

# EMS Minutes: Volume 1: pages 15 to 26

1883-84: Second session

1883  
Nov 9.  
1st

## Second Session.

Minutes of the first meeting of the second session, held in the mathematical classroom on Nov-9<sup>th</sup> at 8 p.m. - W. Mackay president in the chair.

Professor Jait gave an address on "Listings & Topologie" in which he treated chiefly of knots, locks, links, screws and Hamilton's Scotchian game. The lecture was illustrated with numerous diagrams and models. On the motion of Mr. Muir a vote of thanks was heartily carried.

The minutes of last meeting were read and approved.

The financial statement shewing a balance in favour of the society of £3.. 2/- was read and approved.

Office bearers for the session were unanimously elected as follows:-  
President Mr. T. Muir; Vice President Mr. A. J. S. Barclay; Secretary & Treasurer Mr. A. Y. Fraser; Committee Messrs R. E. Mardice, Wm Peddie, Robt Robertson, Dav. Traill.

Meeting: 9th November 1883

Mr. Andrew King was duly elected an ordinary member.

Messrs Alex Murray and Arch. Baker Geo: Watsons College were proposed as ordinary members by Mr. A. Y. Fraser seconded by Mr. A. J. G. Barclay.

Thomas Muir

Dec 14

Minutes of meeting held in the University on Dec. 14<sup>th</sup> - Mr. Muir President in the chair.

Mr. Mackay read a paper on the mediodescribed circle of a triangle with its analogous and associated circles viewed from their centres of similitude. Professor Chrystal proposed some geometrical propositions for which he desired solutions. Mr. Muir communicated a short note on Determinants with  $p$ -termed elements. The secretary gave a construction by the Rev. G. McArthur for Euclid II 9.10. Mr. Taylor, Dollar, proposed for solution a problem in elementary Geometry.

Meeting: 14th December 1883



Messrs Alex: Murray and Arch.  
Baker, of George Watson's College were duly  
elected ordinary members.

Messrs W<sup>m</sup> Reid M.A., Robert Wish-  
art M.A., Farquhar McDonald M.A, mathe-  
matical masters in the High School of  
Glasgow\* were proposed as ordinary  
members by Mr. Muir, seconded by  
Mr. Fraser\* and Mr. Andrew Muir  
[math. master in Glasgow Academy]  
and Mr. John King was proposed by  
Mr. Allardice, seconded by Mr. Barclay.

Thomas Muir

1884

January 11  
3<sup>rd</sup>

Minutes of meeting held Jan 11<sup>th</sup> 1884.  
in the University - Mr. Muir, president,  
in the chair.

Professor Chrystal gave an address  
on "Mathematical Models chiefly of sur-  
faces of the second degree" exhibiting a large  
number of models in thread, cardboard, and  
plaster of Paris. At the close of his own paper  
Prof. Chrystal read an analytical note by

Meeting: 11th January 1884

Professor Tait.

The following were duly elected ordinary members:-

Messrs W<sup>m</sup> Reid M.A. Robert Wishart M.A.  
Farguhar McDonald M.A., High School of Glasgow,  
Andrew Muir, Glasgow Academy and  
John King Edin<sup>g</sup> - University.

The following were then proposed as ordinary members

Mr. John McWilliam M.A. } prop<sup>d</sup> by Mr Muir  
Schoolhouse Auch Aberdeen } Sec<sup>d</sup> by Mr Reid  
Mr Geo. A. Gibson M.A.

Assist<sup>nt</sup> Prof Mathematics  
Glasgow University  
Mr. Jas<sup>ms</sup> Dodds M.A. Fellow  
of Peter's Coll. Cambridge  
The University Glasgow

Mr W<sup>m</sup> Wyper C.E.

Hillhead Glasgow  
Mr. Robt. Franklin Muirhead M.A., B.Sc.  
Clark Fellow of Glasgow University.

Mr. P. Mackinlay M.A.

Established Church Framing All. Edin<sup>g</sup> } prop<sup>d</sup> by Mr. Mackay  
Sec<sup>d</sup> by Prof. Chyrtal.

A. J. G. Barclay



Feb 8

Minutes of Meeting held Feb 8<sup>th</sup> 1884  
in the University - Mr. A. J. G. Barclay, Vice-  
President, in the chair.

Mr. Muir delivered a presidential  
address on "The Promotion of Research".  
Mr. Mowbray communicated a paper  
on "Illustrations of Harmonic Section"  
read by Mr. Mackay. Mr. Muir con-  
tributed a theorem on the area of a 2N-sided  
polygon.

On the motion of the Chairman a  
vote of thanks was passed to Professor  
Tait for presenting to the members of the  
society copies of his opening address.

The following were duly elected or-  
dinary members: Messrs John McWilliam  
M.A. Jusch; Geo. A. Gibson M.A., John M. Dodds  
M.A.; W<sup>m</sup> Wyper C. E., R. Franklin Muirhead M.A.,  
B.Sc., Glasgow; and P. Mackinlay M.A. Edin.

The following were then proposed as  
ordinary members.

Mr. P. J. Anderson M.A. LL.B.	} prop <sup>d</sup> by	Mr Muir
Edinburgh College Aberdeen		

Meeting: 8th February 1884

Mr. Henry Dyer M.A., B.Sc. } Prof<sup>r</sup> by  
 Ex-principal Engineering Coll } W. Muir  
 Tokyo Japan }  
 Mr. Alex Russell M.A. } Sec<sup>y</sup> by  
 Librarian of Cairns Coll. } W. Fraser  
 Mr. John C. Watt M.A. }  
 Fellow & Lecturer of Jesus Coll. }  
 Mr. Richard Thornton M.A. } Prof. by W. Muir  
 The Academy, Glasgow } Sec. by W. Mackay  
 Mr. J. D. Holliday } Prof. by W. Muir King  
 Edinb. University } Sec. by W. Allardice  
 Mr. J. Grant Ogilvie M.A., B.Sc. } Prof. by W. Fraser  
 Gordon's Coll. Aberdeen } Sec. by W. Mackay  
 A. J. G. Barclay  
 Chairman

Mar 14  
 5th

Minutes of meeting held March 14<sup>th</sup> -  
 1884, in the University - Mr. A. J. G. Barclay, Vice-  
 president, in the Chair.

Mr. W. J. Macdonald gave an account  
 of "Pascals Essais pour les Coniques", and  
 Mr. Allardice read a paper on "Spherical  
 Geometry". Mr. Muir communicated a note,  
 held over from the January meeting, on the

Meeting 14th March 1884



"Reduction of a special contingent."

The following were duly elected ordinary members:-

Mr. P. J. Anderson M.A., LL.B.; Mr Henry Dyer M.A., B.Sc.; Mr. Alex Russell M.A.; Mr. John C. Watkin M.A.; Mr Richard Thornton M.A.; Mr J. T. Holliday and Mr F. Grant Ogilvie M.A., B.Sc.

The following were then proposed for election as ordinary members:-

Mr. R. F. Scott M.A.

Fellow & Senior Bursar of  
St. John's Coll. Camb.

Mr. R. H. Carrington M.A.

18 Carrington St Glasgow

Mr J. D. H. Dickson M.A., F.R.S. E.

Fellow & Tutor of

S<sup>t</sup> Peter's Coll. Camb.

Mr. Basil S. McCallan M.A.

Math. Master Gordon's  
College Aberdeen

Mr. T. Hugh Miller M.A. Head Math  
Master Wesley Coll Sheffield.

Mr. John G. Kerr M.A. Math. Lect.

C. N. S. Manning Coll. Glasgow

Proposed by

Mr. Meir

Seconded by

Mr Fraser

Mr. And<sup>rs</sup> Miller M.A.  
High School Dundee  
Mr. E. J. Smith M.A.  
Collegiate School Edin.  
Rev. Daniel Scrimgeour  
Ruthven, Perth  
Rev. John Gordon Macpherson M.A.,  
Ph. D., F.R.S.E., Ruthven

Proposed by  
Mr. Mackay  
Seconded by  
Mr. Barclay.

Mr. Peter Adam  
Kingussie  
Mr. Andrew Thomson M.A., B.Sc.  
Dundee

Proposed by  
Mr. Milne  
Seconded by  
Mr. Robertson

Mr. Peter Carmichael B.A.  
Leith.

Prop<sup>d</sup> by Mr. Thomson  
Sec<sup>d</sup> by Mr. Taylor.

Attention was called to the fact that the next meeting fell to be held on Good Friday. It was remitted to the committee to arrange for the meeting, on another date if necessary.

Thomas Muir



Apr. 10  
1884

Minutes of meeting held April 10<sup>th</sup> 1884  
in the University - Mr. Thomas Muir ~~presi-~~  
dent, in the chair.

D<sup>r</sup>. Macfarlane read a "note on  
Voting". Mr. A. J. G. Bowdler read a paper  
on "The teaching of Geometry"; and the  
subsequent discussion was carried on  
by the Chairman, Mr. J. S. Mackay, D<sup>r</sup>. Mac-  
farlane and Mr. A. Y. Fraser.

The following were duly elected ordinary  
members:-

Mr. R. F. Scott M.A., Mr. R. H. Pinkerton M.A.,  
Mr. J. D. H. Dickson M.A., F.R.S.E., Mr. Basil S. McHellan M.A.,  
Mr. J. Hugh Miller M.A., Mr. John G. Kerr M.A., Mr. Andrew  
Miller M.A., Mr. E. J. Smith M.A., Rev. Daniel Scrimgeour,  
Rev. J. G. Macpherson M.A. Ph.D. F.R.S.E., Mr. Peter Adam  
Mr. Geo. Thomson M.A. B.Sc., and Mr. P. Carmichael B.A. (hon)

D<sup>r</sup>. Muir

May 9  
1884

Minutes of meeting held May 9<sup>th</sup> 1884  
in the University. D<sup>r</sup>. Thomas Muir, presi-  
dent, in the chair.

Professor Crum Brown gave an acc-

Meetings: 10th April/9th May 1884

position of "The hypothesis of the Bel and van't Hoff". Dr. Meir gave a preliminary account of an overlooked treatise on Determinants, published in 1825, unknown to all writers on the history of the subject.  
A. J. G. Barclay

June 13  
8<sup>n</sup>

Minutes of meeting held June 13<sup>th</sup> 1884 in the University - Mr A. J. G. Barclay, vice-president, in the chair. ~~##~~

Mr William Peddie treated of "the representation of the physical properties of substances by means of surfaces"; and Mr David Traill read a paper on "Economy from common sense". On account of the unavoidable absence of Dr. Macfarlane, his note on a geologic calculation was held over till next meeting.

Mr. J. S. Mackay gave notice of a motion to amend rule seven so as to provide for six members of committee instead of four as at present.

D. Ferguson

A. M. Ferguson

Meeting: 13th June 1884



July 11

Minutes of meeting July 11<sup>th</sup> 1884 in the University. In the unavoidable absence of the president and vice president it was moved and carried that Dr. R. M. Ferguson take the chair.

Professor Chrystal contributed papers (1) on the application of the multiplication of matrices to the solution of a problem in spherical geometry (2) on the Discrimination of conics enveloped by the rays joining the corresponding points of projective ranges and (3) on a problem in Partition of numbers. Dr. Macfarlane briefly illustrated criticisms a not uncommon error in logical calculations. Messrs R. S. Allardice & A. J. Fraser gave solutions of a problem of arrangement - "The Tower of Hanoi". Article "On Spherical geometry" by R. S. Allardice was held as read.

On the motion of the chairman a vote of thanks was unanimously passed to Dr. Murray for his liberality.

Meeting: 11th July 1884

in presenting the members of the society with copies of his Presidential address.

It was moved by Mr. John S. Mackay seconded by Mr W. J. Macdonald and carried unanimously that for the word "four" (referring to the number of members of committee) in rule seven be substituted the word "six".

The following were proposed for election at the next meeting as ordinary members. -

James Edward M.A., B.Sc., Head Master, Collegiate School, William- bank house, Aberdeen	} Proposed by Mr. A. J. Drase Sec'd by Mr. J. S. Mackay
John Milne, Junr. - Math. Master in Ladies Collg., Queen St. Edin.	
G. N. Stewart M.A., Medicine & Tu- dent Edin. University	} Prop'd by Mr. W. P. Addison Sec'd by Mr. J. S. Mackay
Jas. Walker Edin. University	
G. P. Leeson Conyngham Royal Military Academy, Woolwich	} Prop'd by Mr. J. S. Mackay Sec'd by Mr. A. J. Drase
T. E. Sandeman 35 Great King St. Edin.	

D. Muir

D. Muir

X