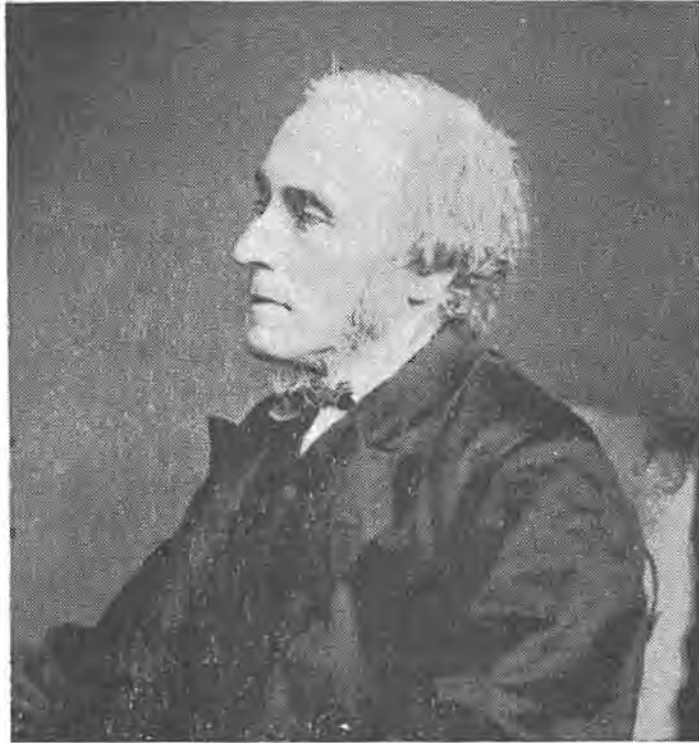


PROFESSOR GEORGE T. KINGSTON - 1817-1886

**See p6 for memo establishing MSC**



This is the fourth in a continuing series of biographies of  
the early Directors of the Canadian Meteorological Service  
written by Dr. Andrew Thomson

George T. Kingston was born near Oporto, Portugal, the second of the eleven children of Lucy Henry Kingston, merchant of London, and Francis Sophia Rooke. Lucy is an unusual name for a man, but in this case Lucy Henry Kingston was named after members of a distinguished and wealthy Lucy family.

The Kingston family had made a fortune in the wine import business to England from Spain. The family divided their time between London and Oporto so that of the eleven children three were born in London and six in Oporto - two were born at ports enroute.

George went to good elementary schools - "Eagle House", "Cheshunt" and "Hammersmith" where less attention was paid to Greek and Latin than in most schools of that time. He attended the Naval College at Portsmouth and graduated with a gold medal in mathematics. He was admitted to Gonville and Caius College, Cambridge, at the age of 26. Kingston obtained his B.A. degree, 32nd wrangler, in 1846 and his M.A. degree in 1849. For some time he was a master at Eton College, but resigned his appointment there to become principal in 1852 of the Naval College at Quebec. This position had been offered him by the Colonial Secretary of the British Government.

The Naval College had been a project of Lord Elgin, Governor General of Canada, aimed at the instruction of Canadians wishing to follow a sea life as officers. Two classes of students were received at the College; the first consisted of boys about 12 to 17 intending to enter the merchant service or navy; the second consisted of young men, mates of merchant men, pilots and others who had been already at sea and wished professional training. The College was wholly supported by the Canadian Government. Very little has been found of Kingston's work at the Naval College, but more attention should have been paid to it. The institution was probably the first attempt to establish a nautical college in the British Empire outside of Great Britain and it was the fore-runner of the Naval College at Halifax established in 1911.

Kingston's famous brother, W.H.G. Kingston, the author of many classic boys stories, visited his brother George at Quebec from November 12, 1853 to January 12, 1854, before returning to Toronto. G.T. Kingston, shortly after his brother's visit, received an invitation from the Appointment Board of the University of Toronto to fill the chair of Natural Philosophy at Toronto. Kingston resigned his position at the Naval College at Quebec, made his way to Toronto only to find upon his arrival that his own brother-in-law Professor Bradford Cherriman, being on the spot, had already secured the appointment. While W.H.G. Kingston wrote a long account in his book "Western Wanderings" of his visit to Toronto with his brother G.T. Kingston, he never mentioned their brother-in-law Prof. Cherriman.

To explain Prof. Cherriman's appointment, the following sentences have been taken from the official History of the University

"University of Toronto 1826-1907":

"In the spring of 1853, Prof. Murray who occupied the chair of Mathematics and Natural Philosophy, had died and Mr. J.B. Cherriman, M.A., Fellow of St. John's College, Cambridge, who had been for some time acting as his assistant, became virtually his successor although the title of the chair was now Natural Philosophy. Prof. Cherriman was a man of great ability and attainments ..... and is represented as having revolutionized the teaching of mathematics in the province."

On March 21, 1855, an Order in Council was passed recommending to the University authorities the establishment of a Chair of Meteorology to be filled by the Director of the Observatory at a salary of £450 of which two thirds were to be paid by the Government and one third by the University. In furtherance to this, on May 8, 1855, University College of the University of Toronto established the Professorship of Meteorology and on May 22, 1855, Professor Cherriman was selected to fill the office of Superintendent of the Observatory. On August 11, Mr. Kingston was appointed to the Chair of Meteorology and the Directorship of the Observatory. (There is no reference to Dr. Cherriman's official resignation of his appointment, although there may be some reference to it in some record that has been lost.) Since Dr. Cherriman's term in the Chair of Meteorology was in the summer holidays at the University, it would appear that Kingston should be given credit as being the first Professor of Meteorology in the British Empire.

The old wooden observatory building built by Capt. Riddell in 1841 had badly deteriorated by the time the British personnel returned to England in the early part of 1853. Magnetic observations ceased until resumed under Provincial authority in July 1855, while meteorological observations were continued without intermission. The general supervision was committed to the Professor of Natural Philosophy in University College Toronto until the appointment of G.T. Kingston, M.A., in August 1855 at a salary of £450.

In the autumn of 1853, a stone building was commenced to take the place of the old observatory. The new observatory was rectangular 54 ft. long, 44 ft. wide and 16 ft. high exclusive of the roof with a tower 48 ft. high on the northwest corner. The stone in the building was carefully tested to ensure the material was non-magnetic. Three small rooms built of stone were first erected and used as offices during the demolition of the old wooden observatory. The erection of the large room and tower of the new observatory building was commenced in June 1854 and was completed in June 1855. The total cost of the above buildings as erected on the Northeast corner of the present Galbraith Engineering building was \$13,100. The main stone observatory building was subsequently moved stone by stone to its present location between Hart House and the University Library.

The Director's residence was built close to the new Observatory

by the University of Toronto at a cost of \$4,840, also two cottages for the observers at a cost of \$5,020. Mr. Kingston did not take up his duties at the observatory until this building program had been almost completed.

From 1873 to 1882 there was a long haggle between the University and the Federal Government regarding the ownership of the observatory buildings, in which Mr. Kingston was involved. The following sentences in the concluding paragraph in John Langton's report sets out the University's position as of June 9, 1879:

"If arrangements could be made so that the Observatory shall continue to be, as was originally intended, an important adjunct to the University ..... the funds of the University have been usefully employed in connection with it. But, if it is to be entirely disassociated from the University ..... we should have a right to resume possession of the Director's house built with our funds on our own property should it be vacated by the present Director and Professor of Meteorology".

Under Mr. Kingston the magnetic program was relegated to second place and meteorology became first. Meteorology became a subject in the University curriculum with a prescribed text book and examinations and scholarships. Mr. Kingston gave the lectures and in the fourth year there was a prize of five dollars offered to the student standing highest in the course.

Mr. Kingston wrote an article entitled "On the Employment of the Electric Telegraph for Predicting Storms" for the Canadian Journal Vol. II 1857 p. 177. According to Kingston the annual loss by shipwreck in the Great Lakes was estimated to be about eight million dollars a year. Many of these shipwrecks would have been prevented if timely notice of coming gales had been given by telegraph. Gales in some localities prevailed for many hours, sometimes even two or three days and travelled only a few hundred miles. According to Kingston storms were subject to definite laws which may be discovered from extended observations. With the concurrence of telegraph companies, the operator at certain telegraph stations could telegraph to Toronto the time of commencement of a gale at his station. The Toronto Telegraph Company would, in turn, inform the Observatory. The Observatory staff would then relay the gale data to agents located at various ports to hoist storm signals wherever storms might be expected.

Prof. Kingston slowly, but persistently, obtained the necessary observers and provided them with the necessary meteorological equipment. He also secured the cooperation of the Chief Signal Officer at Washington, D.C. who transmitted reports from 15 U.S. stations as far as Buffalo, N.Y. According to Prof. Kingston's annual report for the year ending December 31, 1879, there were 19 telegraphic stations in Canada and during the year 712 warnings were issued of which 591 were fulfilled.

Through his enthusiasm and efforts, Prof. Kingston was able to secure a large number of voluntary observers throughout all parts of Canada during the period 1858 to 1871. That year the Dominion of Canada took over the accounts of the Meteorological Service from the Provincial Government and provided a grant of \$5,000 to permit increasing the number of stations and having a number of them report daily to the Observatory. Experiments were made for some years in making weather predictions and commencing on October 1, 1877, weather forecasts were telegraphed to 75 places in Canada.

Prof. Kingston's health began to fail in 1879 and he retired from the Meteorological Service in 1880 and died in Toronto on 21 January 1886. He was married in 1851 to Henrietta Malone daughter of Capt. Edward Malone, Royal Naval Hospital, Plymouth. They had one son George Malcolm.

Certified to be a true copy of a Minute of a Meeting of the Committee  
of the Privy Council, approved by His Excellency the Governor  
General on the 1st May, 1871.



On a memorandum, dated 28th April, 1871, from the Hon. the Minister of Marine and Fisheries submitting Professor Kingston's report in reference to the proposed expenditure for Meteorological and Climatological purposes - and stating that he has carefully considered the scheme of expenditure proposed by Professor Kingston, and generally approves of the same - that he therefore requests authority to make such arrangements to carry out the intentions of Parliament in connection with this branch of the public service, and that the expenditure of the appropriation of \$5,000 made for that purpose be placed under the direction of the Department of Marine and Fisheries and the sum of \$4000 be appropriated for the purpose recommended.

The Committee submit the above recommendation for Your Excellency's approval.

  
Clerk of the Privy Council.