

The 6th Annual Meeting

of the Astronomical & Physical Society, held Jan 17th in the Technical School Building Toronto.

The Vice-President Mr John A Paterson M.A. occupied the chair.

The minutes of the previous meeting were read and confirmed.

A note was read from Mr D. J. Hewell requesting the withdrawal of his name from the list of the gentlemen nominated as members of council.

Mr J Philips also desired, to withdraw from the nomination for council.

Mr G. G. Pusey desired to withdraw from nomination for the office of Librarian.

The election of officers for 1896 resulted as follows:—

Hon. President	Hon G. W. Ross LL.D
President	John A Paterson M.A.
Vice Presidents	Arthur Hawley F.R.S.C.
	R. J. Steuart, Director Toronto Observatory
Corresponding Secretary	G. E. Humason
Recording Secretary	Chas P Spaulding

Treasurer J. Todhunter
 Ass't Secy & Editor J. H. Lindsay
 Librarian W. S. Masson

Members of Council
 C. A. Chant D.A.
 J. R. Collins
 A. Dehury
 G. G. Pursey
 Rev. C. A. Short M.A.

Mr. Paterson addressed the Society briefly on the subject of its general interests and thanked the members for the confidence they had placed in him by electing him to the office of President. He would do his utmost for the general good being assured that he would have the hearty co-operation of the members.

The recording secretary read the Treasurer's report, Mr. Todhunter being unavoidably absent.

The report showed the assets of the Society to be

Cash in Bank	351.59
Estimated value of library and instruments	1146.17
	<hr/>
	1497.76

No outstanding liabilities.

The Astronomical and Physical Society
 of Toronto
 Treasurer's Report for Year ending 31 Dec 1895

Cash Statement

1895
 Nov-2

Receipts

Balance on hand	217 88	
Fees collected	107 50	
Interest & Sales	7 92	
Grants & donations	455 00	\$788 30

Disbursement

Publication exp.	244 82	
Expenses exp.	120 72	
Purchase & donation to library	71 17	
Cash on hand	351 59	\$788 30

Assets

Cash in Bank		
Telescope, Globe, Book Cases	351 59	
Library & in valuation	1146 17	\$1497 76

THE ASTRONOMICAL & PHYSICAL SOCIETY
 OF TORONTO,

James Toddler
 TREAS.

Mr J. Lindsay moved the adoption of the report. He stated that while there were no liabilities recorded, there would, early in the year be an account ^{due} for printing the Transactions and called attention to the fact that the amount received for membership fees had been less in 1895 than in the previous year.

The treasurer had hoped to ~~have been able to~~ meet all incidental expenses without drawing upon the government grant, which indeed the Society could not look forward to further than one year. The grant ~~was~~ it was always hoped, could be kept ~~unimpaired~~ intact, for the payment of the publication account for the year. In 1895 it had been necessary to draw upon it for about 50 dollars which amount about represented the outstanding membership fees, which however it was fully expected would be duly received.

The treasurer's report was then adopted.

The committee appointed to convey to the retiring President and Vice President the Society's appreciation of their services reported as follows:

Moved by Mr. [unclear]
Secunded by [unclear]

That we the Officers and Members of
the Astronomical and Physical Society
of Toronto hereby tender our thanks
to our retiring President
Larratt W. Smith D.C.L., L.C.
who has for the past two years
so capably filled the Chair. We
owe to him a debt of gratitude
not only for the uniform interest
he has exhibited in our pursuits
but moreover a special need
of praise for the munificence
of his gift to our Library - thus
giving palpable proof of our
earnest devotion to the cause
of Science and our earnest
desire for the advancement of
our knowledge therein - It has
been our loss that the infirmities
of years have prevented him
from more frequently discharging
his duties amongst us as
our Presiding Officer - We
however confidently expect to
retain the benefit of Dr. Smith's
counsel in the direction of our
affairs - And it is our hope
that He that doeth all things
well will so tenderly guide
our retiring President that his
life will yet grow richer in
happy years and brighter yet
as it moves onward from the
mere discoveries of human
experience to that revelation of

desire good that comes every useful life
may it be long ere with him it grows late and slow dark -

Moved by Chas. R. Goodwin
Seconded by A. Elvins -

That we the Officers & members
of the Astronomical & Physical
Society of Toronto hereby offer
our thanks to our retiring Vice
President E. A. Meredith LL.D.
for the uniform and kindly interest
he has always ^{exhibited} to us in our
meetings and pursuits. It has
been most gratifying to us all
to have enjoyed the instruction of
nearly amongst our officers the
name of Dr. Meredith. Although
he retires from our list as
Vice President we yet confidently
trust to retain the benefit of his
counsel in the direction of our
affairs - If a man will but
keep his light shining the
Almighty will put it where it can
be seen. We earnestly hope
that our retiring Vice President
full of years and rich in life's
experience ~~and scholarship~~
and of mature scholarship
as he is will be helped to
keep his light shining and we
know that it will be seen ever
lustreous and clear for the good
and the right and the true!

Mr. Lumsden seconded by Mr. Lumsden

That Section 1 of Article III
of the Constitution be amended by
adding the following words after the
word "Officers" in line 4 -
viz "and every ex-President and
ex-Vice-President"

Carried

It was then moved by
 M Lindsay seconded by
 M A Elvins that the Society
 place on record its appreciation
 of the services of M G G Pursey the
 retiring librarian, and one
 who had been among the first
 in Toronto to take active steps
 towards the founding of the
 Astronomical Society, and one who
 had been always interested in
 scientific pursuits.

This was carried unanimously

It was then moved by M G E.
 Lawden, seconded by M Lindsay
 and resolved -

That Section I of
 Article III of the Constitution be
 amended by adding the
 following words after the word
 officers in the 4th line, viz: "and
 every ex-President and ex-
 Vice-President".

This was carried
 The effect of this amendment was

Mr G. E. Lunden gave notice that he would move at the next meeting that steps be immediately taken towards establishing a popular observatory.

Mr J. R. Collins then presented a paper on "Theories of Gravitation" illustrated by diagrams and experiments. The latter were entirely successful and afforded much instruction.

A short discussion followed but the hour being late it was decided to postpone discussion at length to a future meeting.

The meeting then adjourned to meet Jan 21st when the President would address the society in view of 1895, scientifically considered.

John A. Tatum
 Chas. Spading
 Rec. Secy

The first regular meeting of the astronomical & Physical Society, for 1896, held in the Electrical Room of the Technical School, Jan 21st

The President Mr John A Peterson M.A. occupied the chair.

The minutes of the previous meeting were read and confirmed

The corresponding secretary announced the receipt of a mourning card from Paris bearing news of the death of Monsieur Trouvelot

From Dr Sanford Fleming were received some press clippings ~~at~~ conveying the information that the American Society of Civil Engineers were in favour of petitioning the United States Government to put the resolutions of the Washington Conference into effect at once

of 1884

Letters were read from :-

Mr Nelson Greenwood of Lancaster Eng,
the Principal of Woodstock College,

Dr Donaldson of Texas

Dr Woodworth of Simcoe

The Secretary of the N.Y. Academy of Sciences

The President then read the annual address, Mr Arthur Harvey vice-president, occupying the chair.

The address contained an exhaustive review of the progress of astronomy in 1895, which was most enthusiastically received.

At the conclusion of the President's address Mr M Turnbull seconded by Mr J Lindsay moved, ^{that} the thanks of the Society ~~be~~ be tendered to the President for the very great pleasure derived from the review. This was unanimously carried.

The ~~honourable~~ vice-president on presenting the thanks of the meeting to the President added his own acknowledgments.

The meeting then adjourned till Friday 4th.

Johy A. L. Lister
Pres^d

Chas R Sparling
Secy.

Erratum.

The librarian presented a report of exchanges received and called attention to the fact that some volumes had been out of the library for some time and were still unreported. A list of these was laid on the table and it was requested that any member having the unreported volumes would notify the librarian or return the same.

2

(20 P)

The Regular Meeting of the
Astronomical & Physical
Society held Feb'y 4th 1896 in
the Board Room of the Technical School.

The President, Mr John A Paterson
M.A. occupied the chair.

The minutes of the previous meeting
were read and confirmed.

Miss L. Hill and Miss B. M. Shoults
of Toronto were elected active
members.

Miss Alice Baxter of 20 Metcalfe St
Toronto was nominated for
active membership by Miss
Gray and Miss Campbell.

A letter was read from Prof.
Pickering of Harvard College Observatory
concerning the transmission of a parcel
of books.

An item of unfinished business in
the matter of a notice of motion by
Mr. Hunsden was taken up. Mr. Huns-
den stated that he had been asked to
prepare a paper for the Canadian
Institute and had decided to
present such facts as he had collected
in regard to the construction and
maintenance of popular observatories.

Several members reported having observed a very beautiful lunar halo on the morning of Jan 31st

Mr John A Copland forwarded a pen and ink sketch and a detailed description of the phenomenon.

Mr Arthur Harvey described a halo seen on the evening of Jan 28 at 6 pm. and remarked that the shape was decidedly oval.

Mr G. H. Robinson presented a sketch of the sun's disc made at a small telescope on Feb 2nd

Mr Harvey then read some notes on the new photography as made possible by the discoveries of Prof Röntgen of Würzburg; an interesting discussion followed in which several members took part.

Mr Elliot on the subject of light referred to the phenomenon caused by pushing the eye ball with the finger and remarked that the light flashes so seen were something entirely different from the light from a luminous object and transmitted by wave motion.

Mr Lindsay, referring to the explanations given of optical phenomena, stated that there had been a discussion for some time carried on in the columns of "Science" regarding the ~~inverted~~ inverted image on the retina and quoted the opinion of the majority namely, that erect vision is the

result of habit.

The discussion being continued to a late hour a paper contributed by Mr J Halliwell was postponed until the next meeting

The meeting then adjourned

John A. Gator
Pres^d

Chas. Spaulding
Recd^t

L.

The regular meeting of the
Astronomical & Physical
Society of Toronto held in
the Technical School Bldg.
July 18 1896.

The President Mr John A Paterson M.A.
occupied the chair.

The minutes of the previous
meeting were read and confirmed.

Communications were read from
Dr Tharnt W Smith J.C. and
from Dr E.A. Meredith ~~and~~ ^{acknowledging}
~~the resolutions~~, thanking the Society members
for the resolutions passed at the
annual meeting of the Society on the
occasion of their retirement from
active duties as officers of the Society.

A letter was read from the Superintendent
of the Greenwich Nautical Almanac,
concerning the transmission of copies
of the Almanac for 1896-7-8-9.

From Dr J.J. Wassworth of Simcoe
a note on the occultation of Regulus
was received. The particulars for
Simcoe had been calculated by
the Doctor who hoped that Toronto
observers would endeavour to
note the phenomenon.

Miss Alice Baxter was duly elected
an active member of the Society.

7.0.26
7.4.06

THE LIBRARY.

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To the President of The Astronomical and Physical Society of Toront

Your Committee, appointed to revise the Rules regulating the Library of the Society, begs leave to make the following Report:--

Your Committee has much pleasure in congratulating the Society upon the possession of a really large collection of astronomical and physical works, all of which are useful, most of which are of a high standard of excellence and some of which, in addition to being very valuable, are rare and could only be replaced with difficulty, if at all. The collection is doubtless the best of its kind in Canada and may not have many superiors on this continent. It is, therefore, well worthy of the best attention and care of the members of the Society who should be encouraged to make a full and free use of the volumes, pamphlets and periodicals of which it is composed.

Your Committee finds that a considerable portion of the Library consists of timely donations of well-chosen books presented by Mr. Andrew Elvins, Mr. John Goldie, Dr. Larratt W. Smith and other members who have thus set a laudable example which your Committee cannot too highly commend, but which, in the opinion of your Committee, is much more likely to be followed if intending donors have the assurance that books and apparatus given to the Society will be safe-guarded by the adoption and enforcement of Rules framed for the purpose. At first your Committee was loath to suggest any regulations which might appear to be harsh and unduly
rigorous.

rigorous, but reflection has convinced your Committee that in the case of a lending library, as in all other matters where trusts are imposed upon officers and where obligations are entered into, the responsibility attaching to all parties must be well defined. Your Committee would, therefore, respectfully recommend the adoption of the following Rules :--

- mended:*
to Librarian &
the Librarian
- (1) The privileges of this Library are restricted to members of this Society.
 - (2) No member is entitled to more than ^{two}~~one~~ book at a time.
 - (3) Subject to renewal, in the discretion of the Librarian, for like periods, no book shall be retained for a period longer than two weeks.
 - (4) No book shall be taken from the Library unless and until the Librarian shall have received an application for it upon a Form to be provided for the purpose, and has consented to its issue.
 - (5) A member shall be responsible for and, on the written demand of the Librarian, shall make good any injury to or loss of a book while in the possession of the member.

As the Constitution commits to the custody of the Librarian all the books, publications and apparatus of the Society, your Committee would recommend that the Librarian be authorized and required to keep a Stock Book in which, with other particulars, shall be entered the name, or title of every book, piece of apparatus, lantern-slide, or other possession of the Society and that Rules 1, 4 and 5 be made to apply to every such piece of apparatus, lantern-slide or other possession of the Society subject, however, to such modification under special circumstances as the Society itself

shall

3.

shall approve of. In order that each member may know the conditions upon which books et cetera are loaned, your Committee would further recommend that the above rules be printed in the form of a label to be pasted in each volume belonging to the Society.

Considerable as the Library of the Society already is, it is daily becoming larger and more valuable. In the not distant future, it may rank among the best collections of the kind on the continent. This fact has induced your Committee to take a somewhat serious view of the subject committed to it for consideration and has exerted some influence in deciding upon the recommendations made, your Committee being of the opinion that now is the time to lay the foundations of such a scientific library and collection of apparatus ~~as~~ shall redound to the credit of the Society in long years to come.

Your Committee feels confident that the Society is fully alive to the arduous and even exacting nature of the duty it has ~~been~~ imposed on the Librarian and that each member, by a conscientious observation of the Rules approved, whatever they are, will do all that can be done to render the performance of that duty as little arduous and as little exacting as possible.

All of which is respectfully submitted.

G. G. Pursey

Chairman.

The committee appointed to draw up rules regarding the Society's library presented a report embodying certain regulations. After some discussion these were adopted with one amendment namely, that the Librarian might extend the time for retention of a book by a member, and might extend the privileges of the library to others than members, ~~where~~ ^{should} circumstances ~~occurred~~ ^{would} render advisable such extension of the regulations.

The Librarian presented the books and exchanges which had been received since the last meeting.

On motion of Mr. Hildray seconded by Mr. Harvey the President was given permission to make use of the lantern slides for the purpose of illustrating a lecture to be delivered March 13 at the College Institute, Chatham.

Permission was also given to the Librarian to forward a copy of the Royal Society Proceedings for 1892 to Mr. A. G. Ramsay of Hamilton.

Mr. G. G. Pursey reported his observations of the sun's disc and described the appearance of some noticeable groups of spots.

Mr Elvins described the method which had been found successful in photographing the solar corona.

Mr Harvey read some notes from the Journal of the French Academy of Sciences relating to the new photography. It was reported that Monsieur Le Bon had succeeded in photographing through an iron plate with a common oil lamp, without a lens, the sensitive plate being shielded in a particular manner.

Mr Hallin stated that he had endeavored to experiment with a magnet and a photographic plate in order to determine whether the latter would be affected by the radiation from the magnet, but without success.

Mr Ca. Chant described the progress of the experimentation carried on at the Lombr University with the X rays. Some of the members were desirous of seeing the experiments conducted and Mr Chant kindly consented to bring to the next meeting the necessary apparatus, and exhibit give a practical illustration of the new photography.

The paper contributed by Mr J. Hollingworth

Toronto
Rosedale

23 January/96

Charles P. Spaulding Esq
Rev. Secy -
Asst. Secy

Dear Sir

I received yesterday the copy
of the Resolution, forwarded by you,
passed by the Astronomical and
Physical Society of Toronto, on the
7th inst. in reference to my retirement
from the Office of Vice President of
the Society.

The adoption of such a Resolution
by the Society was both a surprise
and pleasure to me. I certainly
did not anticipate the passing
of any resolution of the kind
on the occasion of my retirement;
While the kindly and more
than

Complimentary terms in which
the Resolution is couched will
be for me a source of constant
and sincere gratification.

Believe me,

Very truly yours,

D. A. Mendelssohn.

Toronto, 23 January, 1896.

Chas. P. Sparling, Esq.,
Recording Secretary,
Astronomical and Physical Society,
Toronto.

Dear Sir:-

I am in receipt of your communication of the 21st inst., enclosing a copy of a Resolution, passed at the General Meeting of The Astronomical and Physical Society, held on the 7th inst., and have to request, that you will convey to the officers and members of the Society, my heartfelt thanks, for their too flattering expression of appreciation of my services to the Society, whilst filling the Presidential Chair.

It has been a matter of deep regret to me, that failing strength and advancing years should have obliged me to withdraw from that active participation in the work of the Society, which has always afforded so much pleasure to me; at the same time, it is very gratifying to me to realize that you will have, in my successor, an old and valued friend of mine--one who, from his varied acquirements, and great ability, is so thoroughly competent to fill the honorable position in which you have placed him.


I shall ever take a warm interest in the progress and prosperity of the Society, and shall do what I can to promote its interests.

For the very kind wishes of the officers and members,

for my future welfare, so feelingly expressed, I shall always
pray for them, as for myself, to the Giver of all good, for
'Light at evening time.'

Believe me,

Yours very faithfully,

Laura W. Smith


on the meteorology of Muskoka district was received and read and ordered to be ~~present~~ published in the Society's reports.

The meeting then adjourned till March 3rd at 20 o'clock

Arthur Hamney }
Chairman }

Thursday
for the Res. Society.

The Regular Meeting
of the Astronomical and
Physical Society held
Mar 13th 1896 in the Electrical
Room of the Technical School

The Vice President Mr Arthur
Harvey occupied the chair

The minutes of the previous
meeting were read and
confirmed.

The minutes of the council
meeting held Feb 25th were
read and approved.

Rev M Hamilton of Toronto
was duly elected an
active member of the
Society.

Communications were read
from Rev D J Caswell of Meaford
and from Mr G. F. Hull B.A. Chicopee.

The librarian reported the receipt
of several volumes from Harvard
Observatory and other exchanges.

Mr Lindsay reported that the
volume of Transactions for 1895,
was now ready for distribution.

Meeting of Council Feby 25th 1896

Members present - Messrs. Paterson, Stupart, Todhunter
Musson, Elvins, Harvey, Sparling, and Robt. H. Shortt.

The President, in the Chair. Chas. Sparling Secy.

A letter was received from D. E. Meredith, stating
his inability to be present.

On motion of Messrs. Todhunter and Harvey it was
unanimously decided to insure the property of the
Society for the sum of seven hundred and fifty dollars
viz. Telescope \$100⁰⁰, Globe \$50⁰⁰, Books \$500⁰⁰, Lantern
& Slides \$50⁰⁰, Furniture & Pictures \$50⁰⁰

On motion of Messrs. Todhunter and Sparling it
was resolved that a new lock be placed on the Library
door and that keys be supplied to the Officers
also that the room be furnished with suitable Office
table, chairs and Stationery - Carried.

Moved by Mr. Musson and seconded by Mr. Harvey
that the current periodicals be left on the table
in the Library for one month after receipt, for inspection
by the members. Carried.

A Letter was received by the President from
Hon. G. W. Ross relating to the meeting of the British
Association in 1897 and on motion of Messrs.
Harvey and Todhunter it was resolved that the
President be asked to interview the Minister of
Education in the matter - Carried

It was decided to instruct Mr. Lindsay to
send the Annual Report for 1895 to those members
of the Society who had paid their subscription

+ Fees to date or who are not more than
twelve months in arrears.

+ On motion of Messrs. Harvey and Sparling
it was deemed advisable to allow a Commission
of twenty five percent on the collection of such
fees as are due for more than one year - carried.

The President announced that the paper
on 'rain-falls' by Mr. Hollingsworth be read at the
regular meeting on Mar. 16th, and the Secretary
was instructed to write to Messrs. A. F. Miller
and A. J. Debury for papers to be read at the
two following meetings

The Chairman then addressed the meeting with reference to the special purpose for which the members and friends had met in the Electrical room. Through the kindness of the authorities of the Technical school, several members of the society and the Johnson Electric company an opportunity was afforded for experimentation with the Crookes' tubes which Mr. C. A. Chant D. H. had kindly brought from the University. It was the intention to take photographs by the newly discovered method and to develop the pictures immediately. Mr. J. H. Parlynn, Mr. D. J. Howell and the Messrs. Collins would assist in this work.

The Vice-president then called upon Mr. Chant who gave a brief but comprehensive exposition of the new discovery by Röntgen after which experiments were made. It had been suggested by Mr. Lewarden that if several sheets bromide paper were placed under the Crookes' tube that they would, all be affected at the same time. This experiment was tried and was perfectly successful. Other exposures were made with dry plates and these also were satisfactory.

At the conclusion of Mr. Chart's address Mr. ~~Chart~~ Short moved that the thanks of the meeting be tendered him. Dr. A. D. Watson seconded the motion which was unanimously carried. The Chairman presented the thanks of the audience of Mr. Chart adding his own acknowledgments of the pleasure derived from this lecture.

The meeting then adjourned till Mar 17th at 20 o'clock

John A. Paterson
Pres?

Chas. P. Spaulding

The regular meeting of the Astronomical & Physical Society of Toronto held March 17 1896 in the Board room of the Technical School.

The President Mr John A Paterson M.A. occupied the chair.

The minutes of the previous meeting were read and confirmed.

Under the head of business arising out of the minutes, Mr Lindsay stated that the experimental work carried on at the previous meeting had been perfectly successful. Mr Parslyn was engaged in making copies of the Rontgenographs taken with the bromide sheets and these would be distributed ~~to~~ among the members, if the Society desired. On motion it was decided to authorize Mr Parslyn to supply the members with copies at the expense of the Society.

Letters were read from
 Mr W. N. Greenwood of Lancaster
 Dr Watson of Simcoe
 Mr Shearman of Brantford
 and the Secretary of the Royal Society
 of Canada

The Librarian's report was received

Mr G. G. Pusey reported his observations of the sun. Mr Sainy also reported a visit to the Loomis observatory where the work of sketching the solar disc was being carried on by the observers.

Mr Elvins read some notes received from Mr D. K. Winder of Detroit regarding photography by the means of a magnet. Some discussion arose on this point during which Mr Musson stated that the authenticated experiments in this direction had been made with magnets of great lifting power.

Mr Elvins also read some original notes on the connection between the masses and atmospheres of planets.

The paper contributed by Mr J. Hollingworth on the meteorology of Muskoka was read and considerable discussion followed. Mr Harvey agreed with the writer that the deforesting of the country had not affected the precipitation and stated that it was had been shown that no change in the climate of Canada had taken place in the last 200 years. In speaking of the rainfall in the Lake region Mr Harvey referred to the

valuable researches of M^r ^{R.F.} Stepart
 who had presented to the
 Canadian Institute matter entirely
 new on this subject.

It was decided to read at
 the next meeting the paper
 on Selenology contributed by
 M^r S.E. Peal of India, corresponding
 member of the Society.

The meeting then adjourned till
 Mar 31st at 20 o'clock

G.G. Pusey
 Chairman
 W. H. ...
 for or ...

Sixth Meeting
 Mar. 31st 1896 The sixth regular meeting
 of the Astronomical and Physical Society
 was held in the rooms Technical School
 March 31st 1896 at 20 o'clock

Chair. Mr. G. G. Pursey, in the chair.

19 present. 19 Members present.

Minutes read & confirmed. Minutes of the previous meeting were
 read and confirmed.

Motion. Moved by Mr. Mrs. Lindsay seconded
 G. E. Lumsden by Chas. P. Sparling. That Mr. G. E. Lumsden
 Rep. to R. Socy. represent the Society at the meeting
 of the Royal Society, Ottawa, carried

Communications Communications were received
 from Dr. Sandford Fleming (2) Reviewing his paper
 in the matter of Unification of Time.
 J. E. Lewis, Darby Mass. re loan of Slides.
 Prof. G. E. Hale, Chicago acknowledging
 the receipt of the Society's Transactions
 Mr. A. F. Miller re the decease of Mr. Goldie.

Resolution Moved by Mr. Howell and seconded by
 of Condolence Mr. Chas. P. Sparling "that Messrs. Miller,
 Mr. J. Goldie Lindsay and Howell be a Committee
 to draw up a suitable address of
 condolence to the widow of the late Mr.
 Goldie - Carried.

Mr. G. E. Lumsden reported progress
 in their interview with the Hon. the
 Minister of Education.

The report of the Council Meeting
 was read and adopted - Carried

Proposition Mr. Brodie, Optician, 11 King St. W.
 Mr. Brodie was proposed for Active Membership
 by Messrs. Lindsay and J.R. Collins.

Librarians The Librarians Report was received
 Report. and adopted.

Observations Mr. G.G. Pursey presented his quarterly
 report on Sunspots with several notes.

Mr. Lumsden read a communication
 from Dr. Donaldson re Sunspots.
 and reported having himself seen a
 beautiful Lunar halo a few evenings since
 at 9.30 P.M.

Predictions Mr. Lumsden read a memo.
 on predictions for the month.

Notes & Queries Mr. Lindsay enquired if it was
 a fact that a gentleman of the Toronto
 University had stated that he was
 searching for the last three years for
 a photograph of lightning. He begged
 to state that in the Library of this
 Society we are in possession of several
 copies and two negatives.

Mr. Harvey read a memorandum
 on some experiments on X Rays
 by Mr. Trewe.

Paper Mr. Thos Lindsay then read
 a paper from Mr. S. R. Peal, Sibazar,
 India, on Seismology.

Adjournment. There being no further business before the meeting it was adjourned to meet on April 14th at 2 o'clock

John A. Statterus
Pres^t

Chas. Sparling
Rec. Secy.

Meeting of Council Mar. 31st 1896
in the Society's room at 22 o'clock
Members present: - Messrs. A. Harvey
W. B. Musson A. Elvins, G. G. Pursey,
Members Present J. R. Collins, G. E. Lumsden and
Chas. P. Sparling.

Chairman. Mr. A. Harvey, in the chair.

On motion it was resolved that Mr. Dodhunter the Treasurer do make arrangements with the caretaker by which, on presentation to the library, any person may use the room and read the periodicals on the table. Such members as desire to use the books in the shelves, may obtain from the librarian as they to the book-case in payment of the cost thereof -

A card of admission to be prepared in the following form, and to be issued by the librarian on receiving from the member obtaining it a written statement that he knows the rules made for the regulation of the Library form attached.

Meeting of Council Mar. 24th 1896.

Members present: - Messrs. J.A. Paterson, A. Harvey,
G.S. Pursey, J.R. Collins, C.P. Sparling & Rev. C.H. Shortt.

Mr. John A. Paterson M.A. Chairman.

D. E.A. Meredith sent a memo. stating his inability
to be present.

The Chairman read communications from
Messrs. Lindsay & Musson giving their views as to
the management of the library belonging to the
Society -

Mr. A. Harvey moved, seconded by C.P. Sparling
That any member of the Society on signing the book of
rules of the Library be granted a ticket, authorizing
the caretaker to admit the bearer to the library with
certain privileges and conditions.

Mr. G.S. Pursey seconded by Mr. A. Elwin, moved
an amendment that instead of a ticket being supplied
each applicant, a key to the book cases be given
and that ~~they~~ ^{the holders} have full access to the books for
reference whenever desired.

The Vote on the question being a tie - the
Amendment was carried by the casting vote
of the Chairman.

On motion Messrs. Harvey and Musson
were appointed a Committee to draw up the
necessary rules to be signed - carried

The Chairman reported progress in the
matter of his interviewing the Minister of
Local Education re The British Association
Meeting &c.

The Librarian was authorized to procure
the necessary Keys for the Shelves. Carried.

On motion of Messrs Harvey and Sparling
the Librarian was instructed to obtain
estimates for binding the Periodicals - Carried

On motion the Recording Secretary
was instructed to provide the necessary paper
for the Catalogues being prepared by
Mr. J. R. Collins. Carried

On motion it was decided to bind up
a complete copy of the Society's transactions
to the end of 1895, for presentation to the
Minister of Education. Carried.

The meeting adjourned to meet Mon.
at 22 O'clock

Chas. Sparling
Rec Secy

7th Reg. Meeting
 Apr 14th 1896
 The Seventh regular meeting of
 the Astronomical and Physical Society
 was held in their room Technical School
 April 14th 1896 at 20 o'clock

J. A. Paterson M.A.
 Chairman
 Mr. John A. Paterson M.A. in the chair

27 present 27 Members present

Minutes
 read & confirmed
 The minutes of the previous meeting
 were read and confirmed

Communications
 Communications were read from
 Mr. Percival Lowell, Dr. Prashier of Alleghany

Committee
 Reports -
 The Committee on Unification of Time
 reported through Mr. G. E. Lumsden a
 full report of their emergent meeting
 held Friday evening April 10th 1896 -
 Adopted.

Mr. Lindsay read the report of the
 Committee appointed to draw up a letter of
 condolence to the family of the late
 Mr. John Goldie -
 Adopted.

Report of Council
 The Report from the Council was
 read and adopted.

Mr. Brodie
 elected
 Mr. Brodie, 11 King St. W. elected
 as an active member

Nomination
 S. Downing
 S. Downing, Greenwich Eng. was proposed
 by Mr. A. Harvey and seconded by Mr.
 Thos. Lindsay as an Honorary member

Nominations
D. Brashier
D. Brashier, Alleghany was nominated by Mr. G. E. Lumsden and seconded by Mr. Thos. Lindsay, as a Corresponding Member of the Society -

Election
D. Downing
Hon. Mem.
D. Brashier
Cor. Member.
The following rule being suspended the Chairman declared D. Downing duly elected an Honorary member and D. Brashier as a Corresponding member.

Nominations
W. Loring
W. Loring, Essex, was nominated as an Associate member by Messrs. John A. Paterson M.A. and Chas. P. Sparling.

W. Geo. Craig
Mrs Geo. Craig, 893 Manning Ave. was nominated as an Active member, by Rev Chas. H. Shortt and Mr. G. E. Lumsden.

W. R. S. Muir
W. R. S. Muir, Belleville, was nominated as an Associate member, by Chas. P. Sparling and Mr. Thos. Lindsay.

Librarians
Report
The Librarians Report was received and adopted.

Observations
Mr. Pursey reported that for the first time that there are no sunspots since the 15th March -

Motion
Thanks
to
Messrs. Collins
& Mussen
Mr. Elvins moved, seconded by D. Meredith that the thanks of this Society are due to Messrs. Collins & Mussen for their labours in producing a Catalogue of the library - Carried

Predictions
Mr. G. E. Lumsden announced the predictions for the month -

Notes & Queries

Mr. Arthur Harvey read a short interesting paper on Solar Observations.

Mr. A. F. Miller stated that he was in receipt of a communication from J. Norman Lockyer F.R.S., who took exception to an expression occurring in Mr. Miller's paper on the Spectra of the Nebulae which appeared in the Society's Transactions for 1895. The words to which Mr. Lockyer objected were as follows: "to which he has not always accorded whatever credit may be their due in his connection".

Mr. Miller explained that when using these words he had in mind a conversation with Mr. Elvins who had stated to him that many years ago he had transmitted to Mr. Lockyer a series of his published letters containing, among other things, a hypothesis regarding meteorites; which, however, Mr. Lockyer had never acknowledged. It now appeared on fuller inquiry that Mr. Elvins' letters had no real bearing on "the meteoric hypothesis"; and Mr. Miller therefore felt in duty bound to retract the words complained of by Mr. Lockyer, and had written to that gentleman accordingly. Mr. Miller desired further that this withdrawal of the words might be allowed to appear in the Transactions of the Society.

Mr. A. Elvins then read a memorandum endorsing the action of Mr. Miller in retracting the statement and at same time

showing how the false impressions arose.

Paper
G. F. Hull from Mr. G. Ferris Hull, University of Chicago,
on notes on a paper of Prof. Michelson
on X Rays, accompanied by experiments
through the kindness of Mr. Collins.

There being no further business
before the meeting it was adjourned
to meet on April 28th at 20 o'clock

John A. Gateron

Chairman

Chas. Spaulding
Rec. Secy.

The 8th regular meeting
of the Astronomical &
Physical Society held
April 28th in the rooms
Technical School Building
Toronto

The President Mr John A Paterson M.A.
occupied the chair

18 members were present

The minutes of the previous
meeting were read and
confirmed.

The following communications
were received.

From Mr A. T. Laing, explaining
his inability to be present with
his "Planetarium", which he
had hoped to place before the
society.

From H. B. Witton of Hamilton,
acknowledging the receipt of
a copy of Transactions 1895.

From Mr A. R. Galdie of Galt
thanking the society for the
resolution passed on the occasion
of the death of his father.

From Right Rev J. A. Newham, D. D.
Bishop of Moose Jaw

From Dr J. B. Donaldson of Fergus.

" Dr J. A. Brashear Albury
" Dr Sanford Fleming Ottawa
" Miss Mary Proctor

The following were elected
 members of the Society
 Mr Alex Haring of Essex as associate
 Mr R. S. Muir, Belleville as associate
 Mrs Geo Craig of 893 Manning ave
 Toronto as an active member.

The librarian presented his report
 of exchanges he received since
 last meeting.
 Mr J. T. Parkyn handed to the
 chair a number of copies of
 the X ray photographs taken
 on March 3rd. These were dis-
 tributed among the members.

A discussion was entered upon
 with regard to lunar halos and
 kindred phenomena.

Mr G. S. Pursey stated that in
 England lunar halos were
 precursors of rain, but that the
 rule did not hold in this
 country.

Mr A. Elvins presented to the
 Society a copy of the new
 map of the Moon by J. Gwyn
 Elger. The thanks of the Society
 were ~~presented~~ ^{due} to Mr Elvins for
 this which would be of great
 service to the lunar section in
 the study of the Moon.

The Corresponding Secretary was requested to read the mimosa which accompanied the letter received from the Bishop of Moose. These were exceedingly interesting, detailing auroral observations covering a long period of time.

Mr Lumsden was then asked to favour the meeting with a synopsis of the paper on "A popular Observatory" recently read by him at the Canadian Institute.

The members present were much interested in the views expressed and suggestions made by Mr Lumsden; who was further requested to study certain plans of observatories which accompanied Chambers' 2nd Volume on "Practical Astronomy".

The President expressed a hope that the committee appointed to consider the establishment of a "Popular Observatory" would meet at an early date.

The meeting then adjourned till May 12th at 20 o'clock.

Arthur Harvey
Chairman

John Lumsden
for the Rec. Secy

Examination
The books

The 9th regular meeting of the
Astronomical & Physical Society
of Toronto was held May 12th
1896 in the Technical School Bldg.

The Vice President Mr Arthur Hawley F.R.S.C.
occupied the chair.

25 members were present

The minutes of the previous meeting
were read and confirmed.

Communications were read from:-

The Leeds Astronomical Society
Dr A. M. W. Downing London Eng.
J. Gwyn Elger, London
Dr Sanford Fleming, Ottawa
Mr Greenwood of Lancaster Eng.

It was moved by Mr A. Elvert
seconded by Mr T. Lindsay
that the letter written by
Messrs. Lumsden and Macdonnell
re unification of time be
approved. Carried.

A note was read from Mr J. S. H.
Shearman of Bradford in regard
to a paper promised by him
on photographing the solar corona.

The Secretary of the Royal Society of
Edinburgh wrote acknowledging

the receipt of copies of the
Transactions of this Society

An official despatch re the
Swedish Expedition to the North
Pole was read.

It was moved by Mr Spaulding
seconded by Mr Pursey that
the matter of the Popular Observatory
be considered by the Council at
its next meeting! Carried

The text of the annual report to be
presented to the Royal Society was
read and, after some slight
modifications was approved.

It was moved by Mr Elvins
seconded by Mr Lindsay that
the Lunar Section meet next
Tuesday for organization at Mr
Hawley's residence 78 N Drive
Carried.

After the reading of the
Librarian's report the observations
of the past fortnight were discussed
by Messrs Pursey, Elvins,
Lindsay and the Chairman.

The Vice President then called
upon Mr Loring, who was
present, to exhibit his orrery
and explain its construction.

This Mr. Loring did and met
the entire approval of the
~~at~~ meeting.

It was moved by Mr.
Pursey seconded by Mr. Lindsay
that the society recommend
the orrery as an excellent
apparatus for illustrating
celestial motions

Carried

There being no further business
the meeting adjourned till
May 26th at 2 o'clock

John G. Salomon
Pres^t

C. P. Spaulding
Secy

- 10th Meeting The tenth regular meeting of the
 May 26th Astronomical and Physical Society of Toronto
 was held May 26th 1896 in their room
 Technical School Bldg.
- J. A. Paterson M.A. The President Mr. J. A. Paterson M.A.
 Chairman in the chair.
- 20 present 20 Members present.
- Minutes Minutes of the previous meeting
 read & confirmed read and confirmed.
- Communications Communications were read from
 Dr. J. A. Prachier Acknowledging his election
 as an ^{corresponding} honorary member
 Messrs. W. F. King and Cotton.
- Dr. Lumsden Mr. Geo. E. Lumsden reported the
 Report meetings of the Royal Society at Ottawa.
- Motion Moved by Mr. A. Elvins and seconded
 in Report by Mr. Geo. E. Pursey that the report from
 Mr. Lumsden be received - carried
- Nominations Mr. W. Goulding, 67 St. George St.
 Mr. W. Goulding was nominated for Active Membership
 by Messrs Fletcher and Mr. J. Lindsay
- Librarian's Report The Librarian reported the receipt
 of several periodicals
- Observations Under this heading letters
 were read from Messrs W. F. King and
 J. C. Donaldson

Observations.

Mr. Savigny made a few remarks regarding the meeting of the Lunar Section at Mr. Arthur Harvey's residence last Tuesday evening.

Mr. Geo. E. Sumner read a very minute report of the same meeting, having watched the star before

Mr. J. R. Collins reported the occultation of the star ~~22nd~~ by Jupiter on 22nd ^{May} 1896.

Mr. J. Lindsay reported having seen Jupiter on through the 4 in. reflector made by Mr. J. R. Collins for Mr. Wood of the Mail-Empire.

Mr. Phillips questioned the rarity of the occultation of a fixed star.

Mr. A. Elvins reported having seen a display of Aurora on Sunday 17th.

Mr. Savigny spoke of the brilliancy of the moon at 2.30 AM. on the 26th.

Mr. Geo. E. Sumner read a very interesting memorandum of observations recently made of the moon.

Mr. A. Elvins illustrated several lunar spots observed by himself on the 17th + 22nd of the month.

Adjournment

There being no further business the meeting adjourned till June 9th 1896.

John Adams
Chairman

Chas. Spaulding
Rec. Secy

The Eleventh meeting of the Astronomical & Physical Society held June 9th 1896 in the Technical School Building, Toronto.

The President M^r. J. A. Paterson M.A. occupied the chair.

The minutes of the previous meeting were read and confirmed.

Letters were read from M^r. M. Turnbull, Prof M^r. Heath, and Miss Mary Proctor.

Miss Proctor had forwarded some printed circulars relating to the proposed trip from Philadelphia to view the total solar eclipse of August 8th.

Miss Proctor was nominated for corresponding membership by M^r. Lumsden and M^r. Christ.

M^{rs}. W. Gouding 67 St George St Toronto was duly elected an active member of the society.

The President reported the meeting of the opera glass section held at his residence on June 2nd.
Referring to the sectional reports

Mr Lindsay stated that it would be desirable to have these written out so that they could be embodied in the transactions. The President was requested to furnish a copy or extended notes of the paper read by him on the Constellation Cygnus.

It was arranged to hold the next meeting of the Lunar Section at the Lick Observatory, an invitation to do so having been received from Mr R. S. Stupart the ~~vice~~ Director.

Mr Pursey reported his solar observations and some extracts from Mr Lindsay's correspondence on the subject of observations of Saturn were read.

Mr. Elliot presented some notes on "Rays of Energy" calling attention to the probability of there being ~~the~~ solar rays focussed within the sphere of the Earth and possibly causing certain physical phenomena.

A short paper on Coronal Photography was then read, which

had been contributed by
 Mr J. S. A. Shearman of Brantford.
 Some discussion followed.

The President then read by
 request an article from
 Knowledge dealing with
 the Rontgen rays and their
 phenomena.

Mr Lindsay stated that ^{as} Mr J. G.
 Ridout was shortly to visit
 Europe, ~~and~~ it would be
 well to furnish him with letters
 of introduction from the Society
 to such institutions as he might
 call upon.

It was decided to do this.

The meeting then adjourned till
 June 23rd at 20 o'clock

J. H. Lindsay
 for the Secy.

Charles H. Shortt

1896

The 12th regular meeting of the
Astronomical and Physical Society
held June 23rd in the Technical school
Linnæus.

The President ^{Rev C. H. Shortt}
~~Mr. J. G. Eger~~ occupied
the chair.

The minutes of the previous meeting were
read and confirmed.

Letters were read from
Mr. J. G. Ridout
Dr. A. M. W. Downing
Mr. J. G. Eger
Miss Proctor
& Editor of Popular Astronomy

The subject of continuing the subscription
to Popular Astronomy was discussed and
a committee appointed to report upon
the advisability of what journals it
would be best for the society to take
regularly. Mr. Elvins, Mr. Lumsden, Mr. Musson
and Dr. Wadsworth were appointed ^{on this} committee.
The Librarian presented his report and
announced presents received since last
meeting. Having called attention to an
important paper on stellar evolution in
the current number of Popular Astronomy
Mr. Musson was requested to prepare a
synopsis of this to be read at a future
meeting.

The meeting of the Lunar Section ^{at the observatory} was ²⁷⁴
reported by Mr. Thunders.

Reports of observations were received
from Mr. Percy, Mr. Elliot, Mr. Thunders
and Mr. Saurigny.

Mr. Lindray reported having observed
the close approach of the moon to
Jupiter on the afternoon of June 14th and
stated that ^{at} ~~on~~ the following meeting he would
present a diagram in illustration.

Mr. J. R. Collins had prepared a paper
on the "Construction of Reflecting Telescopes"
but was requested to postpone the reading
until the next meeting when a larger
attendance was expected.

The meeting then adjourned to the lawn
where one of Mr. Collins' telescopes was
mounted, and some time was spent in
observation though the weather was not
very favourable.

The meeting then adjourned to meet
July 7th at 20 o'clock.

John A. Gale
Pres^r

Thos Lindray
for the Secretary

The regular meeting of the
Astronomical & Physical Society
of Toronto held July 7th in the
Technical School Bldg.

The President Mr John A Paterson M.A.
occupied the chair.

The minutes of the previous meeting
were read and confirmed.

Letters were read from
Prof Hendrickson, Washington
Dr Brashear Allegheny
Mr D.C. Hadden Alta

Mr J. Guyn Elfer was duly elected
a corresponding member of the
Society

Some discussion arose regarding the
purchase of magazines for the Society's
library, and the President was requested
to form one of the Committee to consider
the whole matter.

The librarian reported the presents received
since the previous meeting

Mr G.G. Pursey and Mr G.E. Henderson reported
solar observations

275

Opera glass

a Report from the ^{Opera glass} ~~lunar~~ section meeting held at Wallace Road was received from Dr. Lundsten, and some remarks upon a paper and

M^r Arthur Hainey reported some observations made in Essex County on June 30, July 1, and specially called attention to the clearness of the atmosphere.

A letter was read from Dr. Wadsworth covering his recent observations referring to this. M^r Lundsten stated that Dr. Wadsworth and Donaldson and himself had undertaken special study of the lunar ring planet, and would be glad to have the co-operation of others.

M^r Harvey called attention to reports from meteorologists in France who had apparently demonstrated that the rainfall is greater on the whole in the afternoon and evening hours than in the morning. He thought a record might be kept to show the facts for this locality.

M^r J. R. Collins then read a paper on the construction of the telescope illustrating the subject by diagrams and presenting for inspection several silver-on-glass mirrors which M^r Z. M. Collins had figured and polished.

It was announced that the next meeting of the Opera glass section would be held

at the residence of the President July 14th
and that the next regular meeting of
the Society would be a meeting of the
Lunar section; Mr. Musson also to
read his review of the recent theories
on "Stellar evolution".

The meeting thus adjourned till
Tuesday July 21st at 20 o'clock

John A. Gale

for the Secretary.

The regular meeting of the Astronomical & Physical Society held July 22nd 1896 in the Technical School Toronto

The President Mr John A Paterson occupied the chair.

According to arrangement this was a meeting of the lunar section and the members spent the time until 21.30 in observing.

Mr Lumsden 10 1/4 inch reflector, Mr Collins 6 inch reflector, and the Dollond telescope from the observatory were placed on the lawn, and good views of the moon were had by all the members present.

At 21.30 a quorum of the members, assembled for the transaction of business

A letter was read from the secretary of the Natural History Society of St John New Brunswick concerning transmission of a volume of reports and requesting exchange.

An exchange of publications was authorized.

A letter from Dr Wadsworth in reference to Popular Astronomy was read

A report of the last meeting of the opera glass section was received from M. Lindsay.

Mr. Harney reporting his observations of the sun ~~had~~ stated that he had noticed a bulging out of the limb ~~where~~ near a very large spot, and asked whether any other member had observed such

Mr. Miller stated that such an appearance was most probably an optical illusion as he had never heard of an observation of the prominences by the telescope alone. It was presumed that the bulging out if real would be ~~the~~ caused by the prominences.

Mr. Elms made a rough sketch of some of the lunar features and stated that he had ~~for the first time observed a small crater near Messier~~

The librarian reported the presents received. Among these was the volume for 1895 issued by the Royal Society of Canada.

Mr. Musson had prepared some notes on stellar evolution but as the majority of the members were

still on the lawn observing he
was requested to postpone the
reading until the meeting of
Aug 4th when the subject would
be fully discussed.

The meeting then adjourned till
Aug 4th at 20 o'clock

John L. H. Day
for the Secy

Confirmed

P. Marshall
Chairman

The regular meeting of the
Astronomical & Physical
Society of Toronto held Aug 14
in the Technical School Building.

~~The Rev~~ Dr E. A. Meredith occupied
the chair.

The minutes of the previous
meeting were read and con-
firmed.

The report of the Opera glass section
was received.

The librarian reported the presents
received since the last meeting.

Mr G. G. Pursey reported his observations
of the sun, and called attention to
the gradual formation of a sun-
spot on the north east region of
the solar disc which he had noted
particularly. The centre of a
faculous area seemed to have
changed into a dark spot between
July 26 & 28th.

Mr Lewis and Mr Elms
reported observations of the moon,
~~and~~ the former calling particular
attention to the Sea of Nectar, a drawing
of which was made on the black board.

The business routine of the meeting was curtailed in order to give M^r W.B. Musson an opportunity to do justice to an abstract of M^r H.L. Clark's essay on stellar evolution.

This was a condensation of the long and important paper on the subject which appeared in the June issue of Popular Astronomy, and dealing with tidal friction according to the investigations of Geo. H. Darwin and the evolution of double stars as outlined by Prof L. J. J. See of Chicago.

Several of the drawings in illustration of the subject were sketched on the black board and thus a very clear idea was had of the new theory.

An interesting discussion followed several members taking part.

The bearing of the new theory on the nebular hypothesis was referred to specially, some of the members being inclined to doubt its validity while others thought that the new theory ~~did~~ threw no further light on the evolution of our own solar system.

M^r Musson had the thanks of the meeting for the trouble he had taken to make a very long paper concise and clear.

It was announced that the
 next open pass section meeting
 would be held on Aug 11th and
 the next regular meeting on
 Aug 18th at 20 o'clock

John A. Weston has hired say
 Mrs - for the meeting

The 16th regular meeting of the
Astronomical & Physical Society for
1896 was held Aug 18th in the
Technical School Toronto

The President M^r John A Paterson M.A.
occupied the chair

Letters were read from
Academy of Sciences, Madison, Wisconsin
Hamilton Association
Dr J A Brashear
Natural History Society of New Brunswick
Sydney Observatory

The report of the Committee appointed
~~to communicate with the editor~~
~~of the~~ to consider the matter of
subscribing to Popular Astronomy,
and to suggest certain changes in
the interests of amateurs was
presented

The report was adopted

The meeting of the opera glass
section was reported by M^r Lindsay

It was moved by M^r W B Musson
seconded by M^r A Clark that
the Treasurer be authorized to
expend the sum of \$15⁰⁰ in binding
and repairing books in the library.

It was moved by M^r Lindsay
seconded by Dr E A Meredith

that the President of Toronto University be asked to address the Society at a public meeting on the subject of "Aerostatics", or on any subject which he preferred.

This was carried, the chairman stating that he would interview President Gordon at the earliest opportunity.

The librarian reported the presents received since the last meeting.

M^r. G. Pursey reported his solar observations and said that there had been no spots on the Sun on the 6th 7th & 8th of the month.

M^r. Lumsden reported solar and lunar observations.

M^r. Elvins in reporting his observations of the moon stated that he had recently observed a small crater near Cassini, which had hitherto escaped his notice.

~~Mr~~ M^{rs}. Fletcher, asked whether there were any records of changes having taken place on the moon's surface.

M^r. Elvins & M^r. Lumsden replied; the former stating that changes had been recorded as having been

observed, but the question was in reality a doubtful one.

A press clipping was read announcing that Miss Proctor's party of observers had been very successful in obtaining good views of the solar eclipse of Aug 18th.

The paper for the evening was then read by the President on the subject of meteors.

The theory of meteoric orbits was explained and a short sketch given of the history of the Leonids, diagrams being drawn to illustrate the subject. The President then read the paper by Johnstone Stoney on the "Leonids," which appears in the current issue of monthly notices of the Royal Astronomical Society.

Read the fly-leaf here
The meeting then adjourned until Sept 1st at 20 o'clock.

John A. Steiner
Pres^r

His Secy
for the Res Society

The 17th regular meeting of
the Astronomical & Physical
Society of Toronto, held Sept 1st
1896 in the Technical School

The President Mr John A. Paterson M.A.
occupied the chair.

The minutes of the previous
meeting were read and
confirmed.

Letters were read from

The Chief of the weather Bureau
The Editor of Popular Astronomy
Prof Porter of Cincinnati Observatory
Prof Hale of Yerkes

The President briefly reported
a meeting held at Rosedale where
telescopes had been placed at
the service of a large gathering
of friends forming a garden
party. Mr Lumsden's reflector
and Messrs Collins' reflector
had been used with great
success.

It was moved by Mr Pursey
seconded by Mr Lumsden
that the nomination of Miss Mary
Proctor as corresponding member
be now dealt with and that
lady declared elected from
the date of nomination, Aug 4th

This ~~was~~ was carried ^{around} ~~the~~
 members expressing pleasure
 at having Miss Proctor's name
 enrolled on the list of ~~members~~
 correspondents.

M. Lumsden stated that he
 had received from Miss Proctor
 a letter describing briefly her
 observations of the ^{total} eclipse of August
 8th ~~the~~ ^{of} the letter had been forwarded
 to the mail which journal had
 published it, together with a
 sketch of the corona as seen by
 Miss Proctor's party.

The librarian reported the presents
 received since the last meeting
 these included a number of
 volumes of the Greenwich Nautical
 Almanac, earliest date 1844,
 and making the society's collection
 nearly complete, from that date
 to the present time.

It was moved by M. Lumsden
~~that~~ seconded by M. Harvey that
 the thanks of the society be tendered
 to the director of the Lenoix Observa-
 tory who had donated the volumes
 of the almanac carried.

~~It was~~ The corresponding secretary
 stated that M. R. Stupart was
 about to pay a visit to Europe

international

and would be present at an
meeting of meteorologists to be
held at Paris.

Observations ^{of the sun} were reported by
M^r G. G. Pursey and M^r Arthur
Harvey.

M^r Harvey called attention
to the ^{peculiar} appearance of the sun,
when setting, due to atmospheric
refraction.

M^r J. R. Callint reported having
observed the lunar eclipse of
Aug 22nd but had been unsuccess-
ful in taking photographs owing
to the cloudy weather.

The President ~~then~~ ^{there} ~~referred~~ called
upon several of the members who had
met Dr J. A. Brashear during his
recent hurried passing visit to Toronto,
to say a few words regarding that
gentleman and his work.

M^r Humston, M^r Callint, M^r Harvey
and others stated that they had
been delighted with Dr Brashear
and much pleased at having met
him. Several of his anecdotes
concerning his scientific work
were repeated and the general
impression given that this society
was fortunate in possessing among
its corresponding members a gentleman
of Dr Brashear's standing and work.

genial personalities.

Announcements were made of the papers
to be read Sept 29 & Oct 3rd and
the meeting adjourned till Sept 15th
at 20 o'clock.

Archie Haewel,
V. President
in

John Hindray,
for the Rec Secy

The 18th regular meeting of the
Astronomical & Physical Society
of Toronto held in the Technical
School Building, Sept 15 1896

The Vice President Mr Arthur Harvey
occupied the chair.

The minutes of the previous
meeting were read and con-
firmed.

Letters were read from correspondents
as follows:

From Miss Mary Proctor who
forwarded a brief account of
her observations of the solar
eclipse on August 8th and presented
also a drawing of the solar
corona.

From Dr Sanford Fleming
who wrote to say that the
Astronomer Royal would pass
through Toronto, most probably,
on his way home from Japan.
The corresponding secretary stated
that he had written to Dr Christie
asking him to communicate
with the President or himself
if he should be in this city. It
appeared, ^{however} that Dr Christie had
not made any stay here.

From Prof G. E. Hale of the
Yerkes Observatory asking for
some particulars regarding the

on behalf of Mr. Elvins who was
unavoidably absent the following
Resolution was presented by
moved by L. L. Cursey.
seconded by A. Elvins

That we, the members of the Astronomical
and Physical Society of Toronto, do, most
affectionately and cordially tender our sym-
pathy and condolence to our old and res-
pected fellow member Mr. John Phillips
and his bereaved and sorrowing wife and
family in this exceedingly trying experi-
ence through which they have so recently
been called to pass, in the loss by death
within so short a period of two opening,
bright and promising sons just entering the
Arena of life's struggles, trials and triumphs.

meeting of the British Association in 1897. This was referred to the Chairman as one of the executive of the general committee having matters connected with the ~~so~~ visit in hand.

Other letters regarding prices of books and periodicals were referred to the council to be considered at ~~the~~ ^{its} next meeting.

M^r Mayhew of Toronto was proposed for active membership by M^r J. B. Kidout and M^r T. Lunday.

The Chairman introduced to the members Rev. D. J. Caswell President of the Meaford Astronomical Society, who was present. M^r Caswell addressed the meeting briefly, stating that the Meaford Society held its meetings regularly, having an enthusiastic membership.

M^r Lunday reported a visit from Dr. G. W. Hill late of Washington and from whom had been received a valuable addition to the library.

As far as ^{the} library ^{is} concerned the librarian reported presents and changes received since the last meeting.

Mr. J. G. Kidout was then requested to address the meeting in review of his recent trip to Europe. A description was given of the ocean voyage, visits to ^{the} great museums of London, to the arsenal at Woolwich, similar institutions in Germany, and to continental cities.

Reports of observations were received from Mr. G. G. Pursey and Mr. F. L. Blake. The latter stated that the work of sketching the appearance of the solar disc was being carried on whenever opportunity occurred, at the Lick Observatory.

The large group of spots lately seen on the sun had extended about $\frac{1}{4}$ across the disc. Mr. A. T. Miller stated that the group had been visible to ~~without~~ ~~optical~~ ~~aid~~ the unassisted eye, presenting the appearance of a black line.

An interesting letter was read from Mr. David Bayle describing of a triple rainbow which he had observed and which presented the unusual appearance of two of the bows joining at the horizon.

The chairman stated that observations similar to this had been reported from the Ben Nevis observatory.

M^r Craig reported an auroral display seen on the previous Sunday evening.

A paper which had been prepared by M^r G. G. Pursey had been announced for reading, but the hour being late, this was postponed until Oct 13th.

The paper for the next meeting to be held Sept 29th was announced, "On the reformation of the Calendar", by D^r A. D. Watson.

The meeting then adjourned

A. G. Pursey
Ch. pro tem. The hindsey
for the rec. secy.

The 19th regular meeting of the
Astronomical & Physical Society
held Sept 29th 1916 in the Technical
School Building Toronto.

Mr A Elms occupied the chair.

Eight members were present

The minutes of the previous meeting
were read and confirmed.

Letters were read from:-

Prof G E Hale of the Yerkes Observatory
who wrote to thank the Committee
having in charge arrangements for the
British Association visit, for information
furnished. It was stated that one
dedication of the Yerkes Observatory
would be so timed as to admit of
the Association attending at the
ceremony.

Dr Sandford Fleming wrote in
connection with the work of the
Royal Society of Canada in the
matter of the unification of time.

Mr A. S. Hunter B.A. of Barrie
wrote in reply to a request
to read a paper on "light". There
would be no difficulty in
arranging for this.

The Editor of Popular Astronomy wrote to thank the Committee for suggestions made.

M. J. S. H. Sharnes wrote to say that he was engaged in active work in the observatory of Woodstock College.

A letter on observations was received from Dr Wadsworth.

M. J. L. Maybe was duly elected an active member of the Society.

The librarian reported the presents received since the last meeting.

Some discussion arose as to whether the paper prepared by Dr A. D. Watson should be read or postponed, the attendance being small on account of the very severe rain storm.

It was finally decided not to postpone the paper. The chairman pointed out that it did not really give the publicity that was intended to be given Dr Watson's paper, to read it before so few. It would be printed and circulated and so reach many more than could possibly be brought together to hear it read.

The doctor thereupon proceeded, and read the full text of a paper on "The simplification and reformation of the calendar" in which he proposed as an advantageous change, the division of the year into 13 months of 28 days each, the extra day to be the new year day, not in any ~~series~~ set of seven days, but apart from all of them; the leap year day to be put at the end of the year this day also not being connected with any week.

Printed calendars in illustration were handed to the members present.

Some discussion followed in which the chairman took part and commented very favourably on the advantages which it was shown would ensue from the adoption of such a calendar.

The meeting then adjourned to Oct 19th at 20 o'clock when it was announced, Mr G. G. Pursey would read a paper on the Planet Mars

John G. Valerius
Presⁿ

Thos Lindsay
for the Secretary

NEW CALENDAR PROPOSED.

Idea Will be Discussed at a Congress
During the Paris Exposition.

Following the precedent established at the Columbian Exposition in Chicago, there will be held at Paris during the exhibition a great variety of congresses for the discussion of all manner of questions of universal interest. One of these bodies will consider the advisability of making a complete change in the calendar.

It is proposed to abandon altogether the present astronomical calendar and to adopt one which will be framed from a strictly practical and commercial point of view. By the proposed new institution, the year will have twelve months of exactly twenty-eight days each and one of twenty-nine days, the latter to have thirty days in leap year. With this system the days will come in each year always on the same date, January 1 being on a Monday, as also will be the 8th, 15th, 22nd, and so on.

It has been already objected that if this is to be the same for each year, the week in which the 29th day of the thirteenth month falls will be obliged to have an extra day with a new name.

The 20th regular meeting of the
Astronomical & Physical Society
held Oct 3rd in the Technical School
Lorain

The President Mr John A Paterson
M.A. occupied the chair.

The minutes of the previous
meeting were read and confirmed

A letter was read from the
Secretary of the Laristock
Astronomical Society expressing
the desire to become affiliated
with this society.

On motion of Mr G E Lumsden
seconded by Mr T Lindsay
the Laristock Astronomical Society
was elected an affiliated body

A letter was read from Dr G. W.
Hill of West Nyack N.Y. in
which it was stated that copies
of Dr Hill's astronomical papers
would be forwarded to this society
as a donation to its library if
they could be procured at all.

The corresponding Secretary then
addressed the meeting, conveying
the information that another death
was to be recorded among the
active members of the society.

Since the last meeting Mr. J. C. Donaldson of Fergus had passed away, a gentleman personally known to many of the members, and very widely known throughout Ontario as a most assiduous worker in Observational astronomy.

The funeral of the late James C. Donaldson L. L. D., barrister of Fergus, took place at Dundas on Monday morning to the Grove cemetery. Mr. Donaldson spent his boyhood days at Flamboro village, where he attended the public school and subsequently the Dundas grammar school. He then passed all the necessary examinations and took his degree at the Toronto University, and was called to the bar. He opened an office in Dundas, where he remained for some months, afterwards removing to Fergus, where he practised his profession for many years. He was a diligent student and a good scholar and was always of a retiring and unassuming disposition. Of late years he devoted a great deal of his spare time to astronomy and had an excellent instrument for making his solar observations, in which he was so much interested, being also a member of the Astronomical Society of Ontario. He was much respected by his friends and acquaintances in Dundas, West Flamboro and the County of Wellington, as well as elsewhere. He was a brother of the late W. D. Donaldson of West Flamboro, who was a well known business man there and a prominent Reformer, and he leaves only one sister, Mrs. Wm. Crawford, surviving him. Services at the grave were conducted by Rev. Dr. Laing and Rev. J. B. Hamilton.

THE death of Mr. J. C. Donaldson, LL.D., which took place last Thursday evening after a few weeks' hopeless illness of cancer of the stomach, is a loss to this vicinity. He has been a resident of Fergus for nearly thirty years, and was held in the highest esteem by all classes of the community. Born in 1843 in Balinacellan, Kircudbrightshire, Scotland, when he was three or four years old the family came out to Canada, the father dying during the journey. The mother and children settled in Dundas, and later on Mr. Donaldson became a law student in Mr. Cross's office in Fergus. On passing his examinations and being called to the bar he first opened an office in Dundas, and about a year later removed to Galt. A few years afterwards he came to Fergus, and ever since he has been a well known resident of this place. Dr. Donaldson was a gentleman of literary taste and was exceptionally well read on almost every subject. He was also an astronomer of some note, and

contributed able papers to the Astronomical Society of Ontario, of which he was an honored member. He was for many years a valued and useful member of the Fergus Board of Education, and took a deep interest, not only in our own schools, but in everything pertaining to education. He was also an active member of the Mechanics' Institute, and was one of the few who devoted time and care to the selection of books for the library. He was a warm admirer of manly sports, never missed an opportunity of encouraging them, and he was a curler, cricketer and tennis player of exceptional skill. Professionally he stood high; his wide knowledge, sound judgment and high standard of honor securing confidence and esteem for him wherever he was known. And in the social circle he likewise filled every reasonable requirement, for while he was anything but a light butterfly of fashion, he enjoyed company and was to an exceptional degree entertaining. Though he never took a prominent part in election contests, he was a Liberal in politics, and also a most enthusiastic admirer of the British system of government and British institutions. Dr. Donaldson never married. For some years past he has lived with his widowed sister, Mrs. Crawford, by whom he will be greatly missed. His death is regretted by all, and the universal feeling is that through his removal Fergus has lost a most worthy citizen. The funeral took place on Monday, the body being taken to Dundas for interment. The services were conducted at the house by Rev. J. B. Mullan, pastor of the deceased, assisted by Rev. T. W. Jackson, and early as the hour was, eight o'clock in the morning, a large concourse of people assembled to accompany the body to the railway station.

One Evening Night

The chairman, in putting the resolution
to the meeting paid a high tribute to
the deceased as one ever active
even in the midst of professional
work to advance the cause of science.

The resolution was then adopted
the members rising to signify
their approval.

It was then Moved by *A. Elvius* and seconded
by *G. E. Lumsden* and Resolved that this Society has learned
with sincere regret of the untimely death of Mr. J. C. Donaldson,
LL.D., of Fergus, its first non-resident member, and that it desires
to place on record its high appreciation of the merits of the de-
ceased who, whether as amateur astronomer, ^{as} private citizen, as pro-
fessional adviser, as educationist, as member of the Public Library
Board, or as promoter in others of a love of the manly outdoor games
and pastimes in which he himself excelled, appears to have striven
to discharge his duty faithfully, and that this Society regards the
disappearance of Dr. Donaldson from the ranks of its well equipped
observers as a serious loss to Canadian Observational Astronomy, he
having been an enthusiastic, painstaking and conscientious observer
and having for some years regularly contributed weekly reports of
his work to be read at its meetings, *and that Mrs.*

*Crawford, the sister with whom
he lived, and that she
be assured of this
Society's respectful sympathy
and condolences.*

A letter was read from Dr J J Wadsworth who expressed his deep regret at the loss of Dr Donaldson.

Mr Harvey read a communication from the office of the Berlin Jahrbuch to the effect that this society would be placed upon the exchange list.

Dr E A Meredith ^{These stated that he had been asked to} presented ^{the society} a copy of a newspaper published in the interests of a new science, one having a somewhat unpronounceable name but whose chief tenet was that the Earth was not a globe.

Mr Lindsay moved that the paper be received and laid upon the table - having been sufficiently honored by Dr Meredith's undertaking to present it.

The librarian reported the presents received since last meeting

Dr Meredith read some notes upon rainfall observations covering the period from 1815 to 1869 ^{of which} from which it appeared that the hour of the day had to do with precipitation and that a cloud in the afternoon was the time when on the average the rainfall was greatest.

Mr Harvey read some notes on
the great sun spot group of
September 1896 calling attention
to observations of the colour of the
Sun and of the appearance of
the faculae, and accompanying Mr Harvey's notes
was a carefully executed drawing of the group.

Mr Eliot called attention to
the report ~~that~~ from an authoritative
source that it had been spectroscopically
determined that the rotation of the
outer layers of the sun's atmosphere
was much more rapid than that of
the inner layers.

The paper for the evening was
read by Mr G. G.

Mr G. G. Pursey presented his practical
report of sun spot observations with
the corresponding series of sketches.

The paper for the evening was
read by Mr Pursey and was
entitled a trip to Mars, being a
fanciful sketch of an interview with
a supposed inhabitant.

Some discussion followed the reading
of the paper after which the meeting
adjourned till Oct 27th

E. A. Meredith
This Wednesday

for the reading list

The 21st regular meeting of the
Astronomical and Physical Society
of Toronto held in the Technical
School Bldg. Oct 27th 1896

Mr E A Meredith LL.D. occupied
the chair.

The minutes of the previous
meeting were read and
approved

Mr W area of Toronto was nominated
for active membership by Mr^s Fletcher
and Mr^s Lindsay.

Letters were read as follows:-

From the President announcing that
Prof London, president of the Toronto
University had kindly acceded to
the request of the Society and
would deliver a lecture on
"Acoustics" in January

From Mr David Bayle, in further
reference to the phenomenon of
the double rainbow observed by
him recently

From Mr L. Gwyn Elger Bedford, Eng.
thanking the society for having
elected him to corresponding
membership and giving some
valuable suggestions in regard
to drawings of the moon's surface.

From Rev J. B. Mullan of Ferguson, Ont.,
containing a brief sketch of the
life and work of the late
Dr J. C. Donaldson.

The librarian reported having
received among other presents
several volumes of the astron-
omical papers of Dr G. W. Hill
these were very scarce and
difficult to procure. The
thanks of the society were especially
due to Prof. Newcomb of the
Naval Observatory of the United
States who had forwarded the volumes.

Notes of observations were received
from Mr G. G. Pursey and Mr Lumsden.

Mr J. G. Ridout referred to the
dates of the ~~near~~ minimum of Algol,
~~which~~ for November and occurring
~~there~~ at favorable times.

These were Nov 7 $10^h 45^m$
10 $7^h 34^m$

Mr G. G. Pursey extended an invitation
to any members interested in solar
observations to visit him at his
residence ~~and~~ when the ~~the~~ weather
was favorable for telescopic
work on the sun.

The chairman announced that his

paper on "Meteors" must necessarily
be postponed until December as
he would be out of the city on
the date set for the reading, nor 10th.

The paper for the evening was
then read by M^r Lindsay, a
continuation of the history of the
Greenwich nautical almanac.

Two chapters were read one
dealing with common almanacs
of the 18th century, and the second
with the application of Kepler's
problem.

The meeting then adjourned.

John A. Stalder the Secretary
~~the President~~ for the Society.

The regular meeting of the
Astronomical & Physical Society
held in the Technical School
Toronto, Nov 10th 1896

The President Mr John A Paterson
occupied the chair.

The minutes of the previous
meeting were read and
confirmed

Letters were read from
Dr G. W. Hill West Nyack N.Y.
Dr Brashear of Allegheny

Mr^s Warren 266 Bloor W
Toronto was duly elected
an active member of the Society

Mr S. D. Caswell Toronto was
duly elected an active member
of the Society.

Mr Ireland 71 Bloor E was
nominated for active membership
by Mr Fletcher seconded by
Mr Lindsay.

It was moved by Mr Lindsay,
seconded by Mr G. G. Pursey
and

Resolved that this Society
respectfully sympathizes with
its honored member and former

vice-president, M^r A. Elvins in the bereavement which has recently fallen upon him in the death of his wife, the partner of his trials and triumphs for nearly half a century, and would extend to him sincere wishes for a continuance on his own part of life and vigor to prosecute the studies in which he has been so long engaged and with which ever must be associated the memory of his wife.

The resolution was adopted, the members rising to signify assent.

The Librarian reported presents received since last meeting and desired the minutes to be amended to show that the valuable presents from the Naval Observatory had been received through the influence of M^r A. T. DeHenry who had introduced Dr G. W. Hill to members of the society.

M^r G. G. Pusey reported his solar observations and sketched the positions of the sun spots on the black board.

Mr. Harney had also been observing the sun and reported, calling attention also to the theory of sun spot formation.

Mr. R. F. Stepart stated that during his recent visit to England he had met the astronomer royal and had learned that at Greenwich, the position of the sun spots was not considered of so much importance as was the total area covered by them.

Mr. A. T. Miller remarked that he had frequently noted that when there was a great outbreak in one hemisphere of the sun it was followed almost immediately by an outbreak in the other hemisphere.

Mr. Musson read some notes on the positions of the planets during November and also announced the minimum of algal at 9^h 16^m on Nov 30th.

Mr. Saurin stated that several friends had asked for further information regarding Dr. Watson's plan for reforming the calendar. Some copies of the calendar were passed round among the members.

in order to illustrate the proposed plan.

Mr J. R. Ballint read some notes on recent X ray experiments

~~Mr J. R. Ballint~~

The chairman then announced the paper for the evening by Mr A. F. Hunter B.A. of Barrie on Applications of the Polarization of light.

After reading a short review of the subject Mr Hunter proceeded to illustrate by microscope with polariscope attachments

The remainder of the evening was spent in practical work of this kind after which the meeting adjourned.

John A. Calverley the Sunday
Chairman for the Society.

The regular meeting of the Astronomical
& Physical Society of Toronto held
on Nov 24th 1896 in Technical School
Building Toronto

The President Mr John A Paterson M.A.
occupied the chair

The minutes of the previous meeting
were read and confirmed

Letters were received as follows:

From Mr A Elvins, thanking the Society
for the resolution of sympathy
passed at the previous meeting.

From the editor of Popular Astronomy
acknowledging the suggestions offered by
the Committee.

From Mr J.S.H. Shearman of Brantford
calling attention to his solar work
and the conclusions drawn therefrom.

From the Observatory of Paris announcing
the death of Prof. Tisserand

The corresponding secretary was requested
to convey to the relatives of the deceased the
sympathy of the Society.

Mr Ireland 71 Moor E, Toronto was
duly elected an active member of
the Society.

The Librarian reported the presents received since the last meeting. These included a complete set of the 3rd edition of the Encyclopaedia Britannica presented by M^r A. Elvins and a copy of Lockyer's "Star-Gazing" by Dr A. D. Watson also two volumes of the Popular Science Monthly by Dr Watson.

The thanks of the Society were due to the donors.

Observations were reported by M^r G. G. Pusey of sun spots and faculae on 17th 18th & 22nd of November.

M^r Lumsden reported having had a particularly fine view of "Aristarchus" on the lunar disc.

A letter from Dr J. J. Wadsworth was read reporting that he was endeavoring to interest some lady artists in making drawings of lunar features.

A short paper was read by Dr A. D. Watson on a method of improving the ~~practical~~ scale of the thermometer by making the boiling point of Chlorine the zero of both the Centigrade and the Fahrenheit system and adjusting the two so that they would be easily interchangeable.

Some discussion followed in

which several members took part.

The meeting then adjourned till
Dec 8th at 20 o'clock. It was
announced that Mr R. F. Shepard
Director of the Meteorological Service
would favour the society by reading
some notes of his recent trip to
Europe.

A. S. Rogers per Lane
The Secretary

The regular meeting of the astronomical & Physical Society held Dec 8 1896, in the Technical School Lironko.

M^r A. Elvén occupied the chair.

The minutes of the previous meeting were read and confirmed.

Letters were read from

The Secretary of the Paris Observatory

The Secretary of the Royal astronomical Society

The War Department of the U.S.

The editor of Popular astronomy.

It was moved that the sum of 6⁰⁰ be paid for back numbers of ~~the~~ Astronomy & astro-Physics, carried.

The librarian reported the receipt of exchanges, among other a valuable index to the papers read before the Royal astronomical Society.

The thanks of the Society were due to the editor of Popular astronomy who had forwarded early volumes of the Sidereal messenger, to complete the set in the Society's library.

Observations were reported by M^r Lundstedt, who called particular attention to the beauty of the sky on the morning of Dec 1st.

Mr. Lindsay called attention to an optical illusion described in the columns of Science.

Mrs. Fletcher presented a copy of an American magazine ~~in~~ which contained an article on figures produced by sound.

The opening article in Popular Astronomy for December was read by the Secretary. This dealt with the recent observations of Venus made at Flagstaff Arizona and which seemed to prove that the planet rotated on its axis only once in a revolution about the sun.

Mr. Lumsden had drawn upon the blackboard a copy of the plate accompanying the article, the markings referred to in the text being thus seen.

Mr. R. F. Stepart was then reported to inform the Society with an account of his recent trip to Europe.

An interesting account was given of the conference of meteorologists held at Paris and of visits paid to Greenwich & New Observatories. A portfolio of reproductions of cloud photographs was presented

by M^r Stepart to the library
of the society. The pictures ^{unlike}
~~see~~ had been made by a
special process in Zurich, where
the art of reproduction has attained
its highest excellence. The
photos were passed around among
the members and were much
admired.

At the conclusion of M^r Stepart's address
the chairman expressed the pleasure
it had given him to listen to
such an account of a most interesting
trip, and in so saying voiced
the opinion of all present.

The meeting then adjourned
the Dec 22nd at 20 o'clock on which
evening it was announced that
the nominations for officers for the
ensuing year would take place.

John A. Dattner
President

Herb Lundberg
for the Society

M^r Savignus letter from

A meeting of the Council of the Astronomical and Physical Society of Toronto was held Tuesday at 16.30 O'clock Decr. 15th 1896, in the office of the President, corner Adelaide & Victoria Sts.

Present. John A. Paterson M.A., President, in the Chair
D. E. A. Meredith, Rev. C. H. Shortt, Messrs. J. R. Collins,
Arthur Harvey, R. P. Stupart, James Todhunter, G. B. Lumsden,
Thos. Lindsay, W. B. Musson, and Chas. P. Spurling.

A letter was read from Hon. G. W. Ross, Minister of Education, declining to print the Society's Annual Report, but offering the use of the Normal School Building for a special meeting of the Society.

The Treasurer reported the sum of Two hundred and ninety dollars in the treasury.

Moved by Mr. Arthur Harvey and seconded by D. E. A. Meredith that the papers of the Society for 1896 be printed subject to the approval of the Editorial Committee Messrs Harvey, Lumsden and Lindsay, and the President, and that they are hereby instructed to obtain the best terms for the publication of the same. Carried

Moved by Mr. Arthur Harvey and seconded by Mr. Thos. Lindsay that the Treasurer, Asst. Secretary and Mr. Harvey be a committee to draft a suitable circular to be addressed to those members in arrears for dues, carried

A letter was read from the Principal of the Givens St. School thanking the Society for the loan of a telescope on a recent occasion.

On motion the President, Secretaries
and Assistant Secretary were appointed a
committee to secure papers for the
incoming year carried -

The Librarian reported that a
suitable album for the views of the Moon
supplied by the Lick Observatory would cost
about nine dollars, and on motion he
was instructed to have a portfolio made
at a cost of one dollar, until the funds
of the Society would warrant the larger
expenditure.

The meeting then adjourned

Chas. Spaulding
Res Secy.

The regular meeting of the Astronomical and Physical Society held Dec 28th in the Technical School Building, Toronto

The President Mr John A Paterson M.A. occupied the chair.

The minutes of the previous meeting were read and confirmed.

The report of the last meeting of the Council was read

Miss M.T. Scott of Toronto was nominated for active membership
Letters were read from

Dr J A Brashear Allegheny
Mr H Harrison Jersey City

Nominations for officers being called for, Mr A Collins addressed the meeting briefly and formally moved, seconded by Mr Z. M. Collins, that the officers of 1896 be nominated for 1897, without any change.

This being put to the meeting, was carried.

The librarian reported the receipts of presents since last meeting

The chairman referred to the unusually small attendance on account of the inclemency of the night and re-

requested Mr. Lumsden to postpone the reading of his paper until the next meeting, and the remainder of the evening was spent in discussing the best method of furthering the interests of the Society during the coming year.

The president had lectured on two evenings in December at Lynn and Elora on the subject of Astronomy and found that the general interest in the subject was wide spread.

Reference being made to the regular meetings of the society and the arrangements for making these popular, a ~~brief~~ list of papers promised by members was presented by Mr. Lindsay, covering the months of January and February.

It was said that the work of preparing the programme for the year would go on and the best efforts made to render the meetings interesting to all.

Several members took part in the general discussion of these points.

The meeting then adjourned till Jan 5th at 10 o'clock

Arthur Harvey
V.P.

John Lindsay
for the Secretary