Robert Lindsay, August 1926, and the American experience — Part 1: the first International Orthodontic Congress

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Key points

To learn about the beginnings of international cooperation in orthodontics.

To find out about the history of orthodontics in the inter-war years.

To get to know some of the personalities involved in orthodontics early in its development.

Abstract

In August 1926, two important dental meetings took place in America: the first International Orthodontic Congress (16–20 August in New York) and the seventh International Dental Congress (23–27 August in Philadelphia). Robert Lindsay, British Dental Association (BDA) dental secretary and husband of fellow dentist and BDA librarian, Lilian Lindsay, documented his trip attending these two events. His handwritten diary and letters not only describe the dental meetings and the dentists that went there, but also chronicle the epoch of the great luxury passenger liners and a time in America where business was booming and money was seemingly no object. This article focuses on the journey to America and the orthodontic meeting – the first time a dental speciality had held an international gathering.

Introduction

'We ran on to the pier at Southampton shortly after ten and got on board without incident';1 so begins a travelogue of 54 pages (Fig. 1) written by Robert Lindsay between 7 August and 4 September 1926, consisting of a diary and letters sent to his wife, Lilian. Robert Lindsay LDS RCS Edin, at that time, was the British Dental Association's (BDA's) dental secretary (what we would now call the chief executive) and he had been in post since 1920. A man able to see the big picture, one of his main strengths seems to have been as a negotiator and his skills were very much in evidence in getting the 1921 Dentists Act (which allowed dentists working without an accepted dental qualification who fulfilled certain criteria to register as being in practice before 1921) over the line and accepted by a large part of the profession.

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Refereed Paper.
Submitted 6 December 2022
Accepted 18 January 2023
https://doi.org/10.1038/s41415-023-6012-5

Robert and his fellow traveller, Bryan Wood (Fig. 2), at that time honorary treasurer of the BDA (later to become BDA president and the wartime British Dental Journal [BDJ] editor), were on their way to New York on board the Cunard line ship, the Caronia, to attend the first International Orthodontic Congress (IOC), followed by a trip to Philadelphia and the seventh International Dental Congress. Over 30 British and Irish dentists sailed to New York on the Caronia to attend one or both of these events, including at least three women: Bessie Poole LDS VU Manc 1922; Irene Dorman BDSc U Dubl 1919; and Eva Sterling LDS RCSI 1923. Among the men were the BDA president, John Badcock; president of the British Society for the Study of Orthodontics (BSSO), George Cale-Matthews; and vice president of the European Orthodontological Society (EOS) and founder member of the BSSO, George Northcroft (later to be the BDA honorary museum curator)2 (Table 1).

On board the Caronia

Life on board ship settled down into a routine for the week. Professor William H. Gilmour from Liverpool University, 'with thoughtful care had secured a table' and Robert and Bryan Wood (who shared a cabin) sat down

for dinner with him every day alongside John Badcock, George Northcroft, Vyvian Sargent (BSSO member), John Jameson (former BDA president and a BSSO member), Harold Watkin (on the council of the BSSO and later its president) and Dennis Campion (only two years qualified but already a BSSO member and the scion of a famous dental family both his father and grandfather had been presidents of the BDA). Robert writes that they are a 'curiously mixed table...Badcock and Northcroft's conversation is mostly about the food of which Northcroft is a somewhat severe critic...Wood and I have made heroic efforts to talk about something else but almost uniformly without success...the other end talks of the daily sweep on the run [how far the ship travelled in a day] and little else, food being a great second.3 At one point in the voyage, Lindsay and Wood attempted to liven up proceedings:

'What a damned thing is a Tory. Yes indeed. Some harmless remark of mine to Sargent brought a reply to him that I was a member of the National Liberal Club and Asquithian and presently we were in the coal strike and the general strike [the latter only took place three months before the voyage and had meant the postponement of the BDA's annual meeting], with Northcroft, Badcock and Sargent



Fig. 1 Robert Lindsay's diary and letters narrating his trip to America in 1926



Fig. 2 Bryan Wood photographed during his BDA presidential year in 1937–1938. Image reproduced with the kind permission of the BDA Museum

pitching the usual ghastly rot about Red Revolution and what the strong government had saved us from. Wood out of half devilry pitching his opposition pretty high. So, we went from bad to worse...until Northcroft stirred to the depth of his soul, got up and left the table before the cause of nationalisation of everything which I proposed. We must keep off politics for a bit. They are the stodgiest lot...and having tried them on all points at last took a fiendish delight in putting the fat into the fire.'4

Robert spent most of his days watching the sea away from the crowd of dentists: 'my great refuge is the front part of the boat deck under the bridge...it is too exposed for the average passenger and I get long hours there alone sometimes merely leaning lazily over the rail filled with the lovely mystery of the sea watching for passing steamers and flying fish...'3 He was recovering from some sort of 'indisposition' which seems to have been an infected neck wound that Lilian Lindsay had sorted out with a knife! He visited the onboard doctor every day to get the wound dressed, and the latter: 'when he looked first at me [he said] "well you have been properly cut". I said "my wife did that", well he said "she did it pretty thoroughly".4 The other dentists took part in the joys of shipboard life, which included deck tennis, cock fighting (two men trying to push each other out of a circle while sitting down with their hands tied in front of and a stick running under their knees),5 swimming, apple bobbing and shovel board. Campion nearly won the cock fighting: 'Bryan [Hermann Bryan, dental surgeon to Norfolk and Norwich Hospital and a BSSO member⁶] got the apple bobbing easily, Wood got to the semi-final in the tennis, and Mrs Sterling was in the final for the shovel board so dentistry has been doing not badly?3

Not all the dentists could afford to travel cabin class and Robert mentions that 'there are at least two of our men at the third tourist section, Graham and Crane of Bournemouth.' James Wells Graham had been awarded an OBE for organising dental services behind the front lines in the First World War, was Wessex Branch president in 19257 and a member of the BDA's Representative Board, while Walter Crane, also a dental officer in World War One, was a member of the BSSO and much later, a life member of the BDA. Towards the end of the voyage, the dental secretary visited the lower decks and was very thankful for his cabin status: 'nothing would tempt me to be a

Name	Qualifications	Third class*	Women	BDA President	Member of	
					BDA RB**	IDS***
Badcock, John Henry	LDS RCS Eng, 1887; MRCS Eng, 1890; LRCP Lon, 1890			1925–26	REPBD	
Barrett, (Walter) Russell	LDS RCS Eng, 1890; MRCS Eng, 1893; LRCP Eng, 1893				REPBD	
Bradley, Frederick William	Dentist 1921					IDS
Bryan, Hermann	LDS RCS Eng, 1902					
Butterfield, Fred	Dentist 1921					IDS
Cale-Matthews, George Frederick	LDS RCS Eng, 1896				REPBD	
Campion, Dennis Henry	BDS VU Manc, 1924					
Cant, Gifford	Dentist 1921					IDS
Crane, Walter Alexander	LDS RCS Eng, 1913	3rd				
Crowthers, William Smedley	Dentist 1921					IDS
Dorman, Irene Olive	BDSc U Dubl, 1919		W			
Friel, Ernest Sheldon	MDSc U Dubl, 1909					
Gilmour, William Henry	LDS RCS Eng, 1892; MDSU Lpool, 1907			1927	REPBD	
Graham, James Wells	LDS RFPS Glasg, 1911	3rd			REPBD	
Highton, Herbert Cragg	LDS RCS Eng, 1903					
Jameson, John Thomas	LDS RCS Edin, 1890			1922		
Lindsay, Robert	LDS RCS Edin, 1894				REPBD	
Lockett, Alfred Cookman	LDS RCS Eng, 1906					
Lodge, Frank	LDS RCS Eng, 1911					
Macdonald, Percy	Dentist 1921					IDS
Nicol, Robert Alexander	LDS RFPS Glasg, 1911	3rd				
Northcroft, George	LDS RCS Eng, 1892			1932		
Parrott, Arthur Hughes	LDS RCS Eng, 1897; BDS 1903, MDS 1918, U Birm					
Poole, Bessie Helena	LDS VU Manc, 1922		W			
Sadler, Bernard Frederick	LDS RCS Eng, 1897					
Sargent, Vyvian Fitzgerald	LDS RCS Eng, 1904					
Skelton, John Anthony	Dentist 1921					IDS
Spaven, Arthur Thomas	LDS RCS Eng, 1905				REPBD	
Stephens, (Bernard) Maxwell	LDS RCS Eng, 1903					
Sterling, Eva Gertrude	LDS RCSI, 1923		W			
Watkin, Harold Gladstone	LDS U Liverpool, 1918					
Wigoder, Philip Isidore	LDS RCS Irel, 1911; LRCP Irel, 1915; LRCS Irel, 1915					
Wood, Bryan Jardine	LDS RCS Eng, 1898			1937	REPBD	

third class tourist – I think in the present hot weather, the prospect of spending the night in these stuffy rabbit hutches below the waterline is hard enough.⁹

* = Third class tourist passengers had cabins on the lower decks
** = BDA Representative Board – the governing body of the BDA
*** = Incorporated Dental Society

The entertainment committee was chaired by Maxwell Stephens, the vice president of the BSSO, with the help of Arthur Hughes Parrott from Birmingham Dental School, who had

been senior honorary dental surgeon at the first Southern General Hospital in World War One.¹⁰ A fancy dress dance was organised for the Friday night – Robert did not take part

but remarks that 'some of the dresses were very elaborate and quite evidently brought on purpose, which in my view was unfortunate' (no prizes were won by the BDA party!). He continues, 'it was the hottest night we have had and after the parade, I escaped to the upper deck with Mrs Sterling and watched the stars and talked till about midnight when Friel [E. Sheldon Friel was an orthodontist from Dublin and a former president of the BSSO¹¹] managed to wangle tea from the lounge steward...'³

On the final day, 'we had a short meeting of the club at 4.30 and took tea together; many photographs were taken' (Fig. 3). At dinner, 'Badcock and Gilmour united to stand champagne and we all signed each other's menus as souvenirs' (Fig. 4).12 Gilmour described the voyage as very enjoyable: 'we formed a very happy party, the Cunard Steamship Company treating us most royally and giving us many facilities which materially helped in our comfort'.13 Early the next morning, everybody 'rose en masse to view the Statue of Liberty' while the ship was docking. Finally free to leave the ship after getting through customs and a health check, Robert and Wood were met by 'a man from Cooks [who] looked after our luggage and took us to The Commodore [hotel]:12

Living in a film

The Hotel Commodore (Fig. 5) which opened in 1919 was the headquarters for the IOC. When it was built, it boasted the largest hotel lobby in the world, with 22 floors and 2,000 bedrooms, 'all with baths'.14 Robert is stunned by it: 'we are really living in a film. There's no other name for it. It is going on all around and we are part of it.'15 He continues: 'the elaboration of elegance and comfort is amazing, the multiplicities of lifts...the various bureaus, shops, cafes, all arranged conveniently. The boot blacking establishments, I counted three...you can call by telephone to your room a barber, an osteopath, a physician, a chiropodist, a stenographer and various other people. I find everyone pleasant and willing to help...'12 He goes on to describe eating corn on the cob for the first time: 'we had green corn for lunch and the waiter sticks a silver-plated kind of handled skewer into each end and after plashing the cob with butter, salt and pepper to taste, you hold it to your mouth and gnaw steadily along the cob rotating it the while. I



Fig. 3 Photograph taken on the SS Caronia. Back row left to right: Robert Lindsay, Bryan Wood, John Badcock, Hermann Bryan, William Gilmour, John Jameson. Front row left to right: Dennis Campion, Harold Watkin, George Northcroft. Image reproduced with the kind permission of the BDA Museum

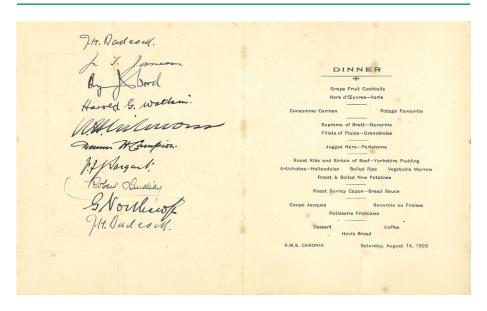


Fig. 4 Signed menu from the Caronia with the signatures of John Badcock (twice), John Jameson, Bryan Wood, Harold Watkin, William Gilmour, Dennis Campion, Vyvian Sargent, Robert Lindsay and George Northcroft. Image reproduced with the kind permission of the BDA Museum

nearly displaced my teeth on my first attempt but got that straight after. They ate in the summer garden room, a most extraordinary place most gorgeously fitted with singing canaries suspended all around... and they did sing. Later in the week, he had his nails manicured by a most charming young lady in the barber shop' while Wood was having his hair cut. — as instructed, he returned on the Saturday to have his nails done again: 'they

are new, shiny and beautiful'. The beautician asked him if Wood (twelve years Robert's junior) was his son and it is a measure of their close friendship that he replied 'no...he is my stepson'. 17

Not everybody had the luxury of a hotel room and some of the delegates were accommodated with local orthodontists. Dublin-based pair, Sheldon Friel and Mrs Sterling, were staying with one of the honorary presidents of the Congress and professor of orthodontia at the University of Pennsylvania, Dr A. LeRoy Johnson.¹⁵

Background to the Congress

The IOC was the brainchild of Dr William C. Fisher from Washington D.C. (Fig. 6). He seems to have been a very cosmopolitan person. After gaining his Doctor of Dental Surgery from Washington University in 1899, he travelled first to Canada's McGill University and later to the University of Dublin to continue his professional education. He then practised in London for two years alongside the University of Michigan-educated Louis James Mitchell. Fisher himself was unable to register since only qualifications from Harvard or Michigan were accepted as valid at the time. His wife, Adelaide, whom he married in 1907, was French, so Europe must have been much in his thoughts as it recovered from the ravages of the First World War. He had been interested in orthodontics for some time before joining the American Society of Orthodontics (ASO) in 1917, and then in 1921, he gathered a group of eight specialists together to form what became the New York Society of Orthodontics. In addition, he was a member of the EOS. 18,19,20

Initially, he had to convince the ASO that a global congress would be a good idea, which he managed to do in 1924 at their meeting in Kansas City. In order to make sure that other organisations were on board, he took a trip to Europe at his own expense and visited various European orthodontic societies.²¹ The BSSO noted 'it has been reported to the Council that an International Orthodontic Congress will be held in New York in June, 1926, that year being the 25th anniversary of the foundation of the American Society of Orthodontics; your Society has been invited to join the Congress, and only awaits further particulars before accepting the invitation.²²

Ultimately, at least 24 Britain- and Irelandbased dentists attended. Of these, George Northcroft was chairman of the IOC's International Committee on Orthodontic Nomenclature and Alfred Cookman Lockett was given responsibility for Europe on the Transportation Committee.²³ The Jamaicanborn son of an English Wesleyan minister, Lockett obtained a Doctor of Dental Surgery at Pennsylvania and studied orthodontics with Edward Angle, finally settling in England and



Fig. 5 The Hotel Commodore, New York. A contemporary postcard

gaining his License in Dental Surgery in 1906. He was the first secretary of the BSSO.²⁴ Both he and Harold Chapman were appointed to the Board of Governors for the Congress, Lockett representing the EOS, for which he was secretary, and Chapman the BSSO.²⁵ The latter, a founder member of the BSSO, its secretary from 1910 and president in 1925, had travelled to America following his License in Dental Surgery qualification in 1903, gaining

a Doctor of Dental Surgery from Pennsylvania in 1905.²⁶ He and Lockett undertook Angle's course together.²⁷ Three further members of the BSSO – John Jameson, Frederick Doubleday and Conrad Ackner – did travel but were neither mentioned by Robert during the Congress, nor listed as delegates, so cannot be confirmed as being present. Interestingly, one confirmed delegate was Robert Newcomer Le Cron, a graduate of St Louis, Missouri, who

was on the dental register as a 'Dentist 1921' and so not eligible to join the BDA. He was a member, instead, of the Incorporated Dental Society (IDS) (Table 2).

Nine committees were set up to organise various parts of the Congress. Apart from the two mentioned above, there was a Program Committee; Committee on Registration; Committee on Arrangements and Exhibits; Reception and Banquet Committee; Ladies' Entertainment Committee; Publicity Committee; and, of course, a Golf Committee.28 Everything was coordinated by a small group headed by Dr Fisher, whose experience as a dentist in the US Army (1901-4)19 may have helped develop his gift for organisation. In total, 27 papers were received, all to be read in English. Surprisingly, 17 of these were from European speakers, with only ten from the USA and none from elsewhere. Of the 29 case reports presented and 36 clinics demonstrated, only seven were from non-USA representatives, but the latter did include Juan Carrea from Argentina and the Canadian, George Grieve. The nine scientific exhibits displayed were all American.28 According to the published 'Members of the Congress', at least 757 delegates were signed-up to attend the gathering, which ran from 16 August to 20 August, and included social festivities and outings to complement its more serious work.29

Orthodontics as practised in America compared with Europe

In America at the time of the Congress, there were 450 exclusively orthodontic practices but 'in the whole of Europe...hardly a score of men who can be classed in the same manner.' Fisher, in his opening address to the Congress, stated that he believed the decision of Angle's graduates and a few others to limit their practice 'exclusively to that of orthodontia' had 'a greater and a more favourable influence upon the wonderful development of the speciality in America than has any other one factor'. The congress, there were development of the speciality in America than has any other one factor'.

In Europe, there was a far greater emphasis on practising dentistry in general practice, with the general dental practitioner expected to become proficient in all aspects of dental work. John Badcock made this point in the discussion following Fisher's speech, declaring 'it cannot be denied that inasmuch as every specialist deliberately narrows his field of action, there is an unconscious tendency to



Fig. 6 President and instigator of the Congress, William Fisher. Image reproduced with the kind permission of the World Federation of Orthodontists

narrow his field of vision, too, to lose his sense of proportion, to fail to see the wood as a whole because his attention is concentrated on the individual trees, and for his own work to assume an importance in his eyes beyond its real value...'31 In addition, as Belgian Professor Otto Rubbrecht pointed out in his thoughts on the conference, there needed to be more of a willingness for orthodontic treatment from the general public in Europe than existed at that time, since 'here we are from 10 to 20 years behind the American public. We actually think in Belgium that we need a population of two million people to maintain the practice of an orthodontist.32 Of those British and Irish dentists who definitely attended the IOC, only four - Harold Watkin, George Cale-Matthews, Harold Chapman and Sheldon Friel - worked or went on to work solely as orthodontists.

At a meeting of the BSSO in 1926, before the Congress, Norman Grey presented a paper on his experiences at the postgraduate school of

orthodontia at the University of Pennsylvania. He described what they might encounter in American orthodontics: 'what you might not be prepared for is the new attitude towards diagnosis. The whole aim of many leading American orthodontists is to get away from a picture of tooth relationships, and to see instead a picture of general development.33 He had travelled to America to take advantage of their expertise in mechanics and discovered that 'the direction of future progress is through the study of biologic principles that concern function, nutrition, metabolism, the repair of the tissues, and the thoughtful application of such principles to every phase of the art of dentistry'.33 This emphasis can certainly be seen in a number of the American papers presented at the IOC, such as Percy R. Howe's 'The influence of food on malocclusion, A. LeRoy Johnson's 'Tissue changes involved in tooth movement' and R. C. Derivaux's 'Orthodontia in its relationships to growth and repair.28

Name	Qualifications	Member of		Where based	
		BSSO	EOS	_	
Ackner (Achner), Adolph Conrad*	LDS RCS Eng, 1912	BSSO		London	
Badcock, John Henry	LDS RCS Eng, 1887; MRCS Eng, 1890; LRCP Lon, 1890	BSSO		London	
Barrett, (Walter) Russell	LDS RCS Eng, 1890; MRCS Eng, 1893; LRCP Eng, 1893	BSS0		London	
Barrows, Edward Doane	LDS RCS Eng, 1915		EOS	London	
Bryan, Hermann	LDS RCS Eng, 1902	BSSO		Norwich	
Cale-Matthews, George Frederick	LDS RCS Eng, 1896	BSSO	BSSO Birmingha		
Campion, Dennis Henry	BDS VU Manc, 1924	BSSO	BSSO Manches		
Chapman, Harold	LDS RCS Eng, 1903	BSSO	EOS	London	
Crane, Walter Alexander	LDS RCS Eng 1913	BSSO		Bournemouth	
Dorman, Irene Olive	BDSc U Dubl, 1919			Keady, Co. Armag	
Doubleday, Frederic Nicklin*	LDS RCS Eng, 1908	BSSO		London	
Friel, Ernest Sheldon	MDSc U Dubl, 1909	BSSO		Dublin	
Highton, Herbert Cragg	LDS RCS Eng, 1903	BSSO		London	
Jameson, John Thomas*	LDS RCS Edin, 1890	BSSO		Newcastle	
Le Cron, Robert Newcomer**	DDS St Louis; Dentist 1921			London	
Lindsay, Robert	LDS RCS Edin, 1894	BSSO		London	
Lockett, Alfred Cookman	LDS RCS Eng, 1906	BSSO	EOS	London	
Northcroft, George	LDS RCS Eng, 1892	BSSO	EOS	London	
Parrott, Arthur Hughes	LDS RCS Eng, 1897; BDS 1903, MDS 1918, U Birm			Birmingham	
Poole, Bessie Helena	LDS VU Manc, 1922			Wales	
Roberts, Clair William**	LDS RCS Eng, 1916	BSSO		London	
Sadler, Bernard Frederick	LDS RCS Eng, 1897			Burton-on-Trent	
Sargent, Vyvian Fitzgerald	LDS RCS Eng, 1904	BSSO		London	
Stephens, (Bernard) Maxwell	LDS RCS Eng, 1903	BSSO		London	
Sterling, Eva Gertrude	LDS RCSI, 1923	BSSO		Dublin	
Watkin, Harold Gladstone	LDS U Liverpool, 1918	BSSO		Liverpool	
Wood, Bryan Jardine	LDS RCS Eng, 1898	BSSO		Kettering	

Key:
= Travelled to America but not on the delegate list and not mentioned by Robert as being at the IOC
** = American dentist settled in London

The Congress begins... inauspiciously

The first session took place on the afternoon of Monday 16 August. The morning had been taken up with the 25th annual meeting of the ASO³⁴ and registration for the IOC. The Frenchman, Jacques Guinat, was delighted at being presented with a badge containing his name, town and country of origin, as this not only made meeting people much simpler, but also meant you had 'la

joie' of discovering a fellow countryman – possibly even a neighbour.³⁵ Each speaker was supposed to talk for a maximum of 40 minutes, followed by a ten-minute talk from a chosen delegate opening a discussion on the paper, five minutes for discussion from the floor and five minutes for a reply by the speaker.³⁶ However, according to a later report, 'evidently a great many men believed that their papers were the only ones to be given. Other essayists seemed to believe that the value of their papers was judged by the

number of typewritten pages they had the strength to read'!³⁷

Robert, at first, was not impressed: 'Badcock who opened...the discussion on the [president's] address read a few remarks to himself. Northcroft had the report of the nomenclature committee which he read very much in the same way...there was a daylight lantern screen for lantern slides which took around half an hour to rig up and wasn't much good when it was rigged. Hellman ['Palaeontology of the human dentition'

co-written with William K. Gregory] talked in a confidential manner to the screen and no-one was a bit the wiser. The next man was on diet and malocclusion [Percy Howe's paper] and he was quite inaudible...when he was done, I said to Wood "I'm going for tea" and I went. He followed me with docility....' They were soon joined in their afternoon orange pekoe by others 'as the readers of the two next papers had not turned up...and the session mercifully ended. Wood asked if anyone moved a vote of thanks to these considerate gentlemen'.15

The following day Robert arrived at the meeting room to find that 'it was impossible to hear' Axel Lundström of Sweden's talk on 'Some case reports and their bearing on diagnosis' so he gave up and 'spent a very enjoyable hour examining the exhibits which included a very successful and interesting mandibular resection for inferior protrusion [William A. McCarter from Kansas' 'Underdeveloped maxilla and overdeveloped mandible (case report)']'.38

The British and Irish contingent are heard

Unfortunately for the organisers, where the papers were being read was 'in close proximity to some new buildings which were being erected' which accounted for the noise.³⁹ As a result, for the third talk of the morning and thereafter, everything was moved to the ballroom 'with an amplifier which improved matters greatly.'³⁸

The first speaker to benefit from the change of venue was Cale-Matthews with his paper on 'The complete deciduous dentition at the eruption of the first permanent molars: its importance in diagnosis and classification'. Robert could at least now hear him, although there were still problems seeing the glass lantern slides. Sheldon Friel on the development of occlusion 'from infancy to old age' was next and was 'very good and we heard him fairly well.38 Alfred Lockett's 'all right but not very satisfactory'38 talk was on 'The problem of final results in adult life of treated cases'. This was a very downbeat paper covering statistics on relapse and the problem of getting people to pay for treatment when there was no guaranteed outcome - especially with money that could be ill-afforded. Indeed, Edward Barrows, a fellow EOS member opened the discussion by saying, 'I must confess that if we all saw the picture in the same light as the essayist,



Fig. 7 Dinner given by the American members to their colleagues from abroad. On the long table, Robert Lindsay is fourth from the left with Axel Lundström to his left. William Fisher is standing up in the middle with George Northcroft to his left. Sheldon Friel is third from the right. Reproduced with the kind permission of the BDA Museum

it would have a most depressing effect on us orthodontists'. 40

The afternoon speakers were from America, Belgium and Germany. Dr J. Lowe Young of New York opened the session with a talk on the 'Evolution, construction and manipulation of the pin and tube appliance'. According to the BDJ Congress report, 'while this appliance is not in favour today, the author referred to technical details which could be used in connection with more modern appliances'.39 The talk was definitely taken note of by Harold Chapman, as in his copy of the transactions held at the BDA Library, he has marked out various paragraphs and pencilled the question 'why are these compensating torsional bends necessary?' where Young mentions creating them in the arch wire 'just in front of the posts, to prevent tipping the molars buccally.'41 One of the few women attendees, Bessie Poole, spoke up after Herbert Pullen of Buffalo's talk on 'Abnormal habits in their relation to malocclusion and facial deformity' to ask about mouth-breathing and 'whether it is possible to breathe through the mouth and smoke at the same time, whether it is possible to blow and suck at the same time, and whether one habit will develop out of the other'. Pullen's response was to say 'that it is obvious that [Dr Poole] does not smoke and I trust that she does not acquire the habit, or she would have been convinced ere this of the impossibility of sucking on

a cigar and blowing out the smoke at the same time unless the cheeks can be used as a bellows independently of inspiration... mouthbreathing cases throw little light upon the thumb- or finger-sucking habits...⁴²

Gilbert and Sullivan 1920s Broadway style

Instead of attending the afternoon session, Robert and Wood spent their time arranging their onward trip to Philadelphia and wandering around the harbour, returning via Broadway and the 'elevated railroad'. After dining 'sumptuously' in the hotel, they took themselves off to the Plymouth theatre in a taxi which drove through 'the region of sky electric signs. It was a revelation - Piccadilly Circus is pale and dull by comparison.'43 They had tickets to see a performance of Gilbert and Sullivan's Iolanthe and the legacy of Robert's army service is apparent as he 'noticed that [Private Willis'] rifle was a Martini-Henry with the old-fashioned bayonet which was correct to the time'. He had been a member of the Volunteer Artillery Corps before the First World War and joined the Edinburgh Volunteer Corps during it, working his way up from private to sergeant-major, 'finally receiving a commission, and many of the men who went on active service had been drilled by him'. 44 He enjoyed the performance despite the 'shock' of the 'yankee American coming out in the repartee'.43

Herbert Locke Wheeler and a Connecticut outing

Robert was contacted by Dr Wheeler the following day suggesting an outing to his country residence at Stamford. Herbert Wheeler had been a professor of prosthetic dentistry and orthodontia at the College of Dental and Oral Surgery of New York for a number of years before its merger with Columbia⁴⁵ and had a practice nearby. Robert describes finding him in a 'typical American house on the sixth floor to which a white dressed clerk in the hall sent us by an elevator to be received by an equally white dressed secretary...we waited in a small well-furnished room with half a dozen other people, where I was put at home by finding Punch and The Tatler'.16 Wheeler drove them out to his house through the New York suburbs and a countryside devoid of walls and hedges which gave 'the effect of driving through some private estate except for the awful specimens of architecture with which one is so frequently confronted. Everywhere houses are going up...but the grass is fresh and green, there are plenty of trees and usually a lake or a burn in sight...'16 On arrival, they were introduced to an American from the South who in talking about prohibition while deploring the 'want of respect for the law' went on to describe how he obtained 'champagne and other hard drinks for his friends and himself'. Wheeler, his wife, the Southern American gentleman, Robert, Wood and a French dentist, Henri Villain and his wife were taken to a local golf club for lunch where the novelty of 'a pickle made of melon rind' was 'most appetising' and 'coffee could be had at any point in the meal'.16

Meanwhile, back at the Commodore Hotel, the Congress was continuing with speakers from the USA, Germany, France and Switzerland. Paul Simon of Berlin spoke on 'The necessity of gnathostatic diagnoses in orthodontic practice' and Harold Watkin asked afterwards why nothing had been mentioned about the 'influence of the size of the tongue...if there is a small tongue, there is no use expanding the jaw and expecting it to stay expanded after removing the expansion appliances'.46 Dr Simon did not respond to this but it is interesting to note that Watkin, a bit of an inventor, apparently developed a pin and tube appliance based on Simon's earlier design.47

Banquet to their colleagues from abroad

Robert and Wood got back just in time to dress for the evening banquet given by the American members to their colleagues from abroad. The former thought this 'a most effectively organised affair. The guests all at nicely arranged separate tables decorated with the flags of all the nations represented. The speakers were all on the top table...' (Fig. 7).16 Originally, the organisers, 'in default of a Scotsman,12 had asked Cale-Matthews to do the reply for Scotland (even though he was English!), but the latter had very quickly passed that honour on to Scot, Robert. This meant that Mr Lindsay found himself on the long table next to Axel Lundström, 'a very nice man'48 and former president of the EOS, who was giving the reply for Sweden.

As each national representative was called and their national anthem was played, everybody stood up, after which the delegate spoke for about five minutes. Apparently, 'Northcroft did very well in a carefully prepared speech for England. Friel was fair although nervous for Ireland and I had of course written nothing but according to remark spoke all right....16 They played The bluebells of Scotland for his national anthem! As well as these speeches, Fisher 'called upon certain distinguished guests, such as Badcock, Aguilar, Blatter etc, to rise in their places and he made a few complimentary remarks. Then he asked all the guests to rise and did the same'. Robert was very impressed with the whole evening declaring that there were 'not a few points which I would like the BDA to imitate'.16 Rubbrecht also thoroughly enjoyed the occasion. He was pleased because the speeches were ordered alphabetically so Belgium went first and 'was warmly applauded and we felt pass through the room a great wave of sympathy for our country. The toasts continued for more than two hours. It was an occasion of real fraternalism between the representatives of all the countries'.32 This event was one of the first truly international gatherings since the end of hostilities in 1918.

Robert declined an invitation from Fisher to join 'a little group after the banquet finished when he produced a bottle of "scotch" (the alcohol ban meant that only iced water had been drunk throughout the whole evening). He remarks that Wheeler also 'produced whisky of various sorts Brandy etc at his house and found me a great puzzle in that I did not at once fall upon it. What a life. I would not stay here for

anything. As an experience yes for a few days – but not otherwise. 48

Demonstrations and a beach party

On the Thursday morning, a number of demonstrations of 'models and other objects... placed on little round tables' was set up while delegates wandered around, allowing them to come into 'direct contact with the different operators and ... examine their methods closely.32 Robert thought they were 'very good' but 'was mostly concerned with the organisation.16 In fact, he seems to have spent more time looking at what would be useful to take back to try at BDA gatherings than actually taking notice of any of the orthodontic discussion going on throughout the Congress. However, Herbert Highton, Vice President of the BSSO, took more notice of these 'clinics', being 'greatly interested in an apparatus shown...to record the pressure exerted by springs. The lightest force of a small accessory spring apparently exerted a pressure of about two ounces, which is an astonishing fact...I expect the force exerted by some heavy devices would reveal the fact that far too great a strain is being placed upon teeth.49 Russell E. Irish of Pittsburgh, the gadget's inventor, called it the Irishometer. At the time of the Congress, his patent was pending on this 'wire testing device' for 'estimating the pressure exerted by flexed wire when used in orthodontia or the straightening of teeth'50 and this was possibly the first time it had been demonstrated at a meeting of orthodontists.⁵¹ A fellow Pittsburghian, Harry Metz showed the practical use he had made of Irish's device in a clinic entitled 'Recording actual pressure exerted by auxiliary springs in conjunction with lingual arch'.52

After the demonstration session was over, the remainder of the day was spent in social activities. For the delegates, there was the choice of a golf tournament or a trip to the Orienta Beach Club on Long Island Sound. Robert chose the latter and discovered that the whole of the Sound seemed 'devoted to pleasure'. There was a 'beautiful sandy beach - actually artificial for the coast is rocky and the sand had to be fetched here. A wealth of boats, canoes, diving platforms and beyond...a low range of wooded hills.16 According to a local newspaper, 'more than 125 delegates... arrived in time for luncheon and enjoyed an afternoon of water sports'.53 Only four of the British contingent braved the water. The

Americans are described as 'perfect hosts' who 'show us much of how these things should be done'. Nonetheless, Robert is 'aghast' at it all, as 'these people seem to look upon all this as quite normal expenditure'. However, he continues, 'it must be good for the children at any rate... and one gets the feeling in looking at all classes that they get more out of life...than we do. The workmen as we went along were stopping for their midday meal...with much more attractive looking fare than we see in our country...'16

The final day...and a novel lunch

On the final morning, six educational classes were given in areas seating about 50 within the main meeting room. They covered impression taking, band technique, arch construction, radiographic technique, photographic technique, and engineering. The afternoon session began with a worrying paper given by Dr A. Ketcham which showed that although 'root absorption [resorption]...may occur when no appliances have been used...it occurs more frequently when appliances are used, and it occurs most frequently the more rigidly the appliance holds the teeth.39 This was followed by Badcock's paper on 'The place of extraction in orthodontic treatment'. Extraction was out of favour at the time in America and there was some critical discussion afterwards. The honour of the final talk went to Harold Chapman, reflecting on arguments for and against different ages at which to begin orthodontic treatment - he was generally in favour of treatment beginning as early as possible.

Robert and Wood saw nothing of this last day as they were out exploring more of New York, fitting in the Public Library ('the real attraction... is the collection of rare books and of bindings'), the Metropolitan Museum ('I never saw anything anywhere like the perfect Roman Glass'), the Woolworth Building ('we went by express lift up the tower in about one minute and the view was of course most wonderful') and finally to see a 'genuinely American show', The Vagabond King ('the dancing was at times very good but... with reference to what they wore as dress, there was a long way between this and the Pilgrim Fathers'). The major event of the day was lunch in the Metropolitan Museum café - Lindsay and Wood's first experience of a cafeteria. He described it in minute detail to Lilian: 'taking up a metal tray on which are a napkin and spoon and a knife and fork, you enter a pathway in front of a counter in which are arranged all sorts of dishes of food. I had a potato salad, brown bread and butter, cheese and biscuits and a kind of pickle, a pot of coffee and cream...at the other end of the way, a young lady glances over your tray, gives you your check, you pay and carry your food away to a table... It was a 'most interesting experience'! Saturday was taken up with a visit to the US National Lawn Tennis Championships at Forest Hills where the dental secretary 'ingested hot dog' and watched the eventual winner of the tournament, Mrs Mallory.¹⁷

The following day, they left for Philadelphia and the International Dental Congress, the last of the BDA orthodontic party to do so: 'on the whole, we are not sorry to go nor that we came. We have seen much that interested us – not a little that amused us and some things well worthy of imitating;' ¹⁷

Legacy of the Congress

William Fisher wrote in a report following the Congress: 'unless great good in the way of a stimulus for even finer and higher ideals is felt then the Congress cannot be considered to have been a complete success.⁵⁴ Lockett certainly felt that it had 'perhaps, done more to make this study of greater interest to us here in Europe than anything that had happened previously.55 Cale-Matthews declared that it had been 'an event of very considerable importance. Dogmatism has departed from the attitude of the orthodontist of the past. Every regard is given to the practice and ideas of the individual who can show a scientific reason for his treatment, and whose treatment is justified.'56 On a lighter note, they had definitely 'had a surprisingly good time, socially, intellectually and clinically.57

A mere five years later, in July 1931, London hosted a second International Orthodontic Congress, with John Badcock as its president. America, following the 1929 Wall Street Crash, was at the beginning of a Great Depression, as was Germany following a banking crisis earlier in 1931, which saw the beginnings of the rise of Nazism, and even Sweden was in turmoil following industrial action that had ended with troops firing on protesters.58 Several of those mentioned here had passed away by this time: Alfred Lockett, Herbert Wheeler and Robert himself, who had died unexpectedly on 4 November 1929 at the age of 65. Even William Fisher was too ill to attend and died shortly afterwards. Nevertheless, 421 delegates were signed up to the Congress, including a multitude of visitors from the USA.

Subsequently, due to international tensions, wars and a lack of coordination, the Congress

fell into abeyance and impetus was lost. There was not another international orthodontic gathering until 1973 and then a further 20-year gap before, in 1995, the fourth International Congress met and the World Federation of Orthodontists was formed, since when they have taken place regularly every five years, even virtually in 2020 because of the COVID-19 pandemic.⁵⁹

If this first international gathering of a dental speciality had been a disaster, then it is possible that the subsequent development of orthodontics could have been very different. However, it 'set a standard of excellence, not easy to attain, much less to surpass'. The success of the first two congresses meant that there was a definite will within the orthodontic community, as the world situation grew more stable, to revive the chance to exchange ideas with fellow orthodontists in person, and ultimately to create a body to coordinate it.

Conclusion

What John Badcock declared in 1931 is still true today: 'many questions await solution... congresses may help to provide the answers.'60 Without the vision of William Fisher, there may well have been no congresses and no opportunity for the frank exchange of ideas and research between nations at such an early stage in the life of the speciality, which can only have helped with its growth and development. For his achievement in drawing the international orthodontic community together in New York in 1926, the orthodontic world owes him a great debt.

Ethics declaration

The author declare no conflicts of interest.

Acknowledgements

My thanks are due to those who preserved Robert Lindsay's diary and letters, the menu and photograph from the Caronia and the photograph of the banquet. Also, I would like to thank Professor Chris Stephens for his help on a point of terminology.

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Correction to: BDA win on pay for dental trainees

The original article can be found online at https://doi.org/10.1038/s41415-023-6046-8

Author's correction note:

News Br Dent J 2023; 234: 854.

When this news story was originally published, the date given for backdating was 1 April 2022. The correct date for backdating is 1 April 2023. The author apologises for any inconvenience caused.