

"Austell" in Sneyr. Brit.

Dictated by Mr. Elvins to L. H. Graham in 1904.

I was born at a place called Polgooth, a small village close by the Ancient tin mines of Cornwall. Polgooth is near St. Austle, a market town. The tin mines above noted are supposed to be one of the places where the Phoenicians extracted their tin two or three thousand years ago, prior to the Christian era. Remains of burnt wood have there been found containing metallic tin of ancient date. I was born on May 4th 1823, thus am now in my 82nd year. (86 May 1909.)

My father, Richard Elvins, and my mother, Mary Johns, were born in that district, and their forefathers were Cornish people, and on my father's side probably Celtic. My father was a tin ^{miner} ~~runner~~ by profession and also did business as a grocer during my early years. Both were inclined to literature and my father, a religious man of the Methodist stamp, published a book of poems of a religious tendency. Neither possessed the least taste for science.

My early opportunities for education were very limited. The schools were all private schools carried on by individuals. I left school at the age of 10 and went to work with my father in a Tin mine, removing the tin rocks from the others in which it occurred. Here I labored for two years. Then I became a bound apprentice to a Mr James ^{Grew} ~~Dobson~~, a tailor, with whom I served seven years. This was at a village 2 1/2 miles from Polgooth. At times during my apprenticeship I attended night school, learning the ordinary branches. As I look back to this period I see that I was always of an aggressive mind, always trying to find out anything new. I often wandered over my native hills examining the rocks and minerals, especially ~~with~~ those associated with the mines.

When about 14 I remember being very much interested

reading ^{Pinnock} Pinnock's books of questions and answers on geography. With the first three shillings I possessed I purchased a small terrestrial globe. When about 15 I learned, through my teacher, that we had a small lending library in connection with the school. I remember reading Sir John Herschel's book, which is a classic today. I was exceedingly struck by the wonders with which I had previously been unaware. I used to sketch some constellations without knowing what they were. I afterwards recognised the same in Chambers's Encyclopedia and was exceedingly pleased at this, and it gave me an impulse in the line of Astronomical study. I remember Herschel's explanation of the precession of the Equinoxes and it was certainly an important factor in my early education.

At home we had some books of poems, Cowper, Pope and others. The Methodist Magazine also came in periodically. It was for a time published by Mr ^{Drew} ~~Drew~~ of St. Austle, formerly a shoemaker.

Drew

In the world of politics the names of Wellington, Jno. Bright, Cobden, Russell, were prominent. I remember the accession of William the 4th. I was born three years after the death of George III and was five years old when William IV was crowned. I recall the songs of the coronation about Adelaide the queen of William IV. (Queen Victoria and her Marriage.)

When about 16 years of age the son-in-law of my master came to America, to Illinois, leaving his wife and child and books at home. He was a student and an intelligent man. His books were put in my bedroom. So I had access to them, especially Chambers's Encyclopedia. To this I owed more than all other books put together at that time. I was interested in religious studies, because of my parentage. I could think out religious problems. I remember even exhorting on such matters even at this early age. I received

Charles Peach

Christen

I think S.P. Robbins was principal
of a Normal School at Montreal - C.A.C.

Sampson Paul Robbins, for many years
principal of the McGill Normal School
— Morgan's "Men & Women of
Canada"

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a strong scientific impulse by the acquaintance of
Charles Peach, then of Goran Haven. He was
an excise man, or a coast guards man, to prevent
smuggling. Later he moved to Ready-Money Cove in
Scotland. He was noted as a Geologist, and a
member of the British Association. He determined
that Cornwall contained much Devonian Strata. I
used to preach on Sundays. This led me to
Goran Haven. He used to take me home. He was
Unitarian in views. Perhaps his intercourse
influenced me in religious matters.

There were but two children in my family, a
brother and myself. He came to America later,
settled in Belleville and was prosperous. His
family are there at the present time and are well
known. I may mention that he died a few years ago.

I finished my trade at 19. I commenced
business for myself at Liskeard. To learn my
business the better I thought of going to London,
not satisfied with conditions in Cornwall at that
time, especially the financial. The branch of the
Methodist church with which I was connected was
the Early Bible Churchmen and some of its
prominent ministers were Paul Robbins, Henry Ebbott
and William Hooper. Ebbott was the minister of
my circuit. Finding I was about to leave Liskeard,
he prevailed on me to come with them to America.
We sailed together in the year 1844. It is of
interest to note that I became of age on the Atlantic.
The voyage took six weeks of sailing. The trip
was fairly pleasant, with 40 passengers. The vessel
came out for lumber but its berths were comfortable.
One of Mr Robbins' sons has been or is a professor
in McGill University. (Prof Sampson Paul Robbins,
now superannuated.) We landed at Quebec, and
came by the Rideau Canal to Kingston. I was
strongly impressed with the beauty of Quebec where
we arrived at daybreak. We were anxious to get

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some fresh provisions, having lived on salted pork for six weeks. We came to a town called By-town, on the Ottawa, which has since become noted. We proceeded by the Rideau Canal. I examined many beautiful specimens of rocks and minerals in the localities through which the canal is built. From Kingston I came to Cobourg with the other member of our party.

The first house I ever slept in in America was in Cobourg. I afterwards bought it and in this house I ~~was~~ ^{now and} at this time met a young woman who afterwards became Mrs Elvins. For two years I was employed by a Scotch man, still living, named David Ross. I have pleasant memories of him and he seemed pleased with my residence with his family. During my spare hours I took walks studying the geology of the neighborhood. I speedily found that I was in a lime formation which was one of the branches of the Lower Silurian, known as the Trenton limestone. This study afforded me information and pleasure. I found I was in a fossiliferous bed or deposit and to my great satisfaction on my first walk I came across a fossil which I had often seen drawn ~~by~~ ^{but} had not ~~before~~ met — the trilobite, *Acephalus Canadensis*. (Chapman)

The fact that Cobourg limestones are crowded with trilobites of different kinds, with fossil shell of every variety, corals, etc. enabled me to find much that was interesting and instructive. Near the lake there was a quarry which was then used for extracting building stone and I soon became acquainted with all hands working there. They undertook to save all specimens for me. Trilobites were the chief fossils we sought for and we obtained many good specimens some 4 in long, (*Acephalus Halli*) (Hall) I was able to interest several others in the study and we formed first a Mechanics Institute in which we had a

... I saw, and at this time I met ...

DEPARTMENT OF ASTRONOMY

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Geological Museum, and as a collection of local fossils I have not seen better until I saw the collection of Mr Townsend (Methodist Book Room.) Prof. Whitlock, professor of Geology, told me that in his travels he had not seen such a locality as Cobourg for Trilobites. He became my competitor in getting these rare trilobites.

I remained at Cobourg until 1860, and our Mechanics' Institute received much assistance from the professors of Victoria College, especially Dr. Nelles, Prof. Whitlock, and Rev. Dr. Ormiston. The latter lectured on "Compensations in Nature", Prof. Whitlock on " The Gyroscope and its Teachings". We had also lectures on literary subjects. I met Mac Lachlan, the poet with whom I became well acquainted, which continued until his death. For the following two years, (1856-57), I was employed in Port Hope, and there we formed a Scientific Society also and had interesting and instructive lectures from visitors, especially Dr. Parks on chemical subjects. We met in the Common School, taught by Mr Spotton, father of Mr. Spotton of Harbord Coll. Inst., author of " Elementary work in Botany. " Mr Spotton frequently acted as chairman. Afterwards a hall was employed. At this early age I had made no special study of Astronomy. Years before I had made drawings of constellations but nothing further, except in a general way.

In 1860 I removed to Toronto, and here was glad to find many friends of a kindred spirit with scientific tastes, but was so engaged with business that few opportunities presented themselves during the day, and I turned to studies suited for the night, and Astronomy presented the best opportunities. I found a

These dates are wrong.

*He went to Cobourg 1844
Stayed 14 yrs
1858*

In Port Hope 1858-9

Moved to Toronto 1860

DEPARTMENT OF ASTRONOMY

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library belonging to the Canadian Institute in the upper stories of a building on Toronto St., to which I obtained access. During the American War I was brought into contact with a Daniel K. Winder, an enthusiastic student of science. He had been professor in an Ohio college, but found it was very difficult to keep from mixing up with one of the political parties. One favored the North, the other the South. He desired no side, hence sought a place where he would be permitted to take neither side. He was a good botanist and I enjoyed very many pleasant walks with Mr Winder who made me acquainted with the species of trees, etc., and introduced me to the habit of mushroom picking and eating, which has become a second nature. He was an author of a book on the Mushrooms of Canada, which enabled me to choose the edible varieties. This friend was also an enthusiast in Astronomy, and especially called my attention to that science. He obtained a small telescope with which I enjoyed many pleasant hours. Afterwards (1868) we formed the first Astronomical Society in Toronto. Mr. Clare was also interested in Astronomy and we prepared and sent out an address to such as might take part in forming a society, among others we sent to a Mrs. R. Ridgeway, a teacher in a High School on Jarvis St., a good mathematician. Also Prof. Kingston, a forerunner of Mr Stupart, who rather discouraged us. He suggested joining the Canadian Institute as a better means of study. Yet we formed a society. Our meetings were reported in a paper "Scientific Opera" of which I have some stray copies. At that time there was much interest amongst observing astronomers about movements on the lunar surface, especially Linné and Messier, which at that time I thought had undergone no change except that due to

Opinion

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 differences of illumination, although the subject has not yet been decided, some yet as Pickering favoring a change. My first telescope was a 1 5/8 in. and I used it chiefly for two years but also used Mr Winder's 2 in. Then I sent to England and got a 3 in. object glass and eye piece and had it constructed into a telescope. This is the telescope that is to be the possession of the Society. About 1900 the society held its first meetings at the Toronto Mechanics' Institute, now used as the city's public library (Church St.) and among its members were Messrs Clare Sr. and Jr, Mungo Turnbull, Robert Ridgeway, James L. Hughes, Mr Winder and myself. Mr Winder was chosen President, Mr Clare Sr. Secretary. I became early interested in the condition of the sun's surface and made a large number of drawings thereof, and about this time commenced collecting material bearing on solar surface phenomena and weather changes. I found it difficult to obtain records as might be of service in the inquiry, but I obtained some from the Smithsonian Institute and Prof Cleveland Abbe. Also formed an acquaintance ~~with~~ the publications of the day ~~through~~ Prof. Daniel Kirkwood of the State University ~~at~~ ^{with} Bloomington, Ind. He furnished me with many tables of wind and rain fall and he referred to ~~to~~ other valuable sources. I introduced the subject of the height of water in our lakes, especially Lake Ontario, which information I obtained by records kept at Queen's Wharf, Toronto. I was led to the conclusion that the variations or similar changes in the rise and fall of the water, corresponding to changes on the sun. I wrote to Prof, Abbe on this subject.

x 2
 1870

through

Mr. Elinus has papers on "Astronomy & Meteorology"
in Astron. Register 1872. July, Sept, November
Twelve letters in the Leader 1870-71

Lockyer's paper on "The Meteorology of the Future"
is in Nature for Dec 12, 1872
(see in "Scrap Book")

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Prof. Kirkwood mentioned that I was the first to suggest such a relation. I still possess the letter stating that I was the first to study river heights in this connection. Later the Meteorological Journals devoted considerable attention to this subject. The results were published in the Astronomical Register of 1870 or 1871, in our library. About this period (1870) I published a series of (12) papers on the "Meteorology of Toronto" in the Toronto Leader, hoping to trace a connection between solar conditions and terrestrial weather. These attracted some attention at the time and I received a letter from Piazzi Smyth, Astronomer Royal for Scotland, speaking favorably of my views and referred to them in his report to his government, which he sent me. The letter is in this volume. We both thought that this was the probable track for weather prediction. This is prior to the publication of the papers by Sir N. Lockyer on the Meteorology of the Future, which arrived at very similar conclusions to which I had previously published. The difference lay in the fact that I contended that a dry period could be traced at both minimum and maximum turning points, a wet year usually preceding a dry one. Sir Norman thought there was one period only, a plus of rain with a plus of sunspots, and vice versa. Since then in 1897 or 8 Sir Norman stated before the Royal Society that his failure in finding satisfactory reception to his views was that a plus with a minus sunspot and rainfall occurred simultaneously, one at maximum, the other at minimum.

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The society had but a short existence as such. Mr Clare's death and Mr Winder's removal to the *United States* were deeply felt. But weekly meetings were held at my house by a few who felt interested in Astronomy or scientific subjects. We embraced other subjects, and found it useful as far as attendance was concerned. Natural History was a favorite study among some of the members, led perhaps by Dr. *Bodie*. At that time Mr Pursey became an active worker in connection with the society, also Mr Pearce, and Dr White. Natural History found more enthusiasts than the Astronomical part, and it was at last decided to join the Natural History Society of Toronto which had already obtained a charter. Several of our members became its members but yet kept up interest in Astronomy, and with the assistance of Mr Roberts, and Mr A.F. Miller, Astronomy was always a favorite study.

About 1880 I met Mr Lumsden, the Assistant Provincial Secretary of Ontario, and we had pleasant walks along the lake shore near the Garrison Common, where I had often studied before. I was interested by a lecture by Mr *Hinde* later of the British Museum. His studies of the formation of the Scarborough heights and deposits westward interested me much in the development and exposure of rocks at the Garrison Common, and here Mr Lumsden and I paid special attention to the manner in which the rocks of the Hudson River were spread out in laminae. Both of us were interested in geological study, but also in Astronomical work. He was a special friend of A. F. Miller who was an enthusiastic astronomer, and through the influence of both it was desirable to *secure* a charter as an Astronomical Society. We visited Prof Carpmael of the Meteorological office and asked his cooperation, which was cheerfully given, he himself becoming a member. This was the origin

*Wm
Dr. Brodie*

*George Jennings Hinde F.R.S., F.G.S.
d. Mar 15, 1918 Aged 79*

*Educated in England. In early twenties came to
Canada; spent 7 yrs. in U. of T. under Prof. H. A.
Nicholson.*

*Returned to England: studied at Munich.
Apt. in B. M.*

See "Science", Dec 13, 1918

of the Astronomical and Physical Society of Toronto, and from this time Astronomy took a more prominent place among the societies of the city. Through the unwearied efforts of Mr. Lumsden we introduced the Society to Astronomers generally. He wrote to various countries and tried to make the Society useful. They responded generously, and sent magazines, etc., and many became honorary members of the Society. Our Annual Meetings were well attended and very interesting.

About 1878 I made a number of observations on Jupiter, being attracted by an oval spot redder in hue than the general surface, since known as the Great Red Spot. This appeared to me as if it were high in the atmosphere or above it. Jupiter manifested great heat and probably matter was thrown up from the denser planet.

Bibliography.

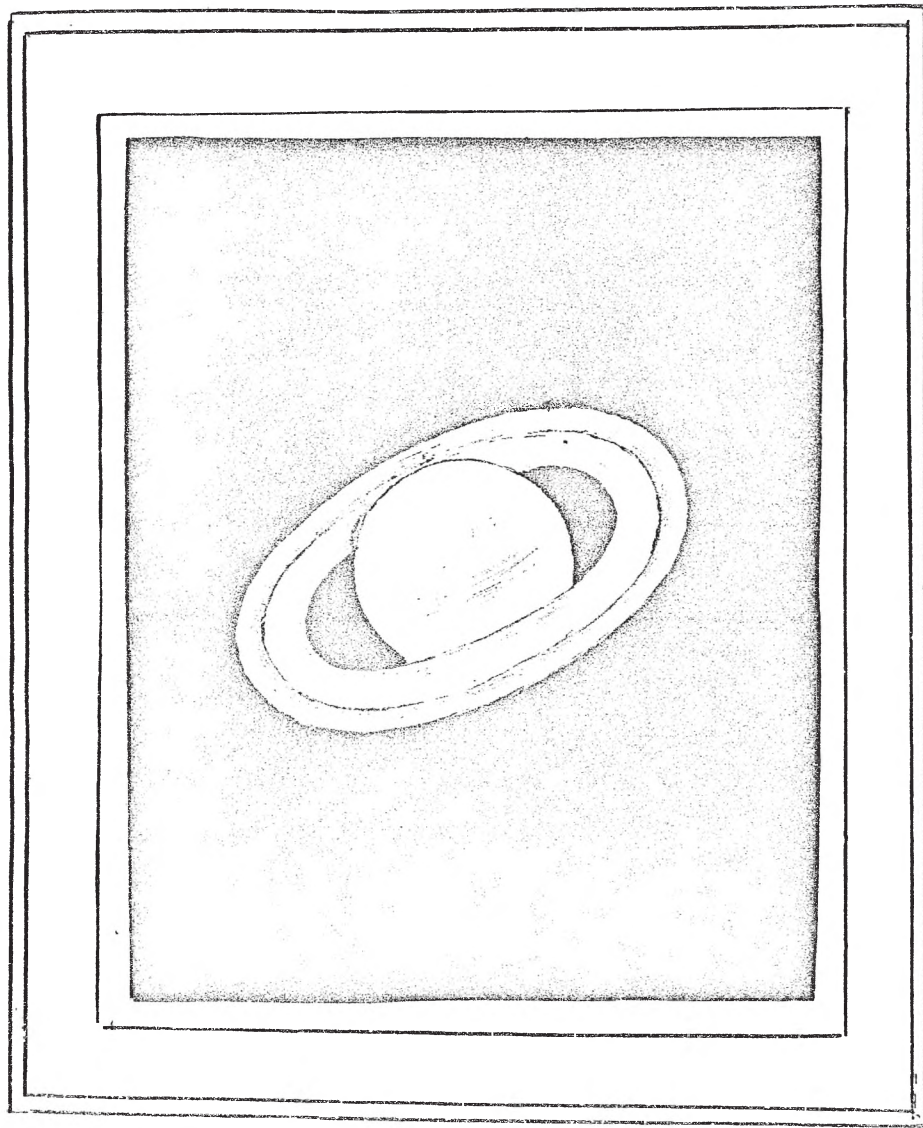
Vol. II of Ast. and Phys. Soc. Theory of Gravitation.
 [Explained by Mr. Elvins Oct. 23, 1908.]

Pictures of Saturn and Rings on edge, Oct. of 1892.
 Many papers in volumes following 1868, etc. on
 Theory of Comets. ("Tides" 1896-99.) in Elvins' Volumes.

Volume in Institute between Barnard and Elvins, on 5th Sat.
 of Jupiter.

[Explained to S.H.G. (?)]

Plate 1 June 11 1868 3. inch



*Transcript of shorthand notes towards the
back of this book: They were dictated
to C. A. Chant at 33 Dowal Road by
Mr. Elvins May 27, 1913 ~~~~*

The Astronomical Club was the first organisation of its kind in the city and these are the minutes of it.

In 1860 Mr. Elvins came from Cobourg and settled in Toronto. Between 1860 and 1870 the American War was raging. Mr. D. K. Winder was located in Cleveland, but it became so uncomfortable for anybody who would not come out in favor of the North to remain among the northern people that he found it impossible to stay there- he was opposed to war under all circumstances, and in his view, the Bible tolerated slavery, which was at the bottom of the American War. Hence, he came to Toronto, where he settled and obtained a living as a printer, Mrs Winder was a better printer than he was. He also preached, being connected with the Disciples, and as there were very few Disciples in Canada employing ministers, he worked at his trade as well as preached. If the brethren asked anyone to preach they furnished him with all the necessaries of life.. The Disciples were very strong in the South. They hired a minister when they wanted one and called him an 'evangelist!'. They compared his life to that of Paul.

Mr Winder was appointed the Club's first president, and Samuel Clare, Sr. was secretary. Clare was writing-master in the Normal School. Nothing was published officially, but the members used to frequently write articles for publication. The first aim of the meetings was, however, to improve each other mutually by discussing current questions and keeping each other informed on what was going on in the heavens.

Mr. Turnbull was great on instrument-making and optical work. He read papers on optics, instruments etc. Mr. Winder had taught Astronomy in a U.S. College Mr. Elvins had a taste for the subject, but Mr. Winder was the most proficient in the subject. Mr. Elvins always had a liking for all scientific questions, and had been used very early in life to notice the stars, make drawings of the different groups, and when about 14 years old he made a number of them. Shortly afterwards he fell in with Chambers' Encyclopaedia, and was very much pleased to find that his drawings were just like those in it, and that led him always afterwards to take some interest in the stars.

At that time Mr. Elvins took more interest in mineralogy and geology, having been born and lived in the neighbourhood of one of the ancient Cornish tin mines, near where the Phoenicians or Jews used to trade for tin, they left behind them their record in many names--Penryn, Perizzin etc.

The beauty of the minerals attracted Mr. Elvins from his youth. Some time afterwards, when he was a young man, when he could talk better than now, he was taken up by the Methodist Bible Christians and urged into public speaking. From childhood he had been a great reader and was well informed in the Bible.

First Person. I was sent to a place by the name _____ of Gofan Haven (there was a regular printed list of men and appointments), and I believe I took as my text, 'What shall the end be of those who obey not the Gospel of God?' (I was about 17 years old) I had learned what the scriptures say on the subject, and I had also read Milton. From him I quoted largely-- more largely, indeed, than from the Bible. I wished to terrify the people. I came down from the pulpit and a gentle man asked me if I would go home and take dinner with him. Having walked 12 miles that day I was very ready to go. This was Mr. Chas. Peach, he was exciseman, appointed by the Government for that port. His duty was chiefly watching for smugglers bringing brandy and wines from France. He took me home and we had a nice dinner with Mrs. Peach and one child. It was in the Spring of the year, and I remember him saying, "This is the first lamb we have had this year." He spoke very kindly to me and afterwards took me in to a cabinet he was a naturalist and a geologist, and he showed me a number of fossils, polished, some of them beautiful; it was surprising to me, I wondered at it, for although I always enjoyed minerals we found few of them in Cornwall. I believe he found a couple which allowed him to say that Cornwall was in the Devonian Strata. The greater part of Cornwall however is granite and there are few or no fossils to get. The central portion is very like the Highlands of Scotland. Sir Roderick Murchison found Mr. Peach in Scotland and recognised

*This date (1844) was determined from
Mr. Elvins knowing when an eclipse
of the sun occurred - I found out
it was 1844 by reference to "N.A."
Mr. Elvins was then 21 yrs. old -*

that he had ability and taste for study on geological lines and he got him into his position into the British excise. Afterwards I heard him lecture two or three times on natural history and geological subjects. The last time I heard him it was at a place called Wiskard after which our northern town is called. He was a most pleasant individual and one of the best teachers that I ever listened to. He for the first time called my attention to those little animals (Mr E. could not recall name) like coral but with a hole right down through them; the animal spreads out like a leaf- he put out his hand to touch the leaf when it disappeared down the hole.

Peach was transferred to Ready-money cove in Scotland where he remained a long time--until his death. Since I came out here I found that Charles Peach was a Unitarian, and for a Unitarian tottake me home and treat me so kindly after I had denounced the views he held was more than some other Christians would have done. It made a turning-point in my life.

In 1844 (~~1845~~) when I was 21, I came to Canada. The first Sunday after I landed at Cobourg I went out for a walk and found that I was in a different Geological series of rocks; I went off and found a place which was dry then, but which every Spring was covered with water and on the top of one of the rocks, but embedded in it there was the first trilobite that I ever saw. The pleasure I felt then I do not expect ever to feel again.

Then I found from my geological books where I was, I was in the Trenton Limestone of the Lower Silurian Rocks and while I remained in Cobourg I enjoyed geology greatly. It is one of the finest places I ever saw for fossils. An old Professor at Victoria (Whitlock) and I became quickly acquainted, from the fact that we would go to the same places to collect. A quarry which was opened then yielded a splendid lot of specimens; we were both keen at collecting, and we found out, after a while that by giving a man the price of a drink one would often get a beautiful specimen. During the 14 years that I lived among the rocks I made a fine collection of specimens from the rocks extending from Belleville to Port Hope. I kept them in a 'Mechanic's Institute' in Cobourg, it was like a geological society.

When I came to Toronto I was still owing on a house I had bought in Cobourg. The one who held the mortgage was Dr. Beatty, a Professor in the College, who that same year was moving to Ottawa. He wanted to have the mortgage cleared off. I brought my fossils here to Toronto, and not knowing how else to wipe off the debt I put them up in an auction room and they sold them- some being given away- and they brought me enough to pay off the mortgage. Altho' it was like parting with my life-blood I sold them and cleared off the debt. Prof. Cheekney of Upper Canada College bought them.

Some time afterwards there was a loan exhibition of a number of curiosities in the dancing hall of the Mechanic's Institute, I went there to see the things and to my surprise I saw many of the fossils that I had taken from the rocks. I then learned that it was Prof. Cheekney who owned them; I was introduced to him, he was pleased to see me. I offered to buy some of them back, but he would not sell them.

I was employed in such a way that I could not study geology. I could not get time off in the day, and so I settled upon the stars.

When Winter came over, as we were both Disciples we soon met. Then it was proposed to gather a few together, to meet in my house. This we did, and then we got together a few whose names are on the sheet. These did not come all at once, Mr. Hughes did not join at the very first. He joined soon after, through Mr. Clare. Hughes was a student at the Normal School, but teaching at the same time, and he was introduced thro' Mr. Clare.

When we had been meeting in that way for a while, we began to talk about forming a club where we might come together and read, and discuss what was doing in the Astronomical world. A committee was appointed to draw a constitution and by-laws.

We observed one eclipse, we met for quite a while at my house, and then we began to find it a little burdensome to Mrs. Elvins, and we then met weekly at different people's houses. By this time Pursey and a number of others had joined. For a time we existed in

a very precarious way. Mr. Miller and I used to get together, and occasionally some others.

Mr. Winder returned to the U.S.A., and business interests had so overweighted the rest of us that the work languished.

Finally, Mr. Lumsden (with Mr. Ross at his back), recommended us to get incorporated- Lumsden, Miller, and I went to see Carpmael to ask him if he would not be Patron. They had always considered me President of the old society, without ever having been elected. After Winder went away they always made me chairman.- it was sort of taken for granted, the idea was to make me the first president, and I understood that Mr. Miller would act with me. Perhaps, however, Mr. Miller intended to get Mr. Lumsden to act. The idea was, at any rate, that we would ask Carpmael to be Patron- Carpmael said "Why not let me join?" I said we would be very glad if he would become a member. Then there was a question about the president. He was made President at once. He however insisted that as he was not well, and would have to be away on business I would have to help him. They made me Vice-Pres. Some time afterwards he got worse and was forced to go to England and he died there.

When he was going away we were at a meeting at Mr. Lumsden's house, and Carpmael spoke about it being necessary to fill his place. He said-"I will resign if Mr. Elvins will fill my place." I protested that there was no need for it, and he remained President until his death.

Then Larratt Smith was elected. Then a struggle was as to who should be elected afterwards. Mr. Lumsden would not take the position and Mr. Harvey took the Chair and kept it for two years.

G. Brunt was one of the partners in Thompson and Son's establishment. He was the book-keeper there and Mrs. Thompson (of the Mammoth House) who died quite recently and Mrs. Brunt were sisters. That led to their acquaintance with me.

Robert Ridgeway in 1868 was a teacher in the Jarvis St. Coll. Inst. Afterwards, for a long time, he was in the Custom House. He was Editor of the Canadian

The Magazine lasted 7 months
July 1871 - Jan 1872
incl

Magazine, Vol. I 1871 It lasted only a year or two-
thirteen months, more accurately. Mr. Elvins used to
write papers for it, one of them was not published on
account of the death of the magazine.

Mungo Turnbull was a cabinet-maker. He was a
well educated Scotchman.

Handwritten notes on the left page, including the word "Penny Perigini" and other illegible scribbles.

Direct
to Penon

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Robt. Ridgway (m1868) 2 6 9 7 4 x }

Editor of The Canadian

Magazine Vol 2 - 1871 - x 1 7 7 7 - x

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Mr. Turnbull

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The Royal Astronomical Society of Canada

This Society was incorporated in 1890 under the name of The Astronomical and Physical Society of Toronto, and assumed its present name in 1903. The Society has active Centres in Montreal, P.Q., Ottawa, Toronto, Hamilton and London, Ont.; Winnipeg, Man.; Edmonton and Calgary, Alta.; Vancouver and Victoria, B.C.

The Society publishes a monthly JOURNAL containing each year about 500 pages, and a yearly OBSERVER'S HANDBOOK of about 80 pages. Single copies of JOURNAL or HANDBOOK are 25 cents.

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