Millet’s peasants.

His daughter recalls his output of pictures as ‘considerable’, though his submission of pictures for the railway posters of Scotland being produced after the War was unsuccessful. He did produce designs for ‘tapestry’ furnishing material being produced in his uncle’s factory ‘The Orinoka Mill’ in Pennsylvania. A one-man exhibition was held at the Annan Gallery in Glasgow in November 1924. The catalogue refers to Scotland’s loss of “an artist of real originality, and power; one who was endowed with a strong individuality and was always a sincere student, intensely in earnest.” This paragraph is obviously the source of Gulland’s later description.

The oil paintings reproduced below and on the back cover, photographed by the author at the Kirkcudbright exhibition and with the permission of the Museum, show a strong influence of the ‘Glasgow boys’ school in the choice of rural subjects, strong brushwork and a rich palette of colours. There does seem to be progression towards a more sparing, simplified style through the years and one can only regret that premature death robbed him of the opportunity to become an even more sophisticated, and perhaps even more celebrated artist.

My thanks are due to Mary Jame Selwood who first told me about the Clarke exhibition, to Dr Maureen Park, Lecturer in the History of Art, University of Glasgow, for her advice in preparing this article, and to Dr David Devereux, Curator of the Stewartry Museum, for his ready assistance and for obtaining permission to reproduce the pictures, all of which are held in family or private collections.

Author: David McGowan, Rhu
A Selection of the Paintings of
A. M. Clarke (1882-1924)

Private collections: reproduced with permission
Photos: David McGowan

Under the Cherry Tree, 1918

Feeding Geese, 1917

Loch Landscape, 1918

Hens, 1920

The Shepherdess, 1921

Beach Scene, the Doon, 1922

(Foreground figures are the artist’s wife and daughters)
Dental History Magazine Vol 5 No 1

Word of Mouth

by

Eugene Feldman

Born on a Blue Day
A memoir of Asperger’s and an Extraordinary Mind
by
ISBN-10: 0340899751

Born on 31 January in east London, Daniel Tammet is a writer with high functioning autism and savant syndrome. As the title of his fascinating memoir suggests, he certainly has an extraordinary, mind. His work is unique since it is the first book written by anyone with this particular diagnosis. It provides a mine of information for neurologists and neuroscientists and the benefits it will bring to the understanding of savant syndrome will prove to be immense. But there is another a bonus. Daniel Tammet, is a writer of the first order. When he describes what he sees and feels, in a manner so strange to the ordinary person, readers are led carefully into his mind and ways of learning. This lucidity is astounding because this is his first book. Strangely enough the script is enriched by the author’s confusion with idiomatic language and his difficulty with abstractions. Metaphors meant nothing to him or for example when someone would remark, ‘I got up on the wrong side of the bed this morning.’ His unspoken reply was, ‘Why didn’t you get up on the right side? This is comic to us, but a serious matter to him.

As the eldest of nine children he had many people to cope with while growing up. But fortunately he had a most accommodating and supportive family. When he needed their special attention, he always received it. He was diagnosed with Asperger’s Syndrome, a mild form of Asperger’s Autism, while still very young so his parents understood his behavior, no matter how odd it appeared. Even as a small child Daniel hated noise and still does to this day. He needed to be quiet, recoiling from being touched even in a simple handshake or contact with his siblings or parents. However when he became a public figure and social events required him to shake hands, his father trained him to respond appropriately, but his uneasiness still lingers.

Two years of instruction to tie his shoes

When he started primary school at six years of age, problems began to emerge. His father had to tie his shoe laces and instruct him as to which was the left or right shoe. It took him nearly two years to master the procedure though he practised tying the laces repeatedly until his fingers hurt. Later his father had to help him with his school tie. Daniel just could not get the hang of tying it himself, so his father would tie the knot leaving it loose for Daniel to slip over his head and tighten.

But it was in school that he discovered his love of numbers. Savants usually excel in three fields: music, dates, or numbers. One of these categories generally becomes the dominant talent. Daniel loved the different shapes and colours of numbers. To him, the number 9 looked very different in shape and colour from, say, the number 3.
Teeth, order and thought

Indeed his attraction to numbers was the source of the astounding event of March 14, 2003, which will be discussed below. But out of class, Daniel preferred to be at home, commenting that, ‘It is where I felt safe and calm. There was only one other place that made me feel the same way – the local library.’ After he learned to read, he persuaded his parents to take him to the local library every day after school even during the holidays. There he found the quiet and orderliness, which is so important to him. Encyclopedias became his favorite reading where he learned about historical figures including the Presidents of the United States, and the names of the capital cities of foreign countries, in addition to copious amounts of trivia.

Of particular interest to readers of this magazine is the exercise which Daniel developed to brush his teeth. It explains the importance of his attraction to order and thought, even in the simplest day to day tasks of personal hygiene.

Daniel writes:

“There were lots of things that I found difficult, like brushing my teeth. The scratchy noise of teeth being brushed was physically painful to me, and when I walked past the bathroom I would have to put my hands over my ears and wait for the noise to stop before I could do anything else. Because of this extreme sensitivity I brushed my teeth only for short periods and then often only with the intervention of my parents. I was very fortunate that I rarely had toothaches, probably in large part I drank lots of milk and did not eat much sugary food. The problem continued for several years and led to frequent arguments with my parents, who could not understand why I would not brush my teeth without them having to compel me and often brought the toothbrush and paste into my room, not leaving until I had used them. It was until the start of puberty that I realized that I had to find a way of brushing my teeth regularly. In particular, my brothers and sisters and the children at school were noticing that my teeth were discolored and teased me about it, which made me more and more reluctant to even open my mouth to talk because of the insults that would ensue. Eventually I tried putting cotton into my ears so that I could not hear the noise as I brushed my teeth. I also watched the small television that I had in my room at the same time to take my mind off the fact that I was using the toothbrush; otherwise it would make me gag. Together these small efforts helped me to clean my teeth from day to day.

On my first visit to the dentist in many years I used cotton in my ears to help block out the sounds of the drill and other equipment. Nowadays I am able to brush my teeth twice each day and without difficulty. I use an electric toothbrush, which doesn’t produce the scratchy noise that manual brushing does.”

‘I brush each tooth individually.’

A few pages near the end of the book when, as an adult living with his partner in their apartment, he enjoys the order and routine surrounding him. He says:

“In the mornings, I always brush my teeth before my shower. I brush each tooth individually and rinse my mouth afterwards with water. When I wash, I use natural oils – tea tree and jojoba – to keep my skin clean and soft, as soap is too drying and makes me itch.”

Each page of the book reveals some insight. Daniel’s precise lucid prose never wastes a sentence, a rare achievement for any writer. His strange sensual world of thinking and seeing engages the reader, however surreal it may appear. It is a remarkable book and will surely advance the understanding of Asperger’s Syndrome and autism.

Earlier in this article, a reference was made to an unusual day in Daniel’s life. This took place in March 2003 at The University of Oxford. Daniel named the event, ‘Pi in the Sky.’ It is a witty title for a charity event in which he raised funds for The National Society for Epilepsy by reciting the lengthy number sequence of the mathematical constant Pi, accurate to more than 22,500 decimal places. This enormous feat took him 5 hours 9 minutes and twenty four seconds.

Most of us remember Pi as equaling 3.14! It certainly was a day to remember for everyone involved.

Author: Eugene Feldman, USA.
This year has seen many celebrations relating to the 400th anniversary of the publication of the King James Bible which was completed in 1611. King James VI of Scotland, who succeeded to the throne of England in 1603 as King James I, was well respected for his scholarship. The College Library possesses a copy of his collected works which were published in 1616. Attached opposite the frontispiece of the volume is a paper, perhaps from a sale catalogue, which describes the works as “extremely quaint, and perhaps the famous ‘Counterblast against [to] Tobacco’ is as amusing as anything in Literature.” Amusing James’ work may have been to the writer of the 19th century sale catalogue but had people heeded the words in his Counterblast they might have been spared many health problems. Although King James pleaded with his readers to consider:

“first upon what false and erroneous grounds you have built the generall good liking thereof [of tobacco]; and next, what sinnes towards God, and foolish vanities before the world you commit, in the detestable use of it”

But it was all was to no avail; smoking tobacco using a clay pipe became an everyday activity both for men and women and even children. Tobacco was first imported to Europe from the New World during the Elizabethan period and the clay pipes used for smoking could cause considerable damage to the teeth. As smokers clenched the pipe between their teeth, the abrasive clay of the pipe stem wore facets in the enamel of the teeth. Eventually these facets left holes in the bite. The Smithsonian Museum of Natural History in Washington D.C. has published on its website finds from Chesapeake which reveal that nearly everyone during the 17th century smoked tobacco using clay pipes. Skulls of men, women and even children from the 17th century sites of Patuxent Point show pipe facets, some so deep that they caused abscessed teeth. Illustrations of some of the skulls showing pipe damage and further information can be accessed at http://anthropology.si.edu/writteninbone/pipe.html.

Clay pipe smoking continued until the mass production of the cigarette at the end of the 19th century and similar finds to those in Chesapeake have recently been published by the Museum of London. A study of skeletal remains excavated from a Victorian cemetery in Whitechapel, East London, reveals that some disfigurement of the teeth had occurred in 92 percent of adults exhumed, with males being more affected than females. Young people, too, showed clay pipe damage to their teeth. Further details can be found on the Museum of London website at http://www.museumoflondonarchaeology.org.uk/News/VictorianSmokers.htm. Should you wish to read the Counterblast to Tobacco, this too, is published on the web on the Project Gutenberg website at http://www.gutenberg.org/files/17008/17008-h/17008-h.htm.
Caveat emptor

Paul Geissler, the curator of the Dental Museum of the Royal College of Surgeons of Edinburgh has contacted the Editor concerning an unusual and exciting item which was recently donated to the College.

Dr Geissler writes:
The donor, a teacher of Russian, had just returned from a trip to Russia. During her time there she had visited an antique shop and found an unusual spoon for sale which was ostensibly made from mammoth ivory. As a Russian speaker the donor was able to question the dealer fairly closely and she was assured that it was genuine mammoth ivory.

Mammoth ivory is from the woolly mammoth, an animal that has been extinct for at least 10,000 years. However it is not unusual to find the bodies of preserved woolly mammoths deep within the permafrost of northern Russia. There are fairly regular finds of mammoth remains in Siberia as the permafrost melts. The mammoth has a rich historical and antique value. The quality of its tusk is as good as elephant ivory and is completely legal to export internationally. Finds of mammoth ivory therefore play a part in saving the lives of modern living elephants who are illegally hunted for their ivory.

On returning to the United Kingdom the teacher donated the spoon to The Royal College of Surgeons of Edinburgh. The item (Fig. 1) is 8 cm long with a small bowl at one end. The relatively large flat handle is engraved with runic characters which spell out a charm bestowing health, wealth and protection by the goddess of the forests on the spoon’s owner. This was an interesting and exciting donation.

Nevertheless, with unusual donations to a museum caution should be exercised.

We knew about the ongoing finds of mammoth specimens in Siberia and that consequently, mammoth ivory was not that unusual. So the item could very well have been genuine. It was fascinating to consider what such a spoon would have been used for? The bowl was remarkably small so it was not easy to come to a conclusion. Could it have been used, for example, to administer snuff? But was snuff used in Siberia centuries ago? Doubts as to its authenticity began to emerge. The runes on the handle certainly suggested an ancient provenance yet these may have been counterfeited to give the impression of age. Examination with a magnifying lens revealed the ivory, as expected, to be a hard material with a smooth amorphous structure. So, no definitive answer there.

In order to determine the animal derivation of the spoon, it was decided to send it to The University of York for genetic tests using mitochondrial DNA analysis. This procedure revealed the specimen was not elephantine, that is, it was not mammoth ivory. The spoon was made of bone from the deer family.

Unfortunately this was conclusive proof that the mammoth ivory spoon was a fake. The runes had indeed been inscribed to give the appearance of antiquity.

Nevertheless, despite the fact that the spoon is a fraud it is displayed, clearly marked as such, in the museum. It was felt that it would be instructive to display the item and its history, as an illustration that the faking of antiques or old objects is a centuries old activity, usually directed at the tourist market.

The moral of the tale is that when you are on holiday and inclined to dally in the marketplace in search of antiquities:

Caveat emptor
‘Buyer Beware!’

Paul Geissler, Edinburgh

Fig. 1. Fake Mammoth Ivory Spoon
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**Institutions:**

- The Osler Library for the History of Medicine
- The National Library of Medicine, USA.