

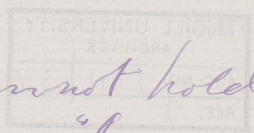
McGILL UNIVERSITY ARCHIVES
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New Haven

Feb 4th 1871

Dear Sir

When first I came to New Haven you asked me to write occasionally and inform you with regard to the Scientific School; I regret that ^I never have done so, partly owing to procrastination & partly from diffidence, thinking that you would not value the opinions of a mere student. I have since learned, Sir, that if we expect to succeed in this world, & especially in these stirring times, we must be students all our lives, & that a college course is but an imitation into a life of study. It was your instructions which first inspired me with a love of science & to-day it is your very excellent "University Lecture" which incites me to write. I confess Sir, that since reading



it I feel humiliated & cannot hold my head very high when I say "I am a Canadian". None can more fully appreciate the want of science education in Canada than one who has been obliged to go to his neighbors to stock his little brain with what he cannot get at home, even if that home be a great Dominion which would fair rank itself among the educated nations of the world.

I repeat it - for, it is humiliating; but God grant that this disgrace may ere long be removed from our land.

The efforts which you have made will, I doubt not, be ultimately crowned with success. Montreal ought to be the place to take the initial step, but can it be that Toronto is to take the lead?

Only last week two gentlemen from Toronto came to visit the school, saying that they had been sent by the Dominion

government which intended soon to establish a school of technology in Toronto.

The Sheffield School is in many respects an admirable pattern & its improvement even during my stay here has been very marked. I was rather unfortunate in coming here at a time when the school was in rather an unsettled condition. ~~None~~ means were required in order to establish the school upon a firm basis, & much of the time of several professors had to be devoted to "begging".

As you doubtless know four or five of the professors were offered important positions elsewhere, but without exception they "stuck to the ship" although in a pecuniary point of view they might have bettered their situation very considerably.

During the year the department of Mechanical Engineering has been very

much improved. In the first place
a new professor— Prof. Howbridge— was
appointed, thus relieving Prof. Lyman
who formerly had charge of this depart-
ment in addition to his other duties;
then a new drawing room was fitted
up in the building of the Yale School
of Art. Prof. Howbridge had been for
some time connected with the novelty
Iron Works in New York, & through his
influence the elaborate drawing desks of that
institution together with several thousand
drawings & working models were procured
for the school. The drawing room is ad-
mirably arranged and students have
access to it at all hours as well as to the
models which are ranged on shelves
all round the room. Many of these
models were recently brought from
Europe & comprise all the most important
mechanical movements. Students are

at once set to work drawing these models & the interest is of course far greater than when they merely copy the drawings of others.

In the Chemical laboratory a new instructor - Mr Allen - has likewise been appointed. Mr A - is a man of very considerable experience in ~~any~~ analytical Chemistry & metallurgy, & he has that faculty, which so few possess, of readily imparting his knowledge to others.

With regard to the methods of teaching here, in all possible cases recitations are substituted for lectures or the two combined. As much importance is attached to the answers in these recitations as to those in the examinations which are held at the end of each term.

This recitation system may seem to some too much like schoolboy treatment

but it certainly has much to recommend it & in my mind is far ahead of lectures. The students are much better grounded & by the time for the examinations everything is so impressed upon their minds that there is not nearly so much of that detestable "cramming".

There is one direction in which this school is very deficient; I refer to a mining course. There is no professor of mining, and students wishing to follow this profession are merely advised to take the three years course in civil engineering & afterwards a year in the laboratory when there is a sufficient number of students, Prof. Rockwell of the Institute of Technology Boston, is engaged to come & give a few lectures. This course is however short &

necessarily very imperfect.

In conclusion Sir, allow ^{me} to express the hope that ere long Montreal may be blessed with the means of giving to any Canadian a sound scientific training. It is this scientific training which has produced & is producing such wonderful results in the United States. Manufactures are rapidly increasing, railroads being built, careful geological surveys being made, mineral resources developed, & many who but a short time ago scoffed at science are now obliged to confess that it is a power which will largely influence the destinies of their nation. Hoping that you will excuse the liberty I have taken in writing to you ^{at} such length I remain

Yours very sincerely
B. Harrington

Principal Dawson L.L.D. F.R.S. &c

Hampton
Oct 14/1

P. S. I send you the last report of
the school, containing ~~Prof. Rowley~~
the catalogue of the Hillhouse li-
brary recently presented by Mr. Sheffield.

I have disposed of the copies
of the University Lecture which you
were kind enough to give me & would
be thankful for two or three more if you
have them to spare. Prof. Gilman &
one or two others asked me for a copy
last evening.