

The Observatory in City Park 1855-1880

by Margaret Cohoe

(1978 Sept 20)

The total eclipse of the moon, which was visible in Kingston on 1 May 1855, was a speculative topic for the frivolous and the scientific members of the community. Only three aspects of the event of special interest locally will be mentioned here.

The first was Rev. Dr. James Williamson, professor of Mathematics and Natural Philosophy (Physics) at Queen's College, the first occupant of that Chair. He served the College from 1842 to 1895. Although his chief interest was meteorological and geodetic studies, his mathematics course, noted in the College Calendar for 1855, includes "use of instruments of observation and astronomical problems, with examinations twice a week on Herschel's Astronomy."

The second item was the publication of a book, which was also of academic interest. In March 1855, the *Daily British Whig* advertised its latest publication, *Astronomical Philosophy, A Study of the Heavens made Easy* by the Rev. Daniel Fallon Hutchinson. The only known extant copy of the book is in the hands of a private book collector, Mrs. Irene Young of Bath, Ontario, who also owns a copy of *Herschel's Astronomy*. The author's modes Preface is informative.

"For many years I have been solicited by numerous friends, in the United States and in Canada, to publish something comprehensive, and, at the same time interesting, on the sublime science of Astronomy; not that, I am sure, they consider me more capable than many others residing in the Province, but because for some years past, I have had more or less, something to do with imparting instruction on this agreeable and delightful subject. I am at present fully convinced that we need a work of this description in Canada, something easily comprehended and of a practical value character. As the small volume is being published in our own province, it is only reasonable to expect a widely extended patronage, and that every over of our country will July encourage its own publications."

The third item associated with the eclipse was an announcement by the Joint Committee on the Park, dated 14 April 1855, "an addition to their numbers was now necessary in order to carry out effectively the designing of erecting an observatory, and of obtaining a good telescope. Each of the following gentlemen is willing to allow their name to be added to the committee, with a special view of effecting the contemplated design regarding the observatory. The names are Colonel, the Baron de Rottenburg, Mr. David Taylor, Royal Navy Retired, Judge Joseph. J. Burrowes, Mr. R.J. Rowan and Dr. James Williamson, who will be their chairman."

As far as can be ascertained, the first astronomical instruments for an observatory arrived in Canada in 1840. The British Ordnance Department had planned and manned a series of meteorological stations at various points throughout the British Empire. In 1840, a Royal Artillery Detachment under captain J. F. Kefroy established a temporary observatory in Toronto to investigate "Terrestrial Magnetism and

Meteorology.” Ten years later, a meteorological station was built on the Citadel at Quebec. It was a co-operative effort of the Canadian and Imperial governments. The Army, the Royal Navy and the Royal Observatory at Greenwich provided the technical experts and instruments, and Canada provided part of the money. It is clear, then, that the first real growth in astronomy in Canada was its origin to the problems associated with recording the weather, fixing the meridians and surveying, rather than to conventional astronomy. The first extensive land survey maps were prepared by the military in the in late 18th and early 19th centuries in preparation for the distribution of land to disbanded servicemen and to the refugees from the American Revolution. The mapping of the Great Lakes, the St. Lawrence River and the inland waters was also done by her Majesty’s Forces and is admirably described by Robin Harris’ Hydrographic Survey of the Great Lakes and the St. Lawrence River, Historic Kingston, vol. 14.

Up to this time, in Kingston, the chief centre of meteorological, geodetic and astronomical informational information was at the Observation Station, the headquarters of which had been in the Commandant’s House on North Street. Commanding officers, for the most part, were most co-operative in encouraging the sharing of scientific information with the community, and retired military and naval personnel who had settled in Kingston were a natural nucleus for scientific ponderings. Their experience melded easily with that of the “Gentlemen Amateurs” in the community.

To add to the core of military and naval knowledge, civilian contributions were solicited, as can be seen in the following letter from Dr. James Williamson to the *Chronicle and Gazette*, written ten years earlier.

20 May 1845. Sir, With a view to ascertaining the result of similar observations made in Canada or other parts of America, allow me at present to state that the termination of the eclipse of the sun on the morning of the 6th of the this month, took place in Kingston at 5 hr. 2 min. 11 sec.

Dr. Williamson’s close association with her Majesty’s Forces continued long after their strength was reduce at the Kingston Base. The following letter speaks for itself. “30 July 1855. To Captain W.A. Noble, at the Engineers Office, Kingston. My Dear Sir, Colonel Gordon and yourself having been so good as to think that the Meteor local Instruments in the Engineers’ Office might be entrusted to my care for the purpose of advancing the Scientific Objects contemplated by the Board of Ordnance, I have to request that you will have the kindness to represent to the respective officers at Montreal, that I shall be happy to hold them for the purposes alluded to, until required by the Board to transfer them back their hands, and will do my utmost to keep up the observations, Yours truly, James Williamson.”

The tasks alluded to be extensive meteorological readings, and the only known examples of the project are the complete records for the year 1860. These twice-a-day readings were accumulated on large printed charts, on which the heading “Royal Engineers” has been stroked out. At the foot of the chart, the Supervising Officer’s signature is that of James Williamson. The assistant observers named on the sheets are George Milligan, Duncan Morrison, John McMillan, James Hope, William B. Thibido, William Sullivan, William Darroch, and W.B. Ferguson. R.V. Rogers, James Ferguson, Charles Cameron and Alex Hunter. In later years the co-operation with government departments continued. The Department of Marine paid \$500 annually for the submission of regular meteorological readings by the Department of Mathematics and Natural Philosophy. The Observatory’s Annual Reports give numerous instances of co-operation and mutual benefit.

For example in 1864 “a temporary North Meridian mark has been place on the County Court House,” and in 1866. “The transit has been employed to aid the Royal Engineers in laying down a meridian mark on Wolfe Island, which will also serve for the use of the Observatory.”

Finally, the essential contribution made by the special committee on the Park can be found in a brief biography of one other member, Mr. David Taylor, Royal Navy Retired. He is a good example of the stature of the retired military and naval personnel in Kingston. In the Navy of the 19th century, where commissions could not be purchased, Taylor rose through the ranks to become the Master of the “Cockburn.” In 1845, he succeeded John Bennett Marks as the head of the Civil Department of the Royal Navy on the Canadian Lakes. We beg leave to tender our sincere congratulations in his appointment, a sentiment we feel persuaded every Press in the Province will re-echo.” An equally generous testimonial was given to Mr. Taylor eight years later, when, as his final assignment, he closed the Kingston Naval Dockyard. The Daily British Whig, 13 June 1853, reported the farewell given by the citizens of Barriefield, part of which reads, “ We may be permitted also to refer on this occasion to your usefulness in a more extended sphere. Your valuable services of a few years ago in preparing maps of Upper Canada and charts of some of our extensive lakes, claim special notice. These publications, being of general utility, are doubtless appreciated, as they serve to be, by the public at large.” Such was the caliber of the man, who having served honourable in Her Majesty’s Forces, volunteered to serve Kingston’s scientific community.

Along with the names of the new committee members, the Kingston Daily News published its won view of the project, 3 May 1855:

Our city readers knew that a Park, which will eventually become an ornament and a credit to the City is now in the course of being laid out and planted with trees. But it is not generally know, that within the park as a great centre of attraction is the contemplation to erect an observatory, on a scale excellence and grandeur which will not only be a great advantage to the minds and the morals of the rising generations, and the citizens at large, but will be oaf provincial and national importance. Kingston is, at his moment, most fortunate in being able to procure the zealous services of scientific men and amateurs in astronomy, who have most kindly and cordially volunteered their co-operation with the Committee of the Council in the Park, for carrying out his noble enterprise.

We are assured that ample subscriptions will be forthcoming to defray the expenses of the building and the instruments; and we also believe that Queen’s College will undertake the charge of the Observatory when completed, without any cost to the City or to the Subscribers, and that it will doubtless afford additional advantages to the students of this rapidly growing university.

Plans and specifications are now being prepared for the Tower and the best opticians in Great Britain, France, New York and in Boston are now furnishing their specifications and prices of the instruments required. It is hoped by the Committee to have the whole completed by the end of the summer.

As a measure of economy, the special subcommittee considered using Block House No. 2 for their observatory. Their decision, recorded in their minutes, reads: “20 April 1855. A meeting took place today at Dr. Yeates’ office. Present were Baron de Rottenburg, Mr. Rowan, Mr. J Burrowes, and an on behalf of the City, Dr. Horatio Yates. Professor Williamson, chairman and MR. Burrowes secretary. After the meeting, a visit was paid to the Block House on Union Street to determine upon the practicability for an astronomical observatory. After careful inspection, it was decided that on the whole, it would be better to erect a new one altogether in the interior of the park field.”

Colonel the Baron de Rottenburg took the key role at this stage. The son of a general, he was a career soldier attached to the 46th Regiment. From 1847 to 1854, he was the Adjutant Quarter Master General, and the following year, the Garrison Commander at Kingston. The remainder of his career was spent as Adjutant General Militia Forces, Canada West. His position in Kingston and his experienced as Adjutant Quarter Master General made him the best qualified member to seek out cost of supplies and equipment. His advice was followed, and it is noted in the Minutes of the 7th of May 1855: “A great deal of information was laid before the meeting...prices and letters were produced by the Baron de Rottenburg...which, upon mature consideration, it was decided to recommend he ordering immediately from Mr. Alvan Clarke, 9 Tremont Street, Boston, first-a six and one quarter object glass (lens) to be prepared; then the mounting clock-works, etc. to be subsequently ordered. The price of the object glass is \$350.” These resolutions followed naturally enough. It was resolved “that additional subscriptions be obtained forthwith”, and “that the Corporation of Kingston be requested to give ^100 forthwith.”

The immediate need was a fence along Kingston Street to enclose the land, as specified in the licence of occupation. At first, the plan was to take down the wooden fence on three sides and to surround the whole ground with “handsome iron fence, on that will last for ever an be a credit to the City.” The estimates that arrived from Edinburgh, Scotland put an end to that dream. The price quoted was four hundred pounds in British sterling for the King Street alone! The committee lowed its sights and decided to “replace parts of the present fence so that it will answer for a year to two longer.” The old military fence lasted much longer than a year or two; it lasted another twenty-seven year. The new wooden paling fence along the King Street side, described as “elegant and durable, costing less than ninety pounds” was built by P. H. Pigeon whose tender was 23 shillings and 9 pence per rod. William Coverdale’s specifications for painting the fence were followed by Thomas Howe & Son of Bagot Street. His tender was 1 shilling and 3 pence per lineal yard or ^25 for the job. (But the new fence was a source of annoyance to nearby residents because it deprived them of a convenient exercise ground for their horses and a grazing ground for their animals.)

Before proceeding any further with the account of the Observatory in City Park, it is well to examine the origin of the park, because the terms of possession and its development as a public recreation area led, eventually, to the removal of this first Observatory.

The original land assembly, from the Murney properties, had been carried out by the City on the secret orders of Lord Sydenham. This was Farm lot 25 concession 1, Township of Kingston, which became known as the Artillery Parade Ground and, eventually, what is now know as City and MacDonald Parks. It is not to be mistaken for the Royal Artillery Parade Ground, of which there will be more later.

In a letter to Lord John Russell, dated 28 October 1840, Lord Sydenham wrote, "Hitherto not a soul suspects my intention of holding Parliament at Kingston and making it the seat of government—on the contrary, I have purposely discouraged the idea, in order to pick up for the Province the land necessary for Public buildings, etc. In which I have succeeded in my heart's content." The result of this private ruse did not become evident until after Lord Sydenham's death. When the seat of government was moved to Montreal in November 1843, the City of Kingston petitioned the Governor-General, imploring him to support their case for restitution. Not only had thousands of pounds been spent in anticipation of the arrival of government offices, but 25 acres of choice waterfront land had been acquired by the Imperial Government. It would soften the blow somewhat, reasoned the petitioners, if the Imperial Government would return the land to the City "that it may be laid out as a Public Square in all time to come, for the health and convenience of the Inhabitants."

There was no official response that year to the City's urgent petition. The colony's attention was on the possibility of war with the United States over the Oregon Territory. The Royal Engineers' line of defence for Kingston was re-activated; with the rim of five blockhouses and the redans, and a 14-foot picket fence, the City was enclosed on the north and the west. By 1846, the defence point on Murney's field was replaced by a Martello tower completing the artillery domination of the harbour's approaches. Any thoughts of a lakeshore ornamental park gave way to the emergency of the day.

Eight years later, the prospect of a public park was revived. In answer to a request from Mayor John Counter, the Commissioner of Crown lands, John Rolph, indicated in August 1852, that the City could have the use of the Artillery Parade Ground while the propriety of a land transfer was being considered. The license for the occupation of farm lot 25 concession 1 was conditional. First, the City was to prove free of all charges, an alternate parade ground for the Royal Artillery. Second, the Military Exercise Ground, which was to be laid out as an ornamental park, was to be well fenced and to be open to the public.

The Streets and Improvement Committee allocated £25 to cover the cost of clearing the parade ground and of installing the gates and stiles at the four corners. The account submitted, and subsequently grudgingly paid by the City, was more than twice the estimate—£40 for the clearing and cleaning plus Robert Waddington's bill for 10 pounds seven shillings for the gates and stiles. So it was for years to come; money, or rather the lack of it, was to prevent the orderly development of the first Public Park in Canada West.

To offset the Council's justifiable apprehension about the future costs of a public park, as Subscribers' Committee for the Park was formed under the auspicious chairmanship of the Honourable John Macaulay. Dr. Horation Yates was the first secretary-treasurer. The other members of the Subscriber's Committee in the year were Alexander Campbell, Thomas Kirkpatrick and Robert Briggs. The City Council welcomed this committee with its prospect of donations, and to show responsibility for the project, decided to form a joint committee composed of alderman and Subscribers. On 17 November 1852, the Kingston Daily News reported that the motion moved by Francis M. Hill, the alderman for Sydenham Ward, and seconded by John Flanigan, proposed that a committee consisting of His Worship, the Mayor, William Ford junior, Thomas Briggs junior, Orlando S. Strnage, John Flanigan and the mover be appointed to act with a committee of five citizens selected by the Subscribers. This joint committee to procure plans... for the laying out of the park and to decide on same."

Augustus Thibido joined the committee the following year, and he presented the progress report to the City Council on 4 April 1853. In a long report, the project was described as :

A subject conceived to be the greatest importance and one to which much consideration has been given... The Park, that great and almost indispensable appendage to the City was planned to be a haven of rest where man, escaping from the turmoil, dust and strife of the city can relax his energies, and for a season forget the cares and sins of the world while reclining in the shade of fragrant and beautiful trees...and for youth, it is the season of enjoyment, and were we blessed with pleasure grounds, our youth would there resort for the enjoyment, and activity to both body and mind, instead of possibly being tempted to places which, to say the least, are of doubtful propriety...and in a pecuniary view, the committee have no doubt that the city would be greatly benefitted by the greater number so strangers who would visit us.

The report was well received and the City agreed to match any sum that the Subscribers could raise. Secretary-Treasurer Yates announced that “already with less than one fifth the town canvassed”... over ^300 had been raised. As well as responding most generously to the Patriotic Fund for the Conduct of the Crimean War, the following gentlemen had also subscribed handsomely to the Park Fund. One hundred pounds from John Watkins and James Morton; fifty pounds from John Counter, thirty pounds from John R. Forsyth, Alexander Campbell, John A. Macdonald, John Macaulay, Thomas Kirkpatrick, Maxwell A. Strange, Archdeacon John McDonnell, William Bowen and Judge K. Mackenzie.” The generosity of these first donors may be measured by the salary of the Clerk of the Market, which was ^100 a year.

The severance of the upper portion of the Government land for the Midland District Grammar School (now the site of Sydenham Street School) which had opened in 1853, and the prospect of an adjacent severance for the proposed County Court House prompted the Subscribers Committee, on 29 November 1853, to direct Messrs. Counter, Kirkpatrick, Campbell and Augustus Thibido ‘to endeavor to procure a patent for the land...such patent to contain provision for the Trusteeship and Management of the park.’ The enquiry was rejected because the City failed to fulfill their agreement with the Board of Ordnance. Furthermore, the likelihood of the forfeiture of the remaining land was reported in the Daily British Whig on 8 April 1854.

Montreal 30 March 1854

To the Mayor of Kingston. Sir, Referring to our communication made to you from this office on 31 July last on the subject of the leveling of the ground proposed to be used for Artillery exercises in Kingston we beg to inform you that the directions have been given for the Royal Artillery to resume practice on their old drill ground-in the west end-as the Corporation does not appear to have fulfilled their agreement respecting the new ground. We remain, Sir, your humble servants, J.C. William Bell, Colonel commanding the Royal Artillery and A.Dixon, Colonel commanding the Royal Engineers.

The City hastened to make improvements to Garrison Gardens which was renamed the Royal Artillery Parade Ground. *The fenced borders were Sydenham, Queen, Rideau and Ordnance Streets.* The military

tradition of the area is now perpetuated by the Armouries on Montreal Street. But the tender for the castle-like building we know today, was not awarded until December 1898.

It would be reasonable to assume that, after the threat of seizure of 25 acres of parkland, the committee would have moved quickly to show its good intentions regarding its development, but the opposite comes through in the Park Minutes for 4 July 1854, which said,

After one or two fruitless attempts to get together a quorum of the Joint Committee of the Park, this day a quorum met on the park ground consisting of the Honourable John MacCaulay, Alexander Campbell, E.W. Palmer, Thomas Kirkpatrick, Dr. H. Yates and Captain Jackson, with a view of determining upon a plan for the laying out of the ground. The committee was assisted by the presence of the Honourable John A. MacDonald...It should be remarked there that this was not a regular meeting, inasmuch as no notice had been given to the committee to attend, and consisted of those only who had accidentally heard, or were told that the ground would be visited.

The presence of prominent politicians convinces me that the threat of forfeiture was real. The Board of Ordnance had been satisfied in one area, but it was plain to anyone who went to the west end, that the City had not done anything about the parkland. It was not a popular project. The Subscriber's enthusiasm was for the observatory, and they made this point when an additional £100 was requested from the City. The money was to be earmarked especially "to assist in the construction of the observatory...many who have subscribed to the observatory would not have paid one penny towards a public park."

The fact that the Rev. Dr. James Williamson was a brother-in-law of John A. MacDonald has led to some speculation that Kingston's observatory got some special consideration when government funds were being allocated. No evidence has been offered, to date, to give credence to that theory. A more realistic premise for Kingston's early progress can be found in a combination of factors, all of equal importance. The topic; the time, and the people were each in the right proportion to give Kingston Observatory the right start. And months later, in 1860, the final factor was the arrival of the fourth principal of Queen's College, Dr. William Leitch who had been an assistant at the renowned Edinburgh Observatory.

Thus far, the interest in the Observatory has been linked to Her Majesty's Forces, the Gentlemen Amateurs and Queen's College. In the City's population of about 12,000, these three groups were far outnumbered by artisans, merchants, labourers, servants, etc. Of what possible value was the Observatory to the general public whose interest in geodetics and meteorology was minimal? I suspect that their interest and wonderment were in the regular arrival of traveling performers, the circuses, the prize fights, the theatricals, the concerts and the forbidden cockfights. Then he referred to our Observatory and to local newspapers of the area recorded the wide variety of entertainment that paused for two or three days in Kingston. Although nothing could ever surpass the visit of Tom Thumb (with Barnum and Bailey's Circus) the amusements for a week advertised in the Kingston Daily News in June 1856 were typical examples of the entertainment of the time. There were two band concerts at Tete du Pont Barracks, and two in the Park; there were church concerts and Sunday school picnics. At the City Hall, the entertainment by the Theatre Royal Company was "three laughable pieces" with admission two shillings and six pence in the boxes and one shilling in the pit. "The

police will be in attendance and the strictest order enforced.” *In the Market Square, the barkers cajoled the citizens to see “the Bear Woman, half-human and half baboon...she can sing, sew, cook, was and iron, and is disposed to be quite sociable and accommodating...pronounced by Naturalists and Physicians to be the link between human beings and brute creation.”*

It took a reporter’s commentary to point out to the average Kingstonian the Observatory’s one advantage. The benefit would be felt in their lives, even if they had not heard the lecture, “Popular Astronomy and the Observatory”, nor read the account in the newspaper of 31 December 1855.

Lt. Ashe, R.N. of the Quebec Observatory, was reported by the Kingston Daily News “to have yielded to the urgent solicitations of the Young Men’s Christian Association and consented to address the on a subject so abstruse that it would require a mind of a most peculiar description to reduce it into popular shape within the range of a single lecture. Mr. Ashe made the effort and was completely successful. The reporter continued then by adding,

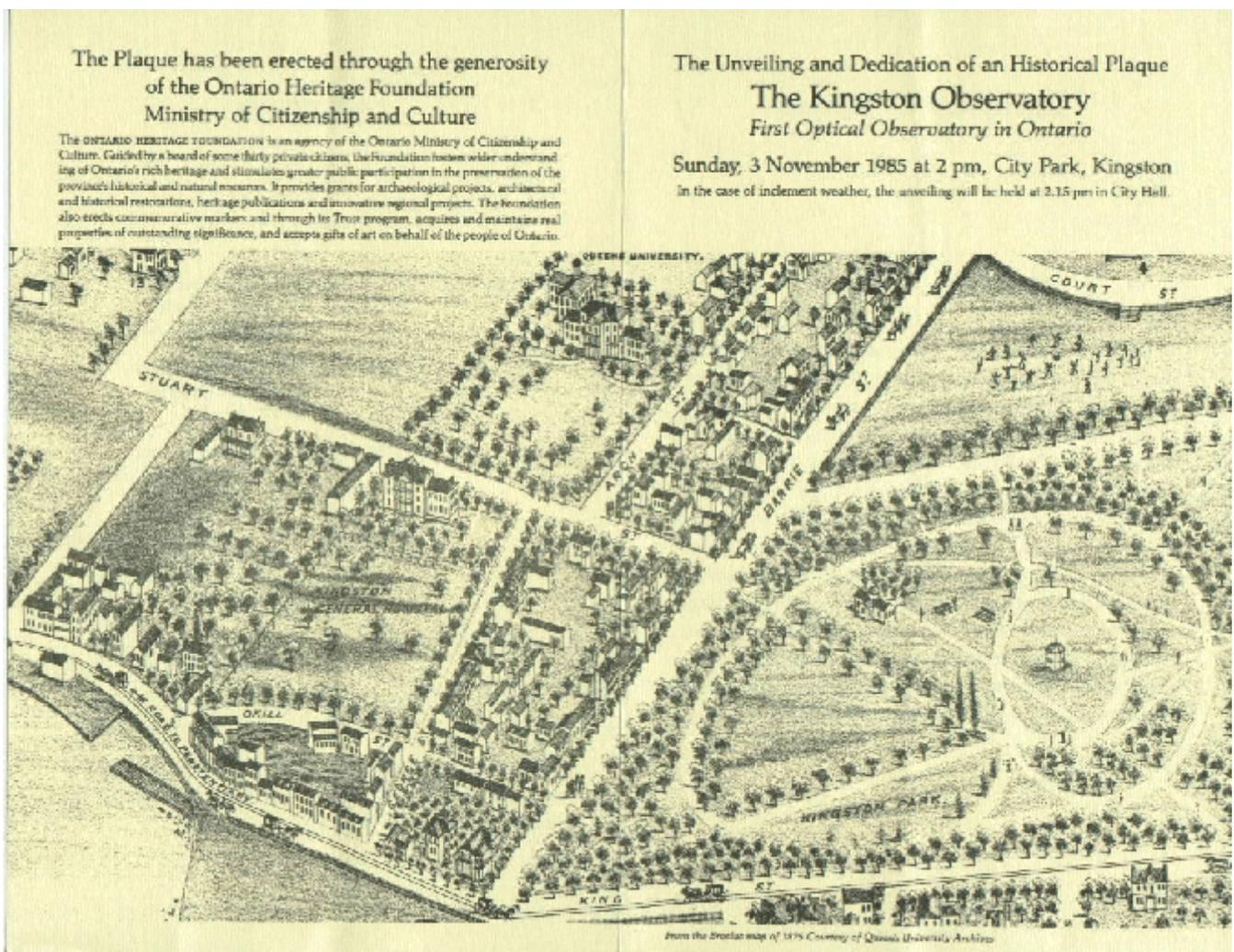
But we are not done! Mr. Ashe referred to our Observatory and to local time, in which he and we are interested. He, theoretically, and we, practically; for in the last three weeks, we have had no less than three different local times inflicted upon us. First, civic time whose organ is the clock on the market building; the second, the clerical time, carefully regulated by some well meaning sexton, an third, the military time announced by the gun at Fort Henry, which depends probably on the tobacco in the gunner’s pipe, and besides these, we have stars of minor light in the shape of church and factory bells, etc. to whom minutes and seconds are as nothing at all. But a new era dawns upon us; the Observatory is now complete; we shall have astronomical observations whereby to correct our clocks. We hope that Professor Williamson will no longer content himself with half-yearly observations, but that he may, every week, bring clocks and bells to their proper bearings.

The construction of the one-room observatory in the Park did not meet the approval of the whole Council. A complaint about the appearance of the wooden building was voiced by an alderman, who said that he “wished to see the Observatory removed as it was unsightly. “ The Daily News of 18 June 1856 reported Dr. Yates’ reply in the Council Chamber that” two wings would be added to it shortly, and then it would be a pretty little building. A large stone shaft had been erected inside for the telescope, every foot of which had cost him eighteen dollars. “Some parts of the shaft are scattered in the City Park today, relics of Kingston’s first community scientific project.

As the momentum for subscriptions decreased, the criticism of the state of the park and the observatory increased. Anon wrote to the Editor of the Daily News of 7 March 1857 to comment Alderman Allen for his proposal for discontinuing the grant towards the City Park;” a very large sum of money has been expended in bringing that apology for a park to its present condition...paths laid out are at any time impassable, trees have been planted which will afford neither shade nor ornament for a decade...and an observatory erected which no one knows anything about except a professor and one or two students of Queen’s College.”

After five years of operation by the Gentleman Amateurs, a provincial grant was awarded the City. The \$500 annual grant was directed exclusively to the Observatory. One of the conditions of the grant was the immediate appointment of a qualified observer. Queen's College, through Principal Grant, offered, without any charge to the City, to manage and to develop the observatory facilities for the city as well as to accept the responsibility of providing the services of a qualified observer, namely Rev. Dr. James Williamson. In return, the College asked for the exclusive right to the site, and the assurance that the provincial grant would go to the college.

An agreement between the Corporation and the College was signed on 19 January 1861, in which one acre of arm lot 25 carrying a mortgage of \$1 was transferred to Queen's College. The College's copy of the conveyance and the conditions of occupation may be seen at the Archived, Douglas Library. A pictorial view may be seen on Broises' 1875 Map of Kingston where the building is shown situated about one hundred yards from the corner of Barrie and Stuart Streets, on the north side of the promenade.



1st page of the dedication of the Observatory.

Inscription on Plaque

The Kingston Observatory

The first optical astronomical observatory in the province, the Kingston Observatory was established in 1855 after a solar eclipse aroused public interest in astronomical studies. Under the auspices of a committee of British military officers and 'gentlemen amateurs' a frame observatory was built here. It was transferred to the control of Queen's College in 1861 and within a year a new brick structure had been erected on the site. Staffed by Nathan Fellowes Dupuis, an able mathematician, the observatory, in addition to making conventional astronomical observations, produced barometric and thermal readings, fixed meridians for surveying and provided a time service. In 1881 it was moved to Queen's and today four cylindrical stones, former supports for the telescope, are all that remain of the old observatory building.

Programme

<i>Welcome and Introduction of Guests</i>	Vice-Principal Duncan Sinclair Queen's University
<i>Greetings</i>	Mr. Robbin Elliott Ontario Heritage Foundation
<i>Greetings</i>	His Worship Mayor John Gerretsen of the City of Kingston
<i>Greetings</i>	The Honourable Ken Keyes Solicitor General and Minister of Correctional Services
<i>Historical Background</i>	Professor Victor Hughes Queen's University
<i>Unveiling</i>	Mrs. Margaret Cohoe Local Amateur Historian

Following the unveiling there will be a reception for guests and citizens of Kingston at City Hall, courtesy of the Mayor and Citizens of Kingston.

Inside of the dedication pamphlet of the Kingston Observatory.



Picture taken on November 2, 1985 dedication of the plaque of the Kingston Observatory.

On the left, Dr. Downie, Dr. A.V. Douglas, and Dr. Vic Hughes.

Photo Credit: Leo Enright

It might be concluded that the College had made an advantageous move in the acquisition of the site in the Park. A closer look at the other nine items in the agreement show that the College was bound to give are amore in civic services that would be covered by the \$500 annual grant. Among other things, the College was to provide “suitable buildings and all necessary additional instruments and apparatus... which are to be kept in a good efficient state of repair and in good working order.” The whole operation was to be subject to the scrutiny of a Board of Visitors to be appointed by the City, who in turn were expected to “inters themselves in the advancement of the Observatory”. In the proper discharge of their duties, the Board could, if necessary, “resort to such remedy at Law, as they may be advised to adopt, for the redress of any wrongs, abuses, defaults or neglects on said premises.”

Part of the College’s civic duty was to publish their twice-daily barometric and thermal readings, and to arrange for the weekly correcting of the City Hall clock. For the edification and enlightenment of the general public, six lectures were to be delivered annually” at convenient seasons and telescopic dissertations...tickets to

all lectures to be delivered gratis to the families of all City officials, school teachers, clergy and newspaper editors.”

The most trying part of the agreement was not the weekly open house “for any respectable person applying to visit and to look over said observatory;” it was the section that said” the Mayor, members of City Council and their successors...have the privilege of using the telescope, at proper and reasonable times, under the direction of the observer, without charge, and other visitors...being respectable citizens, may be charged not more than two cents for the privilege.” What constituted” proper and reasonable times” became a source of irritation to both parties.

Under the chairmanship of Professor Williamson, the whole concept of an Observatory was reviewed in order to upgrade the operation from what of an amateur to a professional standing. The Daily British Whig, Friday, 16 August 1861, advertised that “Tenders addressed to Rev. Dr. Williamson will be received at the City Book Store until 3 o’clock, on Saturday next, from parties willing to contract for the erection of additions to the Observatory in the Park. Plans and specifications may be seen at the City Book Store.

No evidence has been found that the appointed Board of Visitors carried out the Corporation’s part of the agreement, which said, among other things, that it was “to make representations regarding alterations... and the conduct of its affairs.” In fact, the College’s report to the Board of Visitors in 1862 opened with this gently chiding remark. “The Board of Visitors are well aware of the necessity of improvements which existed at the time of the transfer of the building to Queen’s College...and the Equatorial (telescope) which it contained...and of the inadequacy of both for the purposes of an Observatory.” The report goes on to describe the improvements made by the College in the year of the take-over. “The new brick building, designed by William Cloverdale consists of a porch in front, 18’ x 9’, two wings each consisting of a room 22’ x 18’, the west wing being for the accommodation of observers and visitors; the other room for the reception of the transit and sidereal clock. The old tower coating the Equatorial has been raised 6 feet and occupies the centre part of the building.” Further alterations and the purchase of additional equipment were requested to put the operation into first class condition. The theme of the closing paragraph of the report was to become perennial. “The sum expended for the building and some small accounts, previously unpaid, has been \$1403, leaving the Observatory in debt to the College for \$400.” The Board of Trustees of Queen’s College, although a partner in the agreement, did not reciprocate the enthusiasm of Dr. Leitch for the new venture. A tersely worded directive gave their position. “The Observatory” shall not be entitled to receive any money from the Ordinary Revenue of the College.” The annual \$500 provincial grant was deemed to be enough to carry the unit.

The Board of Visitors was urged to use the precedent of the Montreal Observatory. There, a special provincial grant had been obtained to defray the cost of the building; but the Visitors’ appeal to Ontario was unsuccessful. In seeking ways to raise money, Professor Williamson wrote privately to Osborn Cross, the observer at Montreal. He replied, “My experience with institutions...goes to show that the most effective tactics consist in putting things in a state of usefulness as soon as possible. The public are always more ready to help that which is doing something, than to subscribe to a barren notion.” A chronic shortage of funds and mounting debts were to become part of each of Dr. Williamson’s annual reports.

The dearth of instruments was partly offset by the ingenuity and the mechanical genius of an undergraduate student, Nathan Fellows Dupuis; a clockmaker by trade who graduated from Queen's in 1862 and stayed with his alma mater to become Professor of Mathematics. In 1894, he was appointed the first Dean of the Faculty of Natural Sciences. In each annual report, Dr. Williamson gave high praise to his assistant observer N.F. Dupuis." I have on all occasions been highly gratified by his ability, fidelity and zeal in the discharging of his duties."

Donations of the instruments came from various quarters. The Royal Astronomical Society of London, England lent a Beaufoy Transit; Principal Leitch lent a telescope and a Greenwich mean-time clock; A. J. Macdonnell of Kingston donated a telescope; and from the Astronomer Royal, Sir. G.B. Airey came "a gift of the highest importance to an institution...a series of Greenwich observations and other valuable works, many of them a very costly nature, and some of them can hardly be procured at any price."

In 1862, Dr. Leitch's book *God's Glory in the Heavens* was published. In the preface, he stated, "the object of the work is to present a survey of recent astronomical discovery and speculation in connection with the religious questions to which they give rise. These questions impart a new interest in astro-theology, and the recent contribution is intended to meet, in some measure, the felt necessity of a better adjustment between the arguments of the theologian and the discoveries of the astronomer." The book was published in London, England and also in New York. It ran to three editions and had some success in bridging the chasm between the theologians and the new wave of radical free thinkers. There is an autographed copy of the book in Special Collections at Queen's University and an extensive review is in the *Journal of the Royal Astronomical Society of Canada* vol. 58 by Dr. A.V. Douglas, professor emeritus of Mathematics and Astronomy, Queen's University.

The requisite two free lectures that were delivered at City Hall proved to be popular, and are noted in the newspapers as being attended by "a highly respectable audience." The four other lectures which were delivered at the observatory were handicapped, first, by the limited space, an unheated room 22' x 18', and second, by the growing popularity of the park as a recreational area.

Two persistent activities, with long military traditions, began to interfere with the normal operation of the observatory. Spectators at the cricket matches and the band concerts were attracted by the opening of the dome shutters and the appearance of the telescope.

Although the Kingston Cricket Club was not formally instituted until 15 March 1855. The record shows that there was cricket elevens, drawn from regiments and Kingston's gentry, in the early 1840's. By tradition, the cricket patch was on the military parade ground at, what was then, the west end of the City, or on Barriefield Common. The rights and privileges of the Cricket Club were entrenched in a City By-Law of 5 July, 1855, when the City Council ordered "that the Cricket Club get the privilege of occupying the vacant space of ground in front of the new Court House for the purpose of a Cricket Ground, on condition that they keep in fenced until required by the Council." No other sports' group ever got such exclusive rights; not even the Rev. George O'kill Stuart's petition "for a skating rink below the Court House" could move the City Council.

he other activity, which interfered with the Observatory, was the regular band concerts. The Programme and the names of the soloists were published in the newspapers the day before each performance. The first bandstand was built in 1857 and the Kingston Daily News commented on 12 June,

The Park Committee have received from Mr. Coverdale, the architect, a plan for a Musical Pavilion, in which various civil and military bands may discourse sweet sounds of an afternoon and an evening in the New City Park... We understand that the fine band of Her Majesty's 9th Regiment under Mr. Casey will in future play in the Park instead of the Artillery Barrack Yard...and will be followed on a subsequent occasions by the Brigade Band led by Mr. A.W Murdock. We trust that the arrangements are completed that Mr. Fraser of the City Band, and Mr. Stevenson with St.Patrick's Band will also gratify the citizens by selecting one evening in the week to play, and hat our citizens will show their appreciation by a very full attendance.

Many concerts were reported in the press thereafter.

During the summer months particularly, there were two other interruptions to the Observatory's programme. One was from the respectable citizens' and holidaymakers who wanted to visit the Observatory. The other interrupting was from less respectable citizens who were blamed for the continual vandalism; and the unseemly behavior of others brought this comment from the Daily News on 31 July 1863." Complaints are frequently made that the City Park of the late has become a place of resort for abandoned females, and its is alleged that on several occasions, ladies and nurses while walking in the grounds have had their delicacy outranged in open day by the lewd conduct of disreputable characters of both sexes...all known improper characters should be strictly excluded from the Park and the police should be instructed to devote a portion of their time and attention to the locality."

Interruptions, lack of funds, a disreputable locale and, finally, in 1865 a question of right of occupancy diminished the authority of the Observatory. The gradual dispersal of the Subscribers' Committee the untimely death of Dr. Leitch in 1864 temporarily reduced the Observatory's importance.

The right of occupancy arose from the larger question of the City's right to occupy the old military parade ground. Mayor John Creighton discovered that the licence to occupy the 25 acres of Murney's former properties had been issued incorrectly! According to the Public Lands Act only ten acres could be granted as public parkland. It was possible then that the remaining fifteen acres could be reclaimed by the government. During the hot summer of 1865, there was some nervousness and speculation as to the fate of the remaining 15 acres. Mayor Creighton was authorized by City Council to travel to Ottawa to consult with the Hon. John A. Macdonald, the sitting member for Kingston. The solution came from Alexander Campbell, who had been a member of the original Subscribers' Committee. As the Commissioner of Crown Lands, he advised Mayor Creighton that rather than seeking an Act of Parliament, it would "be most advantageous of the City to accept a licence of occupation, under the Provincial Seal, (for the whole plot of 25 acres) which he felt would never be interfered with."

The land boundary definition of 1865 has never been altered. It is the same boundary of the military parade ground minus the two severances for the Court House and the Grammar School. The only restriction

in the 1865 licence-to-occupy is in the sentence that says, “Provided, always. Nevertheless, that no Licence or Permission is hereby given to erect Buildings of any description on any part of said Parcels or Tract of Land in Future...And, provided also hat whenever it Shall become necessary to resume the Said Lands...a Notice of Intention Shall, if possible, be given to Said Corporation three months previously by the Provincial Government.

This restriction on buildings put an end to any plans to enlarge the Observatory in the Park. Every winter and spring, slight changes in the foundation of the building had disturbed the alignment of instruments. Although Dr. Williamson continued to use the Observatory, it was far from satisfactory. The annual grant of \$500 did not cover the cost of maintenance, much less could it cover the cost of new equipment. It was only the mechanical genius of Nathan F. Dupuis that kept the project in operating condition. However, the final problem was one that even he could not correct. The 1878 Observatory Annual Report summed up the position with these words, “the park is a place of general resort where observations can seldom be carried out in quietness, therefore with the consent of the City Council, the Observatory Board are endeavoring to provide for the construction of another observatory in a more elevated position.”

It became more and more apparent that what had started as a mutual support project was now at the point of natural separation. The City decided to end its partnership in the Observatory in the Park. After some consultation with the University, both parties were ready for the formal parting. The Daily British Whig, 20 April 1880: “At City Council, a communication was read from Principal Grant suggesting that the proper place for the Observatory was the College Campus...he therefore proposed that the College give back o the City the site so generously deeded to the College.”

The City’s reply came through Alderman E.J. Pense, chairman of the Observatory Enquiry Committee. The recommendations approved were reported in the Daily British Whig of 4 May 1880. The College was authorized to “remove from the old building in the Park, all instruments and furniture required for the new building to be erected on the College grounds”.

The permission being granted, the College moved ahead quickly. At their Finance and Estate Committee of 25 May 1880, the following minute was recorded, “Principal Grant laid before the meeting the question of building a new observatory on the College grounds. After discussion, it was resolved that the Principal be authorized to proceed with the erection of a new building. The tender of William Irving and Son for \$639 being accepted for same.” The site of this observatory was close to Carruthers Hall. The third observatory planned by Dr. N. F. Dupuis was built in 1909 at the corner of Stuart Street and University Avenue and demolished in 1946 to make way for McLaughlin Hall.

The final report of Dr. Williamson on the topic says,” In consequence of the great inconvenience connected with the situation of the Observatory on low ground, and in a public park in possession of the City with trees growing up all around, it was intended to apply to the City Council for Leave to remove the instruments to another building...tenders were obtained for the erection of a small building for the reception of the Equatorial and Transits and with room for the Observer. The building is nearly completed. wanting only the revolving dome, the plastering and the painting outside. The whole expense connected with the removal will be about \$700.

The Observatory in the Park was demolished that summer. The Cricket Club and the band concerts have disappeared. The Subscribers' first purchase, the Alvan Clarke telescope and some small pieces of apparatus house in Stirling Hall, Queen's University and four pieces of its great stone shaft scattered through City park, are all that is left of Kingston's first observatory.

REFERENCES

1. "George Raudzens: British Ordnance Department in Canada 1815-1855." Ph.D. dissertation. Yale University , 1970.

The other sources were :

1. City of Kingston papers (CK) at Queen's University Archives (QUA)
2. The Observatory Paper, QUA.
3. Queen's University Board of Trustees Minutes, QUA.
4. Kingston Daily News, Kingston Public Library, OKP.
5. Daily British Whig, OKP, OKQ.

Grateful acknowledgment is also made to Margaret Angus, John HI Grenville, Historical Research Officer, Old Fort Henry, Kingston, Jennifer McKendry; and John. W. Spurr.