

# EMS Minutes: Volume 1: pages 135 to 143

## 1896-97: Fifteenth session

### Fifteenth session, 1896-97.

20-XI-96. Minutes of meeting held on Friday, 20<sup>th</sup> November, 1896 in the Edinburgh Institution - Dr Peddie, President in the Chair.

The following papers were read:

- 1 On the Foundations of Dynamics, by Dr. Peddie;
- 2 Note on a Theorem in connection with the Hessians of a Binary Quantic, by Mr Chas. Tweedie;
- 3 Extension of Euclid's II.11 by Mr R. E. Anderson, (communicated by Mr G. Guthrie)

The Treasurer submitted his Annual Financial Statement which showed a deficit of £5.17.1.

Mr W<sup>m</sup> Mackay was elected an ordinary member.

The following were elected Office-Bearers for the session:

President: Rev. John Wilson, M.A., F.R.S.E.

Vice-President: Mr J. B. Clark, M.A., F.R.S.E.

Hon. Secretary: Mr J. W. Butters, M.A., B.Sc., F.R.S.E.

Hon. Treasurer: Mr Chas. Tweedie, M.A., B.Sc.

Editors of Proceedings: Mr W. J. Macdonald, M.A., F.R.S.E.

(Convener), Professor Knott, D.Sc., F.R.S.E. &

Mr Chas. Tweedie, M.A., B.Sc.

Committee: Messrs G. Guthrie, M.A., A. G. Wallace, M.A.

& A. Morgan, M.A., B.Sc., F.R.S.E.

Meeting: 20th November 1896

For election at next Meeting:

- 1 Mr J. A. Shird, M.A.  
Spiers School, Beith
- 2 Mr S. A. Davies  
14 Thirlestane Road
- 3 Mr J. B. Simpson Stoney  
Queen's Service College  
7 Meadow Pl. Edin<sup>r</sup>
- 4 Mr A. S. Pringle  
Trinity College, Cambridge
- 5 Mr A. B. Pond, M.A.  
Fellow, Pembroke College, Cambridge  
were proposed by Mr D. White  
& seconded by Dr. Mackay;
- 6 Mr Chas. S. Songall  
Whitehill School, Glasgow
- 7 Mr D. J. Tweedie, M.A.  
Heriots Hospital, Edin<sup>r</sup>  
were proposed by Mr Jas. Tweedie  
& seconded by Mr Alison;
- 8 Mr Wm A. Lindsay, M.A.  
University of Glasgow
- 9 Mr Horatio S. Carclaw, B.A.  
University of Glasgow.

were proposed by Prof. Gibson  
& seconded by Mr J. B. Clark;

10 Mr W. L. Thomson, M.A.

Kilmarnock Academy  
was proposed by Mr Clark  
& seconded by Mr J. W. Butters.

J. B. Clark.

1-1-97. Minutes of Meeting held on Friday, 8<sup>th</sup> January 1897  
in the Edinburgh Institution - Mr J. B. Clark,  
Vice-President in the Chair.

The Chairman referred to the great loss the  
Society had sustained through the death of its  
President, the Rev. John Wilson, & the Secretary was  
instructed to convey to his relatives the deep  
sympathy of the members of the Society.

The following papers were read:-

1. Theorems on Normals of an ellipse, by Prof. A. H. Inglis  
(Communicated by Mr Chas. Tweedie)
2. On the Geometrical Investigation of the Circular  
Functions of  $3\theta$  &  $5\theta$ , by Prof. A. H. Inglis  
(Communicated by Mr John B. Clark)
3. A General Theorem on the Nine-Point Circle, by  
Mr. V. Ramaswami Aiyar

Meeting: 8th January 1897

(Communicated by Mr W. J. Macdonald)

4 On the Geometrical Representation of Elliptic Integrals of the First Kind, by Mr Alex. Hoggan on the Motion of Mr Alison, seconded by Mr Turner, Mr Sprague was unanimously elected President for the remainder of the current Session.

The following gentlemen were elected ordinary members of the Society:-

Messrs. J. A. Third, G. A. Davies, J. B. Simson  
Storray, A. S. Pringle, A. Brand, Chas. S.  
Longall, D. J. Tweedie, Wm. A. Lindsay, Horatio  
S. Carlaw, and W. K. Thomson.

For election at next meeting:

1 Mr David H. Henderson

Vice-Principal, Kimberley Boys' School  
was proposed by Mr J. Alison  
& seconded by Mr D. Tweedie;

2 Mr A. Ritchie Scott, B.Sc.

The Academy, Alloa

3 Mr Alex. D. Russell, M.A., B.Sc.

High School, Stranraer  
were proposed by Mr J. B. Clark  
& seconded by Mr J. W. Butters

4 Mr E. P. Barrett, B.A.

Magdalen College, Cambridge  
was proposed by Mr Greenstreet  
& seconded by Mr D. Tweedie

5 Mr S. H. Bowman

Royal Military Academy, Woolwich  
was proposed by Mr A. J. Pressland  
& seconded by Mr J. W. Butters

6 Mr George Lawson, M.A.

Assistant to the Professor of Mathematics  
St. Andrews

was proposed by Prof. Scott Lang  
& seconded by Mr D. Tweedie

7 Mr Jas. Rennie, B.Sc.

Gordon's College, Aberdeen  
was proposed by Mr. A. Wallace  
& seconded by Mr. Alex. Morgan

8 Mr Wm Edward Philip

Glasgow University  
was proposed by Prof. Gibson  
& seconded by Dr. Mackay.

*J. B. Sprague*

12-2-97. Minutes of meeting held on Friday, 12<sup>th</sup> February 1897 in the Edinburgh Institution, Dr Sprague President in the Chair.

The following papers were read:-

1. On the Geometrical Representation of Elliptic Integrals of the First Kind (Part II.) by Mr A. Morgan
2. Steady Motion of a Spherical Vortex by Mr Horatio S. Carslaw (Communicated by R. F. Gibson)
3. Elementary Proof of the Collinearity of the Mid-points of the Diagonals of a complete Quadrilateral by Mr John Sangall.

The following gentlemen were elected ordinary members of the Society:

Messrs. David H. Henderson, A. Ritchie Scott.

Alex<sup>r</sup>. D. Russell, E. P. Burnett, S. H. Cowan,

George Lawson, Jas. Renne, & W<sup>m</sup> Edward Philip.

For election at next meeting

1. Mr John I. Pearce

Lochend Road School, Leith

2. Mr John W. White

Lorne St School, Leith

were proposed by Mr John B. Clark & seconded by Mr J. W. Butters

3. Mr Edward Smart, B.A., B.Sc.

Meeting: 12th February 1897

Sharp's Institution, Perth  
was proposed by Mr J. W. Butters  
& seconded by Mr David Tweedie.

John B. Clark

12-III-97 Minutes of meeting held on Friday, 12<sup>th</sup> March 1897  
in the Edinburgh Institution, Mr J. B. Clark - Vice-  
President in the Chair.

The following papers were read:

1. Note on Combinations by Mr J. B. Clark (Dr Knott  
in the Chair)
  2. Note on Maxima & Minima by Mr J. Alison
  3. An Application of Sturm's Functions by Mr J. S.  
Höppner (Communicated by Dr Knott)
  4. A Geometrical Proof of certain Trigonometrical  
Formulae by Mr J. W. Butters & E. Smart
- Messrs John T. Pearce, & John W. White, were elected  
ordinary members of the Society.

J. B. Clark

Meeting: 12th March 1897

7 - IV - 97.

Minutes of Meeting held on Wednesday, 7<sup>th</sup> April  
in the Edinburgh Institution - Dr Sprague,  
President in the Chair.

The following papers were read:

1. Certain expansions of  $x^n$  in Hypergeometric Series by the Rev. F. H. Jackson (Communicated by Mr Butters.)
  2. The G. discriminant as an envelope by Mr. Jas. A. Macdonald.
  3. The factorisation of  $1 - 2x^n \cos \alpha + x^{2n}$  by Prof. John Fock (Communicated by Mr Alex. Morgan)
- For election at next meeting

Miss J. G. Macmillan, B. Sc. 109, Torphins Hill House  
was proposed by Dr. Peddie  
& seconded by Mr Jas. A. Macdonald.

George A. Gibson

14 - V - 97

Minutes of Meeting held on Friday, 14<sup>th</sup> May  
in the Edinburgh Institution - Prof. G. A. Gibson  
in the Chair.

The following papers were read:

1. The Bessel Functions & their Zeros by Dr Peddie
2. A Geometrical Theorem, with application

Meeting: 7th April/14th May 1897



to the Proof of the Collinearity of the Mid-Points of the diagonals of a Complete Quadrilateral by Mr. R. F. Munthead (Communicated by Mr J. W. Cutters.)

3. A Geometrical Note by Mr A. Tucker (Communicated by Mr Mackay.)

Miss J. C. Macmillan was elected an ordinary member.

J. B. Clark

11-11-97 Minutes of Meeting held on Friday, 11<sup>th</sup> June in the Edinburgh Institution, Mr J. B. Clark, Vice-President in the Chair.

The following papers were read:

1. On Superposition by the aid of dissection, and  
2. On a method of studying displacement  
by Mr R. F. Munthead.

3. The Isogonic Centres of a Triangle by Mr Mackay  
On the motion of the Chairman a hearty vote of thanks was given to Mr Ferguson for the use of his rooms for the meetings of the Society.

J. B. Clark

Meeting: 11th June 1897