7

Papers, March 1879

Dear Dr. Clarke

I regret that I am unable to furnish a definite response to the enquiry made by Miss Clark in the letter which you have submitted to me. Had I the time for research among the Trans: of the Academy of Turin & other scientific publications of Italy I might have better success. Thus far I have not met with any acct of "the long tract of broken stones & rocks" near Roveredo to which Miss C.'s interesting letter refers, nor have I any knowledge from personal observation of the extent to which glacial phenomena are exhibited in this region. Speaking however from a general impression, derived from my reading, in regard to the surface-geology of the southern slope of the Alps, & the adjacent regions on the south I should say that there is no reason a priori against the supposition of the glacial origin

of the stone deposit wh Miss Clark describes. It is important however towards the settlement of the question that we should know whether these stony fragments present in part at least the scratched & more or less rounded forms of a true drift or are merely angular broken stones; & furthermore whether their mineral nature shows them to have been ~~brought down from the north~~ derived by transportation from the Alpine slopes towards the north or to be referable to the rocks of the nearer ~~high~~ elevated land.

~~From~~ The phrase "broken stones" applied to them by Miss Clark leads me to ~~suspect~~ suspect that she regards them as angular fragments but little modified by attrition.

As regards the question of the former glacial conditions in ~~which~~ the district where this deposit is found I think that there can be no doubt that during the ice period the glaciers of the Southern ~~face~~ of the Alps now so insignificant extended along the valleys ~~including that of the Adige into the more~~ into the more level regions approaching the Po.

~~As evidence this seen in the great~~ conclusive evidence ~~As evidence~~ of this is seen in the great moraines of the Dora Baltea &c near the outlet of the Val d'Aosta & the similar deposits found at the Southern extremities of all the great Italian lakes from Orta & Maggiore on the East to Garda on the West.

It would seem therefore that the valley of the Adige ~~could not have escaped glacial times~~ must in must during the Ice period have been the seat of a glacier extending over & far Southward of the ground in wh this stony deposit is now seen.

~~Perhaps~~ That these general suggestions in the absence of definite local information may ~~perhaps~~ be of some use to your sister in her further inquiries.

~~With kind regards~~ I remain ~~believe me~~ yours faithfully

WBR

Boston

March 3d 1879

117 Marlborough St.
March 3. 1879.

Dear Mr Choate

I send you herewith a copy of the Catalogue of the Institute of Technology for the current year, in the belief that you take an interest in the Institute, having a pleasant recollection of the interest you formerly took in the affairs of Applied Science, and in the hope that you will sympathize with our efforts in our first efforts towards establishing the Institute — I do not doubt that you will be interested to learn that we are now doing a little work of practical scientific education, I therefore hope

that you will be induced by
a reading of the Catalogue to
afford me at an early
day to shew you our
Laboratories & other means
of Instruction, now in
active Operation.

appealing to the
we are ~~[illegible]~~ ~~others~~
~~You are probably aware~~
~~we are asking by~~ from the
~~that the~~ friends of ~~the~~ practical
Edn. for additional funds to enable
us carry on our work unimpaired
& have already obtained subscriptions
amounting to more than 50,000; but
~~two~~ at least
we need ~~a sum~~ ~~at least~~ twice
that ~~amount~~, sum to place the
Inst. permanently in a satisfactory
Condition & I trust that
after you have satisfied yourself
of the solid value of our work
you will feel inclined to
help our subscription.

In any event ~~&~~ I shall be happy
to see you at the Inst., ~~at any~~
~~time that~~ whenever it may suit
your convenience. I remain

Yours very truly

William B Rogers

X

1321 Vermont Ave
Washington D.C.
March 4" 79

Prof Rogers.

Dear Sir,

I send you the "Record" containing the memorial services of our lamented friend, I regret the appearance in print of S.S. C's spread eagle as exibited on that evening but here it is and more! his additions to the speech (after reflection) are worse than the original. It is ludicrous to see how adherent he is to the wonderful theory "Magnetism produced by oxydation of soft Iron" (Patented by S.S. Cox) ? I hardly imagined it would be in print but it is as you will see. With kind wishes for your health and happiness I remain

Respectfully, F. P. MacLean

* S. S. Cox M. C.

117 Marlborough St.
March 5. 1879

To Ditson, Coney & Jordan

Dear Sir,

I send you herewith a Catalogue of our Institute of Technology for the current year, in the hope that you will be interested in the plan of practical scientific education which the Institute is carrying on.

We are appealing to the liberal friends of such education for additional funds to enable us to maintain our system of instruction unimpaired, and have already obtained

Subscription amounting to
more than fifty thousand
dollars towards the one hundred
~~but be need at~~
~~least twice that sum to~~
which it is the aim of the Corporation
~~place the Institute financially~~
to secure
~~in a satisfactory condition.~~

I trust that, in view of the
value of the work which the
Institute is doing for the practical interests of the
community you will
feel inclined to help our
subscription.

I append the names
of some of the friends
who have contributed from one
thousand to 10 thousand dollars
& it would give me pleasure
to place yr name on my subscription list
if your generosity will
authorise me to do so.

March 8 '79

My dear Mr Rogers

The Faculty are calling upon me for an outline of the Science and Literature Course to send to possible applicants and two such applicants representing three possible future students have already appeared. The present financial condition of the Institute precludes, I suppose the idea of the immediate appointment of an Instructor or Professor of Political Economy and therefore the present problem is to construct a Science-and-Literature course out of material now on the ground, with merely

a certain amount of clerical help - from young women perhaps - in my Department. I think it can be done tolerably well though not of course as it ought to be done or might ~~be~~ and will I hope be done hereafter - done at any rate in such a way as to be a definite step forward out of our present bad position.

I subjoin a tabular view of my part of the work. At first glance it looks a little presumptuous in me to undertake it and certainly it would be presumptuous if I had not been preparing myself during all the years I have been at the Institute for just such work and if I had not accumulated a great amount of MS. material in the shape of notes and schemes of particulars the value of which I am only just realising myself. I am prepared to find cases in each of the subjects laid down which have been shaped through a good many tentative efforts and by the help of a good deal of blundering to meet the wants of our students - and I am emboldened to say so because they begin to interest them so much. After all though they look various they are not so various as they seem; for except the drill in composition they are all differing sides of one great subject and are best treated as such - at least in

such a situation as that in which I am placed where practic Specialization is impossible both for want of time and want of teachers. What I offer then is a continuous and closely-connected course in Literature and History beginning with Dric in Rhetoric & Composition in the first year and ending with one term of Political Economy in the first term of the fourth — or it might perhaps be possible for me to fit the historical part of Political Economy into the third and so leave room for some outside lectures on Monetary Science and Finance from a practical banker or merchant in the fourth division of Edw

[March 8, 1879] x

Philbrick's course on Sanitary Engineering. My brother Edward would prize such lectures extremely well and I suppose he would like to.

With or without them however you do think the regular English work of the school would cover eight hours per week with me. Add two special exercises and the science-and-literature students would have ten hours of class-work with me. Add the requirement of additional reading in connection with these exercises and they would have all the work they ought to do with me. Our condition only is unfavorable to the necessity of their

plan - that I be relieved of drudgery. But the drudgery cannot be given up - there can ought to be a great deal more of it. There ought to be more written work - and now there will be more time for it - and it ought to be more carefully and frequently examined. There ought to be more frequent written examinations involving a great deal of labour in looking over and marking the papers. My carefully prepared lessons are half their value now, because I have neither the time nor the strength to follow them up. This is a kind of work that can be perfectly well done by a competent subordinate or subordinates, and though it would be a great deal better to have a male assistant instructor in the dept of English and History yet if our finances do not immediately allow of that I think the work can be sufficiently well done by young women whom we can likely have in the women's laboratory and elsewhere, in lieu of their fees. This however remains to be proved. At any rate I am ready to undertake the scheme provided in some way sufficient help can be afforded me to secure a greater amount of thoroughness in my work. At present I am not satisfied either with the amount of work secured from

the regular classes with the amount of labour I can now spend on the Science - and Literature Students. I am doing well enough this year because the regular students have only little time for my work - but by the departure of Prof Hosking a considerable amount of their time will be set free and it will become of the utmost importance not merely that the classes shall be well instructed in English subjects but made to do more work themselves - and the only way to get good work is to have thorough supervision

Very truly yours
W. P. Cockburn

	9 - 10	10 - 11	11 - 12	12 - 1
Monday	First year Rhet & Comp.		4th yr Polit Econ	
Tuesday		2d year Litr & History		Extra lesson Sc & Litr Students
Wed	3d year Polit & Constl History			
Thursday	First yr Rhet & Comp		4th year Polit Econ	Sc & Litr Students
Friday		2d year Litr & History		
Sat	3d yr Polit & Constl History			

[Enclosure in letter of 3/8/1879]

2/

Cambridge March 11th 1871

Dear Professor

I have just written a letter to the President of the U. S. recommending F. D. Whitney and in case he is "for any reason not available" Clarence King. Whitney informs that the place will be tendered to him but has not the phantom of a chance. She has taken back his refusal — made to King — ~~[illegible]~~ to be a candidate — and is now strongly opposed to King & in favor of Hayden! Dr Gray has also written recommending Hayden. I have not

your Shades but think he will be pleased
by Whitney. I hope you your Brewer who
could tell you a great deal about what is
behind the scenes.

Sincerely Yours
Wolcott Gibbs

Mrs Gibbs is quite well & homelike. I
hope soon to get in a few days.

Prof. Wm B. Rogers

Nautical Almanac Office,
Navy Department,
Washington, Mar 14 1879

Pres't W. B. Rogers,

My Dear Sir,

The question of the Director of Geological Survey is so far from settled that the President inclines to Hayden, who brings a vast preponderance of numbers in his favor. It is therefore very desirable that as many as possible of King's

supporters should come on in person. I beg to inquire if you cannot do so within a week. The case is likely to be decided soon after Congress meets.

Yours very truly

Simon Newcomb.

Sa

M. F. T Photo 7 7/8 x 9 5/8 – 7786

Copy

U. S. COAST AND GEODETIC SURVEY OFFICE,

To Prof. O. C. Marsh, Washington, March 15th, 1879.
&c &c
New Haven, Conn.

My dear Professor Marsh;

At your request, communicated by Prof. Coffin, I send you a list of publications by the National Academy of Sciences. I think that in addition to those mentioned, there have been at least two brief reports to Congress — probably in 1872 and in 1875, but I cannot designate them, having no copies. I will have them looked up and a set of all these publications bound as archives. The "Proceedings" contain the titles of all the scientific papers read before the Academy. There are about 500 of them by this time, a large part of which have been published in various scientific journals. Before my term as Secretary expired, I issued a circular asking each member to state where his communications had been published, in order that a suitable index might be prepared. The answers are in the hands of Prof. Coffin, but I do not know that he has done anything about the matter. × × × × × × × × × × × ×

Yours &c (Signed) F. E. Hilgard

Ann Arbor, Michigan,
March 17, 1879.

Pres. Wm. B. Rogers,
Mass. Institute of Technology,
Boston, Mass.

Dear Sir:

Having recently received the last number of your annual catalogue, and noticing therein that some portion of time in the Civil Engineering Course is assigned to the study of Graphical Statics, I desire to call your attention to my books on this subject, and have mailed you a table of contents of my Part II., on Bridge Trusses, just now issuing from the press. Part I., on Roof Trusses, Mr. Lanza has already made some use of, and I feel

assured that Part II. will be found superior to DuBois' Graphical Statics which Prof. Henck now uses. The manuscript of Part III. is nearly ready for the printer. It would give me great satisfaction to have my books introduced in the Institute, as I remember my sojourn there with great affection. Knowing well Prof. Henck's conservative disposition, I concluded to write directly to you and should esteem it a great favor if you would call ~~the matter to~~ his attention to the matter.

I am now in my seventh year at the University of Michigan, and what I have made of the course in Civil Engineering here you can see by inspection of any of our calendars of the last two or three years. I did not apply for the chair here, and that it, as well as ~~two other~~ professorships in two other colleges, have been offered me since I graduated from the Institute, I have always supposed I owed to the good offices of the Faculty there. For such strong proofs of esteem I have always felt deeply grateful. My professional labors here have been very congenial and pleasant, but we now fear that the prosperous days of the University of Michigan are likely to be numbered, if the private schemes of outside parties and the introduction of political and legislative influence shall continue to have that power in our governing board of Regents which they now have. In that case it behooves all of us to be looking elsewhere. The resignation of Prof. Watson and Prof. Morris are the results of such a state of affairs and some of the best professors

are currently reported to be threatened. The alumni and some of the people seem to be awakened to the peril, and the election in April may mend matters. New members of the board of Regents, however, will not take their seats until January, and there is a plenty of time for mischief before then. If, therefore, you may know at any time of a vacancy in a chair of Civil Engineering in a good school or college, there is a possibility that I may be willing to make a change, unless matters here take a much better course than I fear that they will. It is quite possible that you may not remember me: I was a number of the first graduating class, a classmate of Prof. Richards.

With much esteem, I am, Dear Sir,

Very respectfully yours,

Chas. E. Greene.

Boston, March 19, 1879.

To the Committee on the School of the Institute of Technology,

Gentlemen:

I received some time ago, through Dr. Kneeland, a vote of your Committee objecting to the employment of students as assistants in the field-work of my department; because no appropriation had been asked for or made for that purpose. No appropriation was asked for by me; because it has been the custom for many years to employ students in this way, and their bills have always been paid without question, though, so far as I recollect, no appropriation was ever asked for in advance.

The field-work has always been made an important part of the instruction in my department, and is highly valued by the students; because it is of such a character as to enable them to take good positions immediately after graduation. The mode of conducting it may be seen by what was done last autumn with the second year's class. This class consisted

of 20 students – 14 being Civils and 6 Miners. They received in the class-room each day before going out such general instruction in the use of instruments or in the mode of making a survey as could be given to the class as a whole. They then went into the field, divided into parties of three or four, to put this instruction into practice. Each party had an assistant, who set them at work immediately, and directed their operations, thus making available for work and instruction the whole time spent in the field – about 2½ hours.

On the other hand, when several parties were under the charge of one assistant, as was the case in the early days of the Institute, only one of the parties could be set at effective work at a time, while the rest, not knowing exactly what to do, were tempted to engage in sports, or if they attempted work, it was seldom of a profitable kind. This was very demoralizing, and made systematic work impossible. The present system was then adopted, and has proved to be a great gain. It is safe to say that the field-practice is now worth three times as much to the students as it was in those early days.

While this Department has always had under its charge more students than any other, its expenses outside of the salaries have been exceedingly small. It has had no expensive laboratories provided for it, and has had scarcely any additions to its appliances for many years. Under these circumstances, it is hoped that the small sum needed to carry on effectively an important part of its work will not be refused.

As the number of parties that will go out the coming Spring is smaller than usual, and as the pay can now, I think, be reduced from 40 cents to 30 cents per hour, the amount required for assistants this Spring will not probably exceed 80 dollars. The appropriation of this sum is respectfully requested.

Jno. B. Henck

X

Mass. Inst. of Technology —
Department of Architecture.
March 20. 1879.

President Rogers —

Dear Sir.

I enclose the letter of the Curator of the Museum of Fine Arts, which you have referred to me.

I think that the Corporation of the Institute can deposit with the authorities of the Museum, in accordance with the expectation of its founders, a chief part of the casts and stained glass now in the Architectural

Museum. They would be quite as useful to us there as here, and would indeed gain in usefulness by being associated with other objects of the same kind. The students in this department have free access to the Museum of Fine Arts at all times, and no practical inconvenience would result from the change.

Moreover the space now occupied by the casts is much needed for collections of another sort. It is probably practicable, at little or no expense, to fill all the space at the disposal of this department with specimens of building appliances, the lack of which is a great hindrance to the more practical part of my work.

I should accordingly be very glad to have the Corporation vote to deposit with the authorities of the Museum of Fine Arts, until further notice, such of ~~the~~ collections of this Department as they may wish to receive and as, in my own judgment, the interests of the Department permit.

I am very truly yours

William P. Ware

Professor of Architecture.

MUSEUM OF FINE ARTS
BOSTON MASS FOUNDED AD 1870
ART INDUSTRY EDUCATION

March 20. 1879

Wm. B. Rogers Esq
President of the Institute of Techology

Sir. I am directed by the Trustees of the Museum of Fine Arts to ask what works of art the Corporation may be disposed to deposit with the Museum.

It may be remembered that at the foundation of the Museum the Institute offered its assistance and has ever since been represented on the board of Trustees.

A hall for Architectural Casts is now to be opened and the additions that the Institute might make to the collections owned by the Museum would add greatly to the value of the whole, considered from the Educational no less than the artistic point of view.

With respect I am yours &c

Chas. G. Loring
Curator

Physical Laboratory,
Mar. 26, 1875.

My dear Professor Rogers —

I have drawn up the inclosed schedule which gives a more definite statement regarding my work in connection with the Boston University, than that given in my letter written in January last.

A reference to that letter will show the circumstances under which my additional labors were assumed: the present shows what they are.

If any points are not made clear, I shall be glad to make them so, verbally or otherwise, if you so desire.

Hoping that the

Committee will appreciate the justice, and hence in the end advantage to the Institute of not proposing any change in our remuneration for this special work, I am as ever

Yours very truly

Chas. R. Croft

Committee will confer with the
Faculty, and have in the end
substituted I the Constitution
and fully carry out strength in
an amendment by which Pre-
sit work, of course we have
Yours very truly
John D. Cox

Forest Hills Hum

March 27th 1879

Mr E. Atkinson

My Dear Sir

Referring to the subjects of our brief conversation yesterday on the street, on further reflection, in view of the fact that I find there is a deep seated feeling of dissatisfaction amongst the boys. I write this to suggest that you cause the subject to be considered in the committee on the school. I find that out of 13 in the class only Eleven have signified their wish to have a course of instruction in Political Economy instead of Logic. It seems that the boys sent in a petition to the Faculty to this effect signed by nine and two others it is understood, would have signed it if they had not been absent on account of being ill

I am informed that Prof Atkinson is ready ~~to~~ and willing to give the instruction in Political Economy and if there are two of the boys who wish to go on with Logic, it seems to me that they should be permitted to do so. It seems to me that the instruction in the School should as far as is possible be given to suit the wants of the boys and not be given simply because we have teachers who would not be employed unless they can teach in some specialties not wanted by the boys It is my opinion that for the good of the School this matter should be considered by your Committee at once

The department of drawing under Instructor Mudge I have understood has never given satisfaction to the boys

Yours Truly W. D. Ross

Copy

U. S. Coast and Geodetic Survey Office,

Washington, March 27th, 1879.

To Prof. O. C. Marsh;
&c &c
New Haven, Conn.

My dear Prof. Marsh;

In addition to the documents which you have received, I find that the following report has been sent to Congress, of which no copies are in my possession, (no extra copies having been printed):

Senate Mis. Doc. No. 101, 42nd Cong.
3rd Sess.

Being the report of the Proceedings of the Academy at three sessions, viz.: April 18, 1871; April 16, 1872; and Nov. 20, 1872. Appended to this report are: the Act of Incorporation and amendment thereto; the Constitution of the Academy, with list of Officers in 1872, and list of papers presented during the three sessions.

Between this and your recent reports (on Surveys of the Territories and on the Operations of the Academy during the year 1878)

nothing appears to have been submitted to Congress. [except the report of the Committee of the National Academy of Sciences appointed to investigate and report upon the usefulness of a certain process of water-proofing in respect to its increasing the durability and security against counterfeiting of notes]

Although the Constitution provides for an annual report to Congress, such reports are not called for by the Act of Incorporation. While therefore the late President might have had some occasion for apologizing to the Academy for not having complied with that provision of the Constitution, there is no need of apologizing to Congress for the omission + x x x x x x x x x x x

Very truly
Yours &c
(Signed) J. E. Hilgard

List of Publications of the National Academy of Sciences.

(Furnished to Prof. O. C. Marsh)

(1) Report of the National Academy of Sciences for the Year 1863
8° 118 pp. Washington. Govt. Printing Office.

(2) Annual of the Nat. Acad. of Sciences for 1863 – 1864
Small 8° 112 pp. Welch, Bigelow & Co
Cambridge, 1865.

(3) Annual of the Nat. Acad. of Sciences
for the year 1865.
Small 8° 130 pp. Welch, Bigelow & Co
Cambridge 1866.

(4) Annual of the Nat. Acad. of Sciences
for the Year 1866 Small 8° 154 pp.
Welch, Bigelow & Co
Cambridge 1867.

(5) Memoirs of the Nat. Acad. of Sciences. Vol I.
4° 343 pp. Washington. Govt. Printing Office. 1866

(6) Senate Mis. Doc. No 44, 40th Cong. 1st sess. including:
Report of Proceedings of the Academy during the year 1866 pp. 1–56, and
Manual for Inspectors of Spirits pp 1–38.
& 94 pp.

(7) Senate Mis. Doc. No. 106 40th Cong. 2nd sess.:
Report of Operations of the Acad. for year 1867. Ordered to be printed July 11, 1868.
8° 44 pp.

(8) National Acad. of Sciences – Biographical Memoirs, Vol I.
8° 343 pp. Pub.d by Home Sec.y 1877.

(9) Nat. Acad. of Sciences Proceedings Vol I
8° 119 pp. Pub.d by Home Sec.y 1877.

HENRY WADSWORTH,

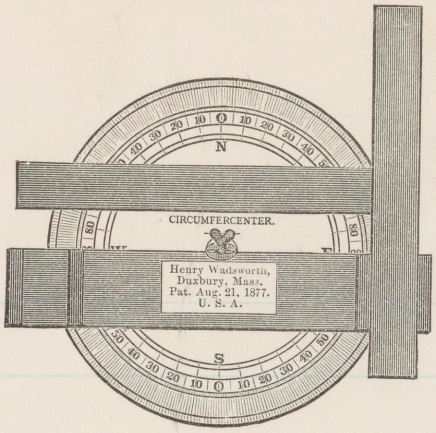
Proprietor and Inventor

OF THE

Patented in the

UNITED STATES & EUROPE,

August 21, 1877.



A SCIENTIFIC

—AND—

Short Hand Method

To Draw A MAP or PLAN,

Determine Distances &c.

Duxbury, Mass.,

March 27th 1879.

To the President of Mass. Institute of Technology
Boston, Mass.

Prof William B. Rogers,

Honorable Sir,

If it will be acceptable to the managers of the "Institute of Technology" I hereby Donate to the Institute, the "Circumfercenter" that I had the honor of exhibiting & explaining before the "Society of Arts" on the evening of the 27th inst.

The Instrument may be used in practice, placed among collections, or otherwise, as the board may elect.

Most Respectfully
Your Obt. Svt.
Henry Wadsworth.

Prof Wm. B. Rogers,
Pres. Mass. Inst. Technology

Mass. Institute of Technology
March 28. 1879.

Henry Wadsworth Esq.

Dear Sir.

Your letter presenting to the Institute a specimen of your ingenious invention the "Circumferenter" has been received.

In reply, I beg to convey to you the cordial thanks of the Institute for this very acceptable gift & to assure you that it will be valued & preserved as an interesting addition to the ~~graphical~~ instruments ~~of measurement~~ ~~already~~ for graphical work already belonging to the Institute.

Regretting that the weather & my delicate health ~~prevented~~ deprived me of the pleasure of hearing your account of the Instrument last evening at the Soc. of Arts

Yours truly

C. B. R.

[March 1879]

Institute Matters –

Comm: on School –

1. Decision as soon as possible – the professors which Mess.rs Nichols & Crosby are to have on of the Best, New, furnishing Schools – they seem unwilling to undertake their services – at a loss, absolute Am.t their now –

2. Letter of Trustees of Mess.: of F. Ar. h – in regard to depositing some of our Architectural Casts – in the new Hall of the Museum to be devoted to the exhib.n of such objects, Thus urging that the Inst.: either directly or indirectly agreed to aid the Museum in this way.
Read Warren's letter to W B R on the above

3. Consider the expediency of having an entrance Exam.n for the Inst.: held in Chicago – as suggested by the Letter of Chicago City – & approved by the Faculty,

4. Recommend to Corp. in Vote – notwithstanding the Faculty that the Corp.: shall feel bound hereafter to make formal Charges if they have found to be deficiency – before the 1st of Oct. Prest. in – the Way of retrenchment –

5 – Letter of Prof. Atkinson – on Course of Science & Literature.

6. Letter of Prof. Hench – asking to be allowed $80 for additional apparatus for field practice –

7. Consideration What action is to be taken as to the Meth. Chem hereafter.