1900-01: Nineteenth session

Nineteenth Session —
1900 – 1901.

9·11·1900. Minutes of meeting held on Friday, 9th November, 1900 in the Edinburgh Institution — Mr. R. F. Muirhead in the Chair.

The following papers were read :-

1. Euclidean Proof of Pascal's Theorem, by Mr. R. F. Davis — communicated by Dr. Mackay.

2. Note on the expression for the area of a triangle in Cartesian Co-ordinates, and a general proof of the addition Theorem in Trigonometry connected therewith, by Mr. Chas. Tweedie.

3. A Proof of the Theorem: "If by any change of axes $ax^2 + 2hxy + by^2$ be changed into $a'x'^2 + 2h'x'y' + b'y'^2$, then will

$$\frac{a + b - 2h\cos\omega}{\sin^2\omega} = \frac{a' + b' - 2h'\cos\omega'}{\sin^2\omega'}$$

and
$$\frac{ab - h^2}{\sin^2\omega} = \frac{a'b' - h'^2}{\sin^2\omega'},$$

where ω and ω' are the angles of inclination of the two sets of axes", by Prof. Sack, Bombay.

Meeting: 9th November 1900

The following were elected officebearers for the current session.

President... J. W. Butters, M.A., B.Sc., F.R.S.E.

Vice-President... George Duthie, M.A., B.A, F.R.S.E.

Hon. Secretary... D. C. McIntosh, M.A.

Hon. Treasurer. Jas. Archibald, M.A.

Editors of Proceedings: Wm A. Lindsay, M.A. (Convener) and Chas. Tweedie, M.A., B.Sc., F.R.S.E.

Committee... R. F. Muirhead, M.A., B.Sc.
J. A. Third, M.A., D.Sc.
Jas. Goodwillie, M.A., B.Sc.
W. L. Thomson, M.A.

For election at next meeting

1. Joaquin de Mendizábal y Tamborrel,
    Palma, 8, Mexico,
was proposed as a 'Life Member' by Mr Butters, and seconded by Mr Alison.

2. Mr Alex. G. Burgess, M.A.,
    Edinburgh Ladies' College, was proposed by M^r McIntosh, and seconded by Mr Duthie.

3. Mr D. M. Johnstone, M.A., B.Sc.,
    Science Master, Spier's School, Beith,
was proposed by Dr Third, and seconded by Mr Butters.

Mr. Archibald submitted the Treasurer's report for Session 1899-1900, which showed a balance in favour of the Society of £9 "16" 2. After some talk about the amount of the Printer's account [£52,] and as to the advisability of forming a separate fund of the Life-Membership Subscriptions, the accounts were unanimously adopted, and Mr. Archibald thanked for his services.

Mr. George Duthie intimated a Donation of £1"5 to the Funds of the Society.

J. W. Butters

14.12.1900. Minutes of Meeting held on Friday 14th December in the Edinburgh Institution, Mr. J. W. Butters, President, in the Chair.

The Chairman, after thanking the members for electing him President of the Society, made a sympathetic reference to the death of Dr. McCowan who was President of the Society during Session 1894-95.

Mr. Duthie communicated to the meeting a paper by Professor Alladice on

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"Four circles touching a common circle", and Dr Third thereafter gave the main points of a most elaborate paper on "Triangles triply in perspective".

Mr Joaquin de Mendizábal y Tamborrel, was elected a Life Member of the Society, and Mr Alex. G. Burgess, and Mr D. M. Johnstone were duly elected Ordinary Members.

For election at next meeting Mr J. Edwards, M.A., Academy, Ardrossan, was proposed by Mr Butters, and seconded by Mr McIntosh.

John W. Butters.

11.1.1901. Minutes of meeting held on Friday, 11th January, in the Edinburgh Institution — Mr George Duthie, Vice-President in the Chair.

The following papers were read:-

1 On "The Nine-Point Conic" by Professor Allardice.

2. "Tangents to a conic, or to confocal conics, at right angles meet on a circle, by Prof. John Dack — and communicated by Mr McIntosh.

3. "There can be no relation of the form $a_0 + a_1 p^{\frac{1}{n}} + \ldots + a_{n-1} p^{\frac{n-1}{n}} = 0$ where p is the product of fact or prime to each other" by Mr De B. Main, communicated by Mr Tweedie.

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Professor Steggall intimated that the late Dr McCravan's Mathematical Papers had been handed over to him for examination with a view to their ultimate publication. After some discussion it was agreed to ask Prof. Steggall to consult with Professor Gibson, and the Society expressed the wish that some of Dr McCravan's papers might first of all find their way into its _Proceedings_.

Mr J. Edward, M.A, was duly elected an Ordinary Member of the Society.

For election at next meeting, Mr J. Angus McDonald, M.A., B.Sc., Science Master, George Watson's Ladies' College, was proposed by Mr McIntosh (for Mr A. D. Russell), and seconded by Mr Archibald.

Mr Duthie gave notice of a motion as to the sum to be drawn annually from Life-Membership Subscriptions, and Mr McIntosh gave notice of a motion as to the amount of Life - Membership Subscription.

Jbo. B.

8.2.1901. Minutes of Meeting held on Friday, 8th February, in the Edinburgh Institution, Mr J. W. Butters, President, in the Chair.

The following papers were read:—

1. Note on the cooling of a sphere in a finite mass of well stirred liquid, by Dr Peddie, &

2. Some inequalities relating to Algebraic Means, by Mr R. F. Muirhead.

Mr Duthie proposed "That Life-Membership Subscriptions be drawn on at the rate of 7/6 per annum". This was seconded by Mr Muirhead, and became the finding of the meeting.

Mr McIntosh's motion as to Increasing the amount of Life-Membership Subscriptions was, on the motion of Mr Alison, seconded by Mr Clark, remitted to the Committee for consideration.

Mr McDonald, George Watson's Ladies' College was elected an Ordinary member of the Society, and for election at next meeting,

Mr Frank Pearson
George Watson's College, Edinburgh
was proposed by Mr Alison, and

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seconded by Mr. Clark, while
Professor Robt. J. Aley
Indiana University
Bloomington, Indiana. U.S.A.
was proposed by Mr. Goodwillie and
seconded by Dr. Morgan.

R.F. Muirhead.

8.3.1901. Minutes of Meeting held on Friday, 8th March, in the
Edinburgh Institution, Mr. R. F. Muirhead, Exe-President,
in the Chair.
The following papers were read:-
1. 'Some elementary Theorems regarding Surds' by
Professor Chrystal — Communicated by Mr. Tweedie.
2. 'Note on the application of complex integration to
the equation of conduction of heat, with special reference
to Dr. Peddie's Problem' (discussed at last meeting)
by Mr. John Dougall.
Prof. Aley, Indiana University, Bloomington, U.S.A.
and Mr. Frank Pearson, George Watson's College, Edin?
were duly elected ordinary members of the Society.

29.3.1901   A special meeting of the Local members took
place on the evening of the last Friday in March
in the Royal Observatory, Blackford Hill, when

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through the courtesy of Professor Copeland, Astronomer-Royal for Scotland, members were afforded an opportunity of examining the Instruments in the Observatory. The Professor kindly conducted the party himself, and a most interesting evening was spent.

J. W. Butters

10.5.1901. Minutes of meeting held on Friday, 10th May, in the United Free Church Training College, Glasgow, Mr J. W. Butters, President, in the Chair.
The following papers were read:-
1st. The General Equation of a Geodesic on a Surface of Revolution applied to the sphere, by Prof. Crawford, communicated by Dr. Carslaw.
2nd. On a cubic curve connected with the triangle, by Prof. Allardice, communicated by Mr. Tweedie.
3rd. On the focal relations of a bicircular quartic, by Mr. R. F. Davis, communicated by Professor Gibson.
Thereafter Dr. Carslaw contributed a short note on the summation of a certain series.
There were thirteen members present.
On the motion of Mr. Alison, seconded by

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Mr. Archibald, Mr. William Anderson, M.A., Science Master, Bruntsfield School, Edinburgh was proposed as an ordinary member of the Society.

John W. Butters

14. 6. 1901. Minutes of meeting held on Friday, 14th June, in the Edinburgh Institution — Mr. J. W. Butters, President, in the Chair.

Professor Gibson contributed a note on "an extension of Abel's Theorem on the Continuity of a Power Series; and Dr. Carslaw communicated a paper on "The Diffraction of Plane Waves incident obliquely on a semi-infinite Plane" by Dr. Carslaw.

Mr. Wm. Anderson, M.A, Science Master, Bruntsfield School, Edinburgh, was elected an Ordinary Member, and for election at next meeting Mr. John H. McAlpine, Viewfield, Kilmalcolm was proposed by Mr. Muirhead, and seconded by Professor Gibson.

On the motion of the President, a vote of thanks to Messrs McNaughton and Turner for the continued use of the rooms in the Edinburgh Institution was cordially passed. John W. Butters.

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