

# History of Canadian Geology: Charles Jackson, M.D. (1805-1880) and Francis Alger (1807-1863)

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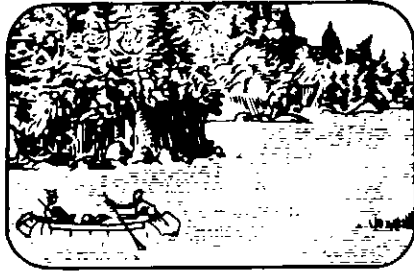
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# Features



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## History of Canadian Geology

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### Charles Jackson, M.D. (1805-1880) and Francis Alger (1807-1863)

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#### Further information on their charges of plagiarism against Abraham Gesner (1797-1864).

A document written by the Bostonians Charles Jackson, M.D. and Francis Alger, charging the early Maritime geologist Abraham Gesner, M.D. with plagiarism of their geological work in Nova Scotia was recently described (von Bitter, 1977). This document, a letter sent February 25, 1840 and addressed to the House of Assembly of Nova Scotia, requested the government of that province belatedly to recognize and acknowledge their work, and indicated that "A copy of the communication had also been addressed to Governor Sir Colin Campbell, but no acknowledgement of it has ever been received from him; nor are we aware that any note has ever been taken of it". Neither the

Nova Scotia Archives (B. Fergusson, 1976, pers. commun.) nor the Nova Scotia Legislative Library (S. Elliot, 1976, pers. commun.) had any record of either of these communications. (Copies of the 1840 letter have been deposited at the Nova Scotia Museum, the Nova Scotia Archives, the Nova Scotia Legislative Library, the New Brunswick Museum, the Central Library of the City of Toronto and the Canadiana Section of the Royal Ontario Museum.) It was therefore of great interest to discover that the letter to Governor Campbell is still in existence and is preserved in the Baldwin Room Manuscript Collection in the Central Library of the City of Toronto.

This earlier letter to Governor Campbell (Fig. 1) is dated June 10th, 1837, and is written only a year after the publication of Abraham Gesner's *Remarks on the Geology and Mineralogy of Nova Scotia*. It is far more restrained in its charges against Gesner and states only that "it (Jackson and Alger's published work) has evidently served Mr. A. Gesner as the basis of his essay entitled 'Remarks on the Geology and Mineralogy of Nova Scotia' ". Most importantly, the letter of June 10, 1837 supports the authenticity of the later one dated February 25, 1840. It also provides a measure of Jackson and Alger's less hostile initial reaction to Gesner's publication than does that written three years later after their more polite attempts to gain recognition for their pioneering work had been ignored.

Abraham Gesner received immediate and tangible rewards for his book on the geology and mineralogy of Nova Scotia: Jackson and Alger in their letter to Governor Campbell noted that Gesner was awarded the sum of £100 by the Nova Scotia House of Assembly for his services. In my earlier article (von Bitter, 1977) I listed probable reasons why Gesner was given this recognition freely and without question. It is less clear why Jackson and Alger's extensive earlier work was not recognized. One explana-

tion is that these two authors (Jackson and Alger, 1828, 1829) chose a scientific medium, *The American Journal of Science and Arts*, to publish their findings unlike Gesner (1836) who chose to publish his book privately. Publication in *The American Journal of Science and Arts* by Jackson and Alger probably served to insure its unavailability to a more general readership, while Gesner's book would likely have been widely available from booksellers. After Jackson and Alger republished these four articles in yet another scientific and literary journal, *The American Academy of Arts and Science* (1832a, incorrectly cited as 1831 in von Bitter, 1977), they were republished in book form (1832b) (Fig. 2). Jackson and Alger's letter of June 10, 1837 to Governor Campbell provides important information why the republication in book form could not possibly have resulted in wide-spread distribution. They wrote that "their Memoir was contributed freely to the Scientific World no copies having been offered for sale on their account. The 100 copies extracted from the Transactions of the Academy were freely distributed to learned Societies in various parts of the world". The fact that no copies were sold in bookstores and only 100 copies were available for distribution accounts not only for the fact that their work was not widely acknowledged but also for the fact that this 1832b republication must be among the scarest of books, not only among Canadian geological literature, but among Canadiana in general. I know of only five copies in existence, these being at the Nova Scotia Museum, the Nova Scotia Archives, the Nova Scotia Legislative Library, the New Brunswick Museum and the Central Reference Library of the City of Toronto.

In my earlier discussion of Jackson and Alger (von Bitter, 1977) I made reference to the fact that it remained uncertain as to who had written the

Boston June 10<sup>th</sup> 1837

The Excellency Sir Colin Campbell  
Major General, Knight, Commander of the Most  
Military Order of the Bath, His Governor &  
Commander in Chief of the Province of Nova Scotia  
& its dependencies, &c. &c.

May it please your Excellency  
to accept from the authors, with their best  
respects, a copy of their Memoir on the  
Mineralogy & Geology of Nova Scotia  
in Essay which was originally published  
in the American Journal of Science & Arts  
Vols XIV XV in 1828, the surveys having been  
made in 1827 - & subsequently continued in  
1829 - The present copy is an extract from  
the Memoirs of the American Academy's  
transactions published in Boston 1832

While collecting the observations for  
this work, the authors devoted themselves for  
nine months to arduous Geological labours among  
the mountains & precipices of Nova Scotia &  
expended more than a Thousand Dollars in  
the country while prosecuting their work -

This they did purely for the advancement  
of Science without any expectations of pecuniary  
reward, & their Memoir was contributed  
freely to the Scientific world No copies  
having been offered for sale on their account.

The 100 copies extracted from the transactions of the Academy, were freely distributed to learned Societies in various parts of the world, & the work was noticed in the most favorable manner by the Emperor of Russia in the Review *Impériale* given at Paris - The world also remarks that the whole Memoir, from the American Journal of Science, was republished in the columns of one of the Halifax N. S. newspapers so as to reach every Citizen of the Province in 1828, as may be seen in looking into the files of newspapers for that year -

Your Excellency having been appointed to the Command of the Province of Nova Scotia since the period of our labours on that country, it occurred to us that the present Memoir might not have reached your eye since you have been engaged in the intensity of that Province, & that you might perhaps feel willing to look over its pages during your travels in the country.

It is confessedly imperfect, & we beg you to remember that we were but Strangers in the Geology of a new country.

We are more particularly anxious at the present time, that your Excellency should look over this work, since it has evidently served Sir A. Geonor since the basis of his essay entitled "Remarks on the Geology & Mineralogy of Nova Scotia" published at Halifax N. S. 1835 a work for which the Honorable Assembly at Halifax Voted that gentlemen the Complimentary present of £1000 as a mark of the estimation in which they held his services. "We would be more highly gratified than ourselves by the development of the native talent of Nova Scotia, or

Figure 1

Letter by Charles T. Jackson and Francis Alger of Boston, addressed to Sir Colin

Campbell, Governor of Nova Scotia, dated June 10, 1837. (Courtesy of the Metropolitan Toronto Library Board).

document of February 25, 1840 and who had edited it prior to it being sent to Nova Scotia. I speculated that the original was written by Dr. Jackson and edited by Francis Alger. With the discovery of the 1837 letter, written and signed by Dr. Jackson, it is now possible to compare his handwriting and signature with that of the 1840 letter, as well as with another known specimen of Dr. Jackson's signature. Such comparison suggests that the letter of 1840 was not written by Dr. Jackson since both the signature (Fig. 3a) as well as the handwriting of the 1840 letter (see von Bitter, 1977) are much neater and more carefully formed than are the same features in either the 1837 letter (Fig. 1, 3b) or in the signature dating from an unknown period (Fig. 3c). The penmanship of the 1840 letter as well as the signatures at the end must therefore be attributed to an unknown person, possibly a secretary.

My speculation, however, that the 1840 letter was edited by Francis Alger prior to it being recopied and sent to Nova Scotia is substantiated. When known specimens of Alger's handwriting and signature (Fig. 4) are compared with that of the edited and added portions of the 1840 letter (Fig. 5) it is clear that Francis Alger corrected and edited this letter.

Before concluding, a word or two about the less well-known Francis Alger (Fig. 6) are in order. Although without formal education beyond "common school" (Jackson, 1865), Francis Alger became interested in mineralogy in 1824 at the age of seventeen. In 1826 he accompanied his father to Nova Scotia where his father was to erect a furnace for the smelting of the bedded iron ores of Devonian age which occur at Clementsport.

Francis Alger enthusiastically collected minerals in Nova Scotia and on his return to Boston published the first

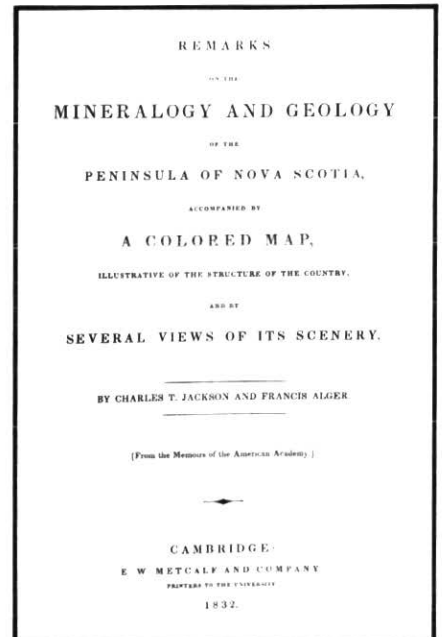


Figure 2

Title page of book entitled "Remarks on the Mineralogy and Geology of the Peninsula of Nova Scotia, accompanied by a colored map, illustrative of the structure of the country, and by several views of its scenery", published in 1832. (Courtesy of the Metropolitan Toronto Library Board).

would more heartily rejoice to learn that merit was duly appreciated by Government, & we confidently hope that many original discoveries will yet be made by your Citizens, for the field is but just entered & a full harvest of discovery is yet to be reaped.

Since we found the Province as pioneers in its Geology, the past & present history of your Mining interest prove that our researches have been of great value to the Country; & the history of that department of Commerce & the arts will satisfy you that the Mineral Wealth of Nova Scotia began to be appreciated from 1827: we should be wanting in justice to ourselves & ~~posterity~~ did we not humbly claim that our services should be acknowledged in a similar manner to those of the Gentlemen whose essays we have noticed - Indeed one of the Members of Halifax has already claimed for us such an acknowledgment, which we should be happy to receive as a testimonial of the good opinion in which our services are held by your enlightened Government.

With the most profound respect & we have the honour to be  
Your Excellencies most Obedt Servt

Charles T. Jackson  
Francis Alger  
per C.T. Jackson

No 21 Green Street  
Boston -

A Signed Charles T. Jackson  
Francis Alger

B Charles T. Jackson  
Francis Alger  
per C.T. Jackson

C Respectfully  
Your Obedt Servt.  
Charles T. Jackson

**Figure 3**  
a) Signatures from letter sent to the Nova Scotia House of Assembly February 25, 1840. (Described by von Bitter, 1977; b) Signatures from letter sent to the Governor of Nova Scotia, Sir Colin Campbell, dated June 10, 1837. (Courtesy of the Metropolitan Toronto Library Board); c) C. T. Jackson's signature. (From Woodworth, 1897).

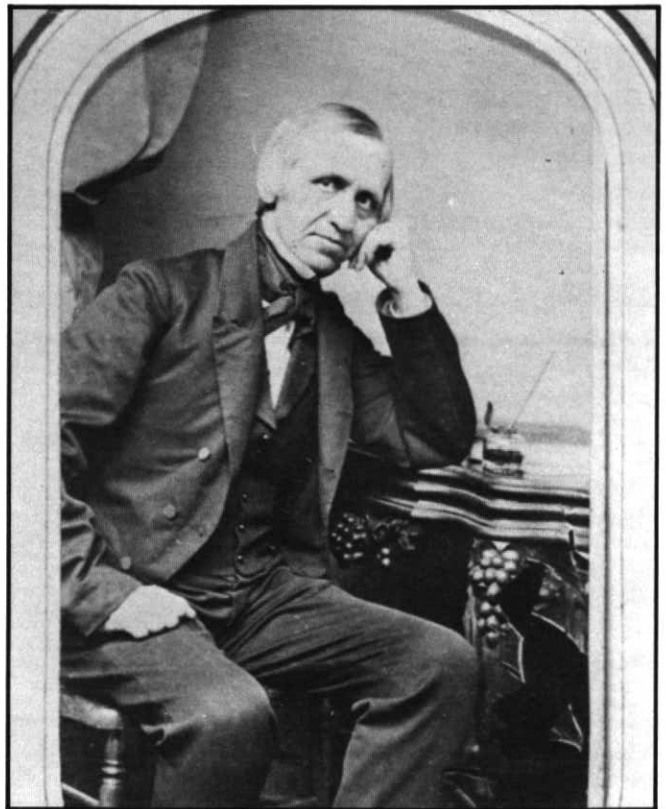
Dear Sir,

I believe you told me that Mr Archer of Liverpool had been made a corresponding member of our Society. To I have informed him. I have just got a letter from him from which I give you an extract which you will oblige me by reading at the next meeting. "At the last meeting of our Society I made application for a set of casts of the Christchurch fossils, for your Society which was granted, and we should be glad of both a cash and despatch of the impressions of the orthidontinae & gigantaria of the coal would not be very much." You know he must see the drawings or those of the fossils of the Christchurch which I gave to the Society. And as he proposes to send the plaster casts, I should advise the Society to obtain them from Kitchcock, of which we have one in our collection, and forward it with a drawing to Mr Archer - He adds "it will take some little time to prepare, but by the first opportunity which offers after they are ready, I shall send them". Please let me know what the Society think of the plan -

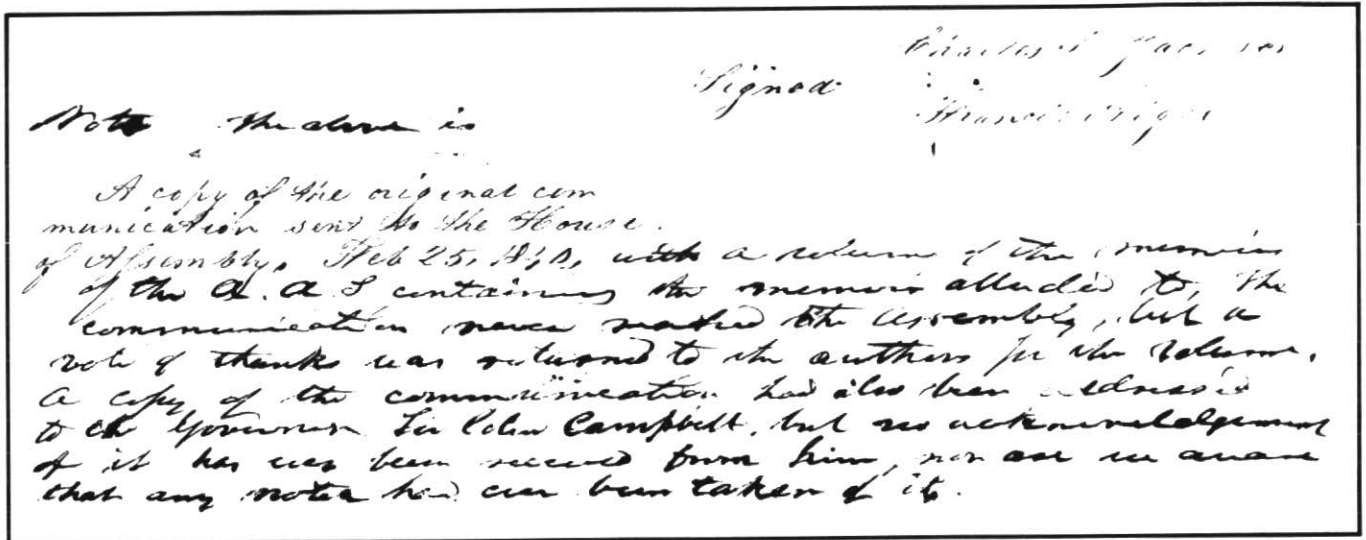
Yours very truly  
F. Alger

2 sent by Kitchcock  
near Springfield

**Figure 4**  
Francis Alger's handwriting and signature. Letter sent by Francis Alger to Thomas Bouvé of Boston. No date, but after 1841. (From BSNH Manuscripts, Boston Museum of Science).



**Figure 6**  
Francis Alger (1807-1863). (From Photograph Album of the Boston Society of Natural History Collection, Boston Museum of Science).



**Figure 5**

Portion of letter by Charles T. Jackson and Francis Alger of Boston to the Nova Scotia House of Assembly. The part shown is

believed to have been added by Francis Alger sometime after the letter was sent on February 25, 1840. It also seems likely that the letter described by me (von Bitter, 1977) is

the original which was edited and corrected by Alger prior to it being recopied and sent to Nova Scotia.

reports on the mineralogy of Nova Scotia (Alger, 1827). He returned to Nova Scotia in 1827 in the company of Dr. C. T. Jackson and the geological explorations and observations made by them in that year and again in 1829 resulted in a series of joint publications (Jackson and Alger, 1828, 1829, 1832a,b) on the mineralogy and geology of Nova Scotia. Francis Alger remained an assiduous collector of minerals for many years and he contributed a number of mineralogical articles to the scientific journals of the day (Jackson, 1865). He was the Curator of Mineralogy to the Boston Society of Natural History for a number of years, until the pressure of business forced him to resign. Although none of his obituary notices (Anonymous, 1864, 1865; Jackson, 1865; Bouvé, 1880) have stated what the nature of this business was it appears, from his father's concern with iron furnaces, his own interest in the iron and zinc mines of Sussex Co., New Jersey, as well as the fact that he died as a result of exposure while "perfecting shrapnel to be employed in restoring the union of our divided states" (Jackson, 1865), likely that Alger was engaged in a family business concerned with the mining, smelting or manufacture of iron.

#### Acknowledgements

I am grateful to Miss Joan Burke, ROM, for editing and typing the manuscript and to Mrs Hilary Geberl, ROM, for assistance in the preparation of figures.

Ms Sharon Hick, Librarian, ROM, kindly assisted in locating the Alger portrait and correspondence. It is a pleasure to acknowledge the assistance of Mrs. Barbara Wiseman, Reference Librarian, Boston Museum of Science in making this portrait and correspondence available. Similarly I wish to thank Miss Sandra Alston, Central Reference Library of the City of Toronto for making a copy of Jackson and Alger's letter to Governor Campbell available.

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