3

Papers, November 1878

EDWARD ATKINSON,
131 DEVONSHIRE STREET,
BOSTON, MASS.

Dear Sir

I submit the enclosed for your consideration — I am sure some such action is needed

Yrs sincerely
EA

Nov 5. 1878

[Enclosure in letter of 11/5/1878]

From the best information that we are able to obtain we are led to believe that a considerable part of the falling off in the income of our school is due to the position taken by the faculty to wit: that special students in particular branches must meet certain requirements in other departments as the condition of remaining in the school. We are informed that this rule has been applied in certain cases to the exclusion of students and the consequent reduction of our income, and hence it is in part the cause of our present embarrassment. As a matter of business policy this course is an error and it is entirely inconsistent with the original plan on which the Institute was founded. It is also held to be inconsistent with right methods of technical education. Let us suppose instances

A complete knowledge of modern languages may be very desirable for a chemist to possess in order that he may be able to use the languages in his course of study, but to require a complete knowledge or ability to pass our examination in language as a condition of instruction in chemistry and to exclude a special student for want of it would be an absurdity.

A knowledge of English grammar may be very desirable

to an engineer but is not essential; an engineer who has mastered the principles of his profession and who can understand the conditions of a given problem will not find himself incapable of expressing its conditions even if he does not know how to parse a sentence or to define the difference between a conjunction and an adverb.

It is therefore held that special students should be admitted and retained in any and all departments of the school without other conditions than such as are requisite for the maintenance of discipline and to prevent interruption on the part of those who are not studying for a degree, when instruction is being given to those who are so studying.

It is believed that if this course is adopted there will be a large addition to the number of students by the inclusion of young men who are desirous to obtain a moderate knowledge of the elements of science, but who are unable or unwilling to become candidates for a degree.

The course of instruction in the department of architecture is an example of the policy that may well be adopted in all departments. This department has not graduated a large number of students but it has met a public demand and has been self-sustaining. Its being open to those who could only take a very partial and limited course has not been found inconsistent with a high standard of requirements as the condition of its degree.

The faculty are therefore advised that a change is expected to be made in the present rules to the end that special students may be admitted in all departments on easy conditions and shall not thereafter be excluded for failure in other departments than those in which they are specially entered.

That rules shall be established in respect to discipline and in the order and method of instruction consistent with the above advice.

That no student shall be dropped or excluded from the regular or special courses of instruction after his or her first year, without a submission of the case with the reasons for such exclusion to the Committee on the school or to a subcommittee thereof appointed to take cognizance of such cases.

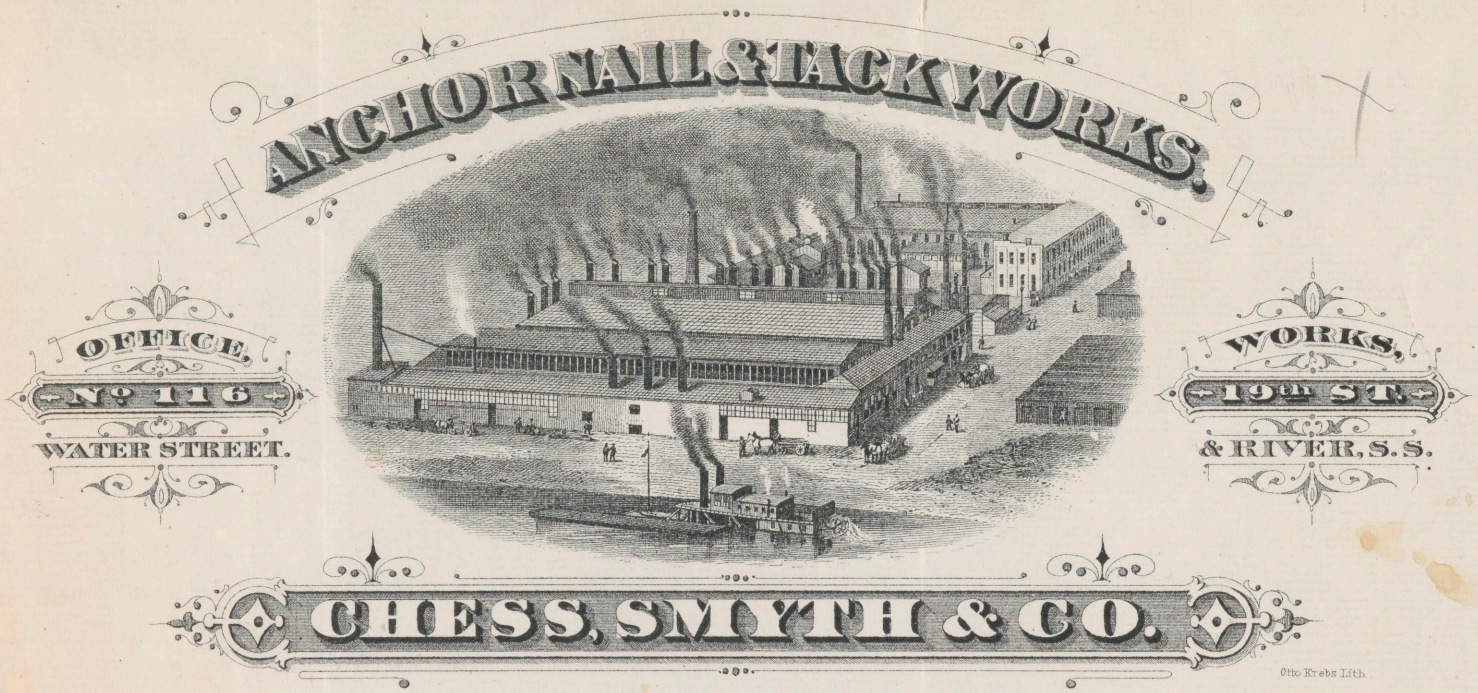
It is held that on the adoption of the method therein advised the number of the students and the income of the school will thereafter depend more than it has done, upon the ability of the several professors to attract and interest students in their respective courses of instruction, and that out of a much larger number of students, while there may not be a greater number found competent or willing to work for a degree there will yet come a greater number capable of entering business life with such a training in science as may enable them afterward to be able to distinguish the thoroughly trained

experts in the scientific professions from those who now impose upon and mislead the community with a semblance of knowledge.

A power of distinguishing, the want of which has been felt for years by many of those who have been otherwise qualified and have been called to take charge of important interests.

Boston Nov 5. 1878

Thompson
Dr. Clifford
Nov 1878.



Pittsburgh Nove 6 1878

Wm B Rogers
111 Henry st
New York.

Dear Sir, About twenty years ago a gentleman of your name made a report as a geologist, on lands belonging to the Pridevall Iron Co Virginia. This report was published with reports of Surveyor &c in pamphlet form. If you are the person who made this report, would you let me have a copy of this pamphlet if you have one.

If I am not writing to the right man, could you give me the address of "Prof Wm B Rogers Geologist" or inform me where I can get the Reports. Should you have them & do not wish to part with it, I will return to you if you will allow me to see it.

Very respectfully yours
G R Lauman
116 Water st

Said report was made by
W B Rogers.

Boston Nov. 7. 1878

My dear Sir –

Coming to the city for a day or two, I find your notice of the meeting of the Corporation as fixed for Saturday the 9th inst – As I shall return home before that time, I cannot be present –

With a very humble ~~sense~~ sense of my services as a Trustee in the past, you will perceive that as residing mostly in the Country, I can be of still less use in the future – I ~~feel~~ therefore feel called upon to resign my place as a member of the Corporation of the Mass.ts Institute of Technology, that it may be filled by one who can better attend to the important duties devolving upon a Trustee – With my hearty & sincere good wishes for its prosperity and that of its officers & members, I remain

Yours very truly &c

Jos. S. Fay

Dr. Sam.l Kneeland
Sec.y Mass. Inst. of Tech.y
Boston

From Jos. S. Fay
resigning his place
as the Corporation of
the Institute

Boston, Nov. 8, 1878

Dear Prof. Rogers,

I enclose a statement of the hours of exercises in the department of Mathematics.

The time for preparation is of course only an approximation; it cannot be estimated exactly.

Very respectfully & sincerely yours,

Geo. A. Osborne

Class.	Hours per week in class-room.	Hours per week of preparation, individual assistance, &c. (estimated.)
1st year Math.	9	6
2d " "	6	6
2d year Desc. Geom.	4	4
	19	16

First Term. 1878–9.

No. of exercises = 29.

	~~COURSE~~ Year	9 — 10	10 — 11	11 — 12	12 — 1	2.30 — 3.30	3.30 — 4.30
MONDAY	1	I French	II French				
	2						
	3		German			French (Sc. & Lit.)	German
	4	*German					
TUESDAY	1						
	2	I German	II German				
	3						
	4				French † Italian		
WEDNES.	1	I French	II French				
	2						
	3		German			French (Sc. & Lit.)	
	4						French (C. E.)
THURSDAY	1						
	2	I German	II German				
	3						
	4				French † Italian		
FRIDAY	1	I French	II French				
	2						
	3		German			French (Sc. & Lit.)	
	4	*German					French (C. E.)
SATURDAY	1		I French	II French			
	2	I German	II German				
	3						
	4						

* an optional class consisting of 4 students. † an optional class consisting of 4 students.

The French (Sc. & Lit.) of the 3d year consists of 5 students.

Institute of Technology.
Boston. Nov. 8, 1878.

President Rogers.

Dear Sir;

Inclosed please find the arrangement of studies in my department, and a scheme of recitations for the present term, with such modifications of the normal scheme as the fiscal view and the necessities of the case have required or suggested.

In respect to the required French in the first half of the fourth year, I am of the opinion that it would be as well or better to omit it, and give students their option to take French or German this term or to omit both. This would give greater elasticity in the various departments in the arrangement of their professional work. Also some of them would prefer German rather than more French. I do not think that students at the end of the first year could be expected to be very strong in the practical use of the language, but they would be as strong or more so than students in German at the end of the third year, owing to the greater difficulty presented by the German. If therefore

either language is to be continued as obligatory into the fourth year, I think it should be the German rather than the French. For these reasons, I should be in favor of discontinuing French as a regular study in the fourth year.

In my interview with you yesterday, the greater importance of French rather than German in certain departments, as for instance that of Civil Engineering, was alluded to. One mode of meeting such a difficulty would be not to require any German whatever in this or these departments, and perhaps give them an opportunity to go farther in French. But I think such a course would be very undesirable in the best interests of the school. For, aside from the intrinsic value of German to every department, there is a liberalizing value in its study, although taught in a practical manner as here, which our students who have so little comparing of that kind of training so much need. It is true that things must be balanced by judgment and adapted to means, but something in the direction of breadth and of a tendency to counteract narrowness is very desirable in the training of our students, as you yourself have readily and happily stated.

Permit me a word in reference to what I alluded to yesterday, the remark of a member of the Corporation, that there was "an excessive amount of time devoted to French and German." By actual figures there is much less time devoted to these studies than in the Sheffield School, and there Latin is required for admission. All who have acquired the ability to use practically French and German know that the acquisition requires much time and work. If we are going to give the students a start in these languages, it is desirable to give them a start which will be of value, when they get to work, in other words an ability to read with some readiness and accuracy. Then there is the liberalizing value of these studies, even when taught in a purely practical manner, of which I need not speak. For my part, and speaking in the interests of the Institute and not alone of my department, I think there is too little rather than too much time given to French and German.

Very Respectfully,

Charles P. Otis.

P.S. To the last sentence above I wish to add: that it is the interests of the Institute which I consider primary, as it is my duty to do, in all that concerns my department.

C. P. O.

[11/8/1878]

Arrangement of studies in the modern languages for all students.

First Year.	Second Year.	Third Year.	Fourth Year (first half.)
French	German	German	French

Arrangement for special students.

Third Year.	Fourth Year.
French (Sc. & Lit)	German (Sc. & Lit.)

Third & Fourth Years (first half.)
Italian & Spanish (alternating.)

Scheme showing the number of recitations per week.

All students.	1st	Year	French (2 divisions)	6
	2nd	"	German "	6
	3d	"	German "	6
	4th	"	French	3
				21
Special students.	3d	"	French (Sc. & Lit.)	3
	3d & 4th	"	Italian & Spanish (optional)	2
	4th	"	German (Sc. & Lit.)	3
				29

Remarks.

In the arrangement for all students, the recitations in French & German come three times a week, and two hours are allowed for preparation for each. The same is the case in the Special classes in Science & Literature. In the optional classes, the number of recitations is less as also the time of preparation.

In addition to the Annual and Semi-Annual examinations, there are written Intermediate examinations occurring once a month. In some of the optional classes, where the work is reading only, the Intermediate examinations are not so frequent.

In addition to the above regular classes, optional classes have generally been formed every year, for the purpose of pursueing a course of reading in French or German, and going farther than the time allotted to the study in the regular course allowed. These classes have not been very large, and have been composed of such students as had time for this extra exercise. The class in Italian has been maintained to meet the wants of certain students, as those in Architecture who wanted Italian, and those

purposing to go into business, who wanted Spanish. The class (optional) in Italian this year numbers 4 students, three of whom are architects. The optional class in German in the fourth year, this term, numbers 4 students, which would probably be larger were there no required French in this year.

Remarks on the studies of the present term.

Some modifications have been necessitated in the above normal scheme as applied to the present term. These are as follows.

There being no students in the course of Science & Literature in the fourth year this term, that course in German is not given.

The French of the fourth year is given twice instead of three times a week, in consequence of a difficulty in arranging the tabular view. For the same reason the Civil Engineering students have had to recite by themselves, although this arrangement will not have to be continued through the term.

In the third year German there is but one division, neither the size of the class nor the tabular view requiring two.

In the first year French there is this term one additional recitation. This does not increase the whole amount of time devoted to the subject, since the amount of time devoted to preparation has been proportionately diminished. This additional exercise requires no preparation, and is devoted to exercises in dictation, talking and reading at sight. It is a kind of laboratory exercise, in which the students accomplish by thus working with the teacher much more than they would by spending the time by themselves in preparation. This is especially the case at this early stage of the students' course in the language, and where they are somewhat unequal in their standing, owing to the not entirely satisfactory fulfillment of the requirement for admission.

In the second year, the beginners in German have, for the same reasons as in the case of the French, a part of the time of preparation turned into a class room exercise without preparation.

These modifications are indicated on the inclosed view of studies for the present term.

adopted Nov. 9. 1878

Report of a plan for reducing the expenses of the School of the Institute

On a review of the progress of the School of the Institute for the past ten years, it appears that the number of students in its regular paying departments increased steadily, from 172 in 1868, to 353 in 1872 and that since that time it has gradually fallen off to 203 in 1877, a result doubtless due in a large degree to a decline in the public demand for Engineers & other experts in applied science.

During this period, through the zealous labor of the President & Faculty, the courses of instruction have been increased in their extent & thoroughness, new laboratories have been established and, as a necessary incident, a large addition has been made to the teaching & executive force of the school, by which means the Institute, in spite of the increasing competition, has been able to keep its place at the head of the scientific schools of the country. Of course if the receipts from students fees of late years had kept pace with this internal development of the school, we should have escaped in part our present financial embarrassment.

But it must be borne in mind that the great

But it must be borne in mind that the past

[11/9/1878]

want of the school is an adequate permanent endowment, - that without this, or large occasional contributions to its means, it must always be subject to the evil effects of fluctuations in its patronage - in the financial conditions of the community.

Observation shows that schools of this description abroad as well as at home, cannot rely for their support exclusively or even very largely on the income derived from their classes. In this respect we know of no instance of a Technical School that is self supporting. It is we believe a fact that the school of the Institute has been more largely supported by its income from students fees than any other of like character in this country. In illustration of what is here stated, we may refer to the Sheffield Scientific School of New Haven, one of the most justly distinguished in America, in the annual catalogue of which for 1876-7 it will be seen that, while the income from students was only half as large as that of the Institute, donations amounting to $15.000 are added to balance the account for the year.

In this connection we should not forget that the number of teachers required in such a school as ours is dependant, more on the variety, range

[11/9/1878]

and thoroughness of the instruction & the consequent sub-division of classes, than upon the actual number of pupils taught, and hence that no large reduction of the teaching force can be made without impairing the character & detracting from the value of the education which it furnish

In view of these considerations and of the high reputation of our School with the public, for the solid & practical character of its training & instruction we can hardly doubt that sooner or later it will be relieved from the chances of such embarrassment as the present, by the accumulation of a large permanent endowment, and we feel the more assured of this from the effort recently begun to increase our funds by subscription.

Whatever may be our success in raising the needed addition to our funds, we cannot hope at an early day for such an increase as to dispense with the present necessity for retrenchment.

In considering what measures should be adopted for reducing the expenses of the school so as in future to be within the limits of its financial ability, the committee on the school have been guided by two considerations, first: to avoid wherever possible, retrenchments that would seriously impair the efficiency of its practical work, & secondly, to see that

[11/9/1878]

the changes made in its present system be of such a nature as to secure permanent economical results.

Looking then, for the present, to the means of diminishing the expenses of instruction, three general plans of retrenchment have suggested themselves, either of which might be made to secure the desired result. These are:

1st To reduce the salaries of the Professors & Instructors by a large percentage of their present amount.

2d To dispense with a number of the Professorships as well as inferior officers of instruction and administration.

3d To combine both these expedients by dispensing with a less number of Professors & other officers & reducing the salaries of those that remain by a less percentage than in the plan first-mentioned.

The first of these measures might perhaps be concurred in by some of the Corps of instructors under the pressure of necessity and as a purely temporary arrangement but could not be carried out as a prolonged policy without chilling or even extinguishing the zeal for which our teachers have heretofore been distinguished & could not fail soon to deprive the school of its ablest Professors.

The plan of reducing the expenses by a large

1

1st. To reduce the activity of the Pyloric mechanism for a large percentage of their present amount.

2d. To diminish the number of the Peristaltic waves as well as improve their character and intensity.

3d. To convert the atonic distended by dilatation into a less number of Pylorus with physiological functions and the number of these that remain up to the full of their normal capacity.

Results

Results of these measures applied to dog with dilatation of the stomach.

Results of the same measures applied to dog with dilatation and stenosis of the pylorus.

Results of the same measures applied to dog with dilatation and stenosis of the pylorus and with the pylorus closed by a ligature.

Results of the same measures applied to dog with dilatation and stenosis of the pylorus and with the pylorus closed by a ligature and with the pylorus closed by a ligature.

[11/9/1878]

curtailment of the teaching staff might of course be made financially effective, but if carried far enough for the purpose in view would, we fear, so impair the value and attractiveness of the school as to defeat the economical object it was intended to secure.

The third plan above mentioned, calling for a less reduction of the teaching staff and of the salaries of the Professors, might, we think be so arranged as to sacrifice comparatively little of the practical efficiency of the School and would on both accounts, we should hope, be acceded to, if not cordially, at least without serious dissatisfaction.

Keeping in view the above considerations, the Committee are of opinion that the following scheme of retrenchments, more or less modified in some of its details, would effect the desired economy without a serious disturbance of the productive activity of the School.

1st To dispense with the chair of "Logic & the Philos: of Science," thereby saving	$2500
2d To dispense with the office of Sect.y, as heretofore constituted, leaving the Faculty to choose their Sec.y from among themselves and calling upon the Bursar if necessary to act as Sec.y of the Corp.n " "	2500

[11/9/1878]

3d. To dispense with one of the assistants in each of the several Depts of Chemistry, Civil Engineering, Mech.l Engineering and Architecture. " " $2400

4th. To restore the duties of Profs Niles and Hyatt to the measure of last year, reducing their salaries to what they then were, but keeping Mr. Crosby's as lately fixed " " 2100

5th. To dispense with one of the mechanics or servants attached to the building or reduce wages to the amount of $500 500

6th. Turning to other expenditures of the Institute, as exhibited in the late report of the Treas.r, we find in the item of Laboratory expenses - that of Insurance - Repairs an opportunity for further important reductions.

The former item, which in 1877 amounted to $2.156, was from various causes swelled in 1878 to $5.637. Allowing a reduction from the latter to 3000 which is nearly $1200 more than the reported expense for 1877 we should save $2377.

As the outlay for Insurance, repairs &c for 1878 amounting to $4,256, included

[11/9/1878]

the large payment for a 5 years Insurance and as the corresponding expenditure for 1877 was only $1755, we may assume $2,000 as a sufficient sum for the current year.

We have then an aggregate saving on these two items of about $4600, so that, allowing $600 margin for further expenditure if needed, we may estimate our saving on these two heads, as compared with the expense of 1878 at about 4000

Making all the above reductions we should, without resorting to a tax on salaries, save $14000 as compared with the expenditure of 1878 14000

Cutting down the salaries of the remaining 12 Professors, (Prof. Dunkle excepted) to the amount of 10 percent would bring $3000 and a like tax on the inferior salaries not below $1000, would save $600 making an aggregate of — 3600

We should thus have a total reduction of our expenses as compared with last year of 17600

Were we certain that our pending subscription would by the beginning of 1879 reach

[11/9/1878]

$100.000 or even $75.000 we might feel secure in dispensing with the tax on incomes, and even so should the subscription be much smaller at that time or much slower in accumulating than we had been expecting, it is worthy of consideration whether a small part of it might not be allowed by the donors to be applied directly to paying what may be needed to balance our expense account for 1878-9

It may be added that the $3000 paid for many years past to the President of the Institute will not be called for as long as the present arrangement continues and this itself would probably go far towards balancing the account in future; provided that the income from the students does not fall off.

As yet the committee have not considered the question as to the time at which it will be expedient that these retrenchments go into effect. Should the 1st of January next be fixed on as a suitable date for this change, the amount of retrenchment above stated would of course be considerably reduced.

(1)

Nov. 9. 1878

At a meeting of the Corporation of the Mass: Institute of Technology, held at the Institute on Friday Nov: 9th 1878, a plan for reducing the expenses of the School of the Inst: was adopted in which are included the following changes ~~to wit~~: viz

1st To dispense with the chair of Logic & the Philosophy of Science.

2d To relieve the Sectry of the Inst: of all labors of instruction in the School & to limit hereafter the duties of his office to the Clerical work of the Corporation & its Committees & of the Society of Arts, leaving the Faculty to choose their Sectry from among their own number; & in virtue of this diminution of his labors to reduce the salary of the Sectry to $1000.

3d - To discontinue the Chair of Geology, looking to a future new arrangement of the Courses in this & the allied studies; & to restore the duties of Profrs Niles & Hyatt to the measure of last year, reducing their salaries to what they then were.

[11/9/1878]

4th. To dispense with one of the Assistants in each of the several Depts of Chemistry, Civil Engineering, Mechan: Engineering & Architecture

5th To reduce the salary of the Instructor in Architecture to $1600 per an: that of the Instructor in French to $1200. & that of each of the three remaining Instructors ~~to wit~~: viz in Mathematics, Drawing & School of Mech: Arts to $900.

6th To dispense with one of the servants attached to the building, or to reduce wages to the amount of $600.

7th To diminish by 10 per c. the salaries of the remaining 13 Professors.

8th To limit the aggregate appropriation for Laboratory expenses for the current year 1878-9. to $3300.

9th The above changes, as far as relates to the cessation & to the special & pro-rata reductions of salaries, ~~shall~~ take effect from Jan: 1st 1879.

Nov. 9, 1878

Union Club, Boston
8 Park Street.

My dear Mr Rogers —

I promised you that I would send you a line in answer to your inquiries about my own work at the Institute and also in regard to possible reductions in the expenditure of my Department —

I. My regular exercises with my students come on Tuesday Wednesday Thursday and Friday. On each day I have a lecture or recitation in the morning and a lecture in the afternoon. I also spend an hour or two every day in the drawing-room revising and correcting the drawings made in illustration of the lectures. The rest of their work in drawing is

merely in Mr Lévangé's hands, and I only give it time enough to keep the run of it, and to keep up my knowledge of the young men.

On Mondays and Saturdays I have no regular exercises. But any special instruction I want to give, such as courses of lectures in Perspective or in Shades & Shadows I generally give on Mondays, and I generally take Saturdays for examinations, so as not to interrupt the regular work.

After the first of December I shall have two hours a week in addition to the above.

As two thirds of my young men are on my hands all day, being special students with no other work but what I give them, a good deal of my time is taken up in personal conferences with one and another or with their parents & guardians, all the correspondence and all the talking which in the case of other students is done by the Secretary being necessarily thrown upon me, so much so if it was a private school. I find I cannot get through with the day's work in less than five or six hours. But on Mondays and Saturdays I do not generally spend more than three or four hours at the Institute.

By day's work, I mean the actual conduct of affairs. I never get any time while I am there for reading or study. I am generally down town or in my office for three hours between noon and half past three.

II. As to the expense of the Department I think it will not appear to be disproportionate to

the amount of teaching done, when it is considered that it gives to between twenty and thirty students almost every thing that they get, in the course of the year, (only the regular students of the 2d and third years doing anything to speak of outside,) and that the teaching given is in the nature of things of the most expensive and advanced kind, being personal instruction in individual and independent work. Nevertheless the expenses of course ought to be diminished if they can be, so that the department may become a source of as much revenue to the school as possible, without impairing its efficiency.

I do not think it is practicable or desirable to make any change in Mr Lévarq's

case, for divers reasons. Although it has not proved practicable to increase his salary as time has gone on, as was hoped and expected at the time of his appointment seven years ago, it is true that the its value has been enhanced by the reduction in the cost of living and the rate of exchange, so that it is at present fairly proportioned to the value of his services. It is never the less true that they would be almost impossible to replace, and that in putting them at our command he has thrown himself out of the line of ~~advancement~~ professional advancement either here or in his own country. We can of course discontinue the arrangement whenever it seems best to do so, but while it continues ~~and~~ while we desire it to continue, I do not think it

will be practicable to change the conditions, even if under the circumstances we should think a reduction of compensation proper to propose.

But I think that I can now for a year or two dispense with the services of a second paid assistant. When I asked for a second assistant three years ago the appointment was absolutely necessary to enable me to carry on the work of the Department. His assistance has enabled me to put my work into excellent condition, the collections are in good order and twice as available as before, and the diagrams and drawings most necessary to my work will by the end of this year have been completed. The Department can run for a year or two on the strength of what Mr. Underwood has done. He does not in any case wish to remain in a place that offers no promotion, beyond the spring, and though it would be well worth while to have his place filled by another so competent person, it is not absolutely necessary and I will not ask it. But I shall be glad to have the services of one of my own students, for two or three hours a day, to keep the collections in order, and to have his fees remitted in consideration of such service. Every year some promising student is prevented from coming into the school on account of the expense, and if I can be al-

tuned, as I have once or twice been allowed in former years, to offer a free place in exchange for necessary service, I am sure that I could make an arrangement that would not diminish the revenues of the school.

I am very truly

Yours.

Wm. P. Ware

Nov. 9. 1878.

Union Club, Boston,
5 Park Street.

Notes on Plan for Reducing expenses.

The Suggestion of (2) relating to the present Soc. could not be carried into effect — without ~~first Notifying the~~ giving Notice to the Corpn. of the proposed Change, with the Intimation by what the Meeting is called?

Dr. Kneland does a large Amt. of Clerical work for the Faculty — which could not be done by Soc. of the Faculty (one of the Profs) without Clerical help — He has also much work for the Soc. of Arts which he is engaged to do by the By-Laws of the Society.

Read Substitute for this Clause —

Omitting Delany & Sequency & Weller

Frany 1000

~~Weller 1000~~

Mudge 1000

2000 10 pc = 200

Sing & Ref. 300

13 Prof.s 13 × 250 = 3250

Gen 3250

Making a Total of Tax on Salary on Salary of 3450.

Our Items would stand thus

Superior	2500
Sec.y	1500
Assists	2400 Tutors
Delany & Seq.s & Weller	900
Riley & Hyatt	2100
Rumpler	~~500~~
Servant	600 or 600
Lab.s & Repairs	2,000
	14.550
Weller	200
	14.300

Effect

If the above Estimates shall take effect Jan. 1st 1879 - we shall have to deduct per the above. One fourth of the following Sums.

Salary of Superior	2500
Sal of Secretary	1500
" Delany & Sequency & Weller	900
Riley & Hyatt	1500
Assist Tty & Sec'ty	300
10 p.c. Tax on Sal	3450
	4/12850
To be deducted	3202.50

from the estimated total Saving - for the Current Scholastic Year.

63
75
25
3250
3202.50
375
2827.50

[11/11/1878]

(1)

Dear Sir.

At a meeting of the Corporation of the Mass: Institute of Technology, held at the Institute on Friday Nov: 9th 1878, a plan for reducing the expenses of the School of the Institute was adopted in which are included the following changes, important to the Faculty & other officers of the School - viz:

1st. To dispense with the chair of Logic & the Philosophy of Science.

2d. To relieve the Secretary of the Institute of all labors of instruction in the school, & to limit hereafter the duties of his office to the Clerical work of the Corporation & its Committees & of the Society of Arts, leaving the Faculty to choose their Secretary from among their own number; & in virtue of this diminution of ~~his~~ labors to reduce the salary of the Secretary to $1000.

3. To discontinue the Chair of Geology, looking to a future new arrangement of the Courses in this & the allied studies; & to restore the duties of Profs Niles & Hyatt to the measure of last year, reducing their salaries to what they then were.

[11/11/1878] (2)

4th. To dispense with one of the Assistants in each of the General departments of Chemistry Civil-Engineering, Mechanical Engineering & Architecture.

5th. To reduce the salary of the Instructor in Architecture to $1600 per an., that of the Instructor in French to $1200, & that of each of the three remaining Instructors, viz: in Mathematics, Drawing & School of Mechan-~~ical~~ Arts to $900.

6th. To dispense with one of the servants attached to the building, or to reduce wages to the amount of $600.

7th. To diminish by 10 per cent the salaries of the remaining ~~twe~~ thirteen Professors.

8th. To limit the aggregate appropriation for Laboratory expenses for the current year, 1878-9, to $3300

9th. The above changes, as far as relates to the Cessation & to the Special & pro-rata reductions of salaries, shall take effect from Jan: 1st 1879

Mfr. Statement for
Papyrograph.

Nov. ~~9~~ 11. 1878.

[11/11/1878]

Dear Sir,

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1st To dispense with the chair of Logic and the Philosophy of Science.

2d To relieve the Secretary of the Institute of all labors of instruction in the School, and to limit hereafter the duties of his office to the clerical work of the Corporation and its Committees and of the Society of Arts, leaving the Faculty to choose their Secretary from among their own number; and in virtue of this diminution of labors to reduce the salary of the Secretary to $1000.

3d To discontinue the Chair of Geology, looking to a future new arrangement of the Courses in this and the allied studies: and to restore the duties of Profs. Niles & Hyatt, to the measure of last year, reducing their salaries to what they then were.

[11/11/1878]

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6th. To dispense with one of the servants attached to the building, or to reduce wages to the amount of $600.

7th. To diminish by 10 per cent the salaries of the remaining thirteen Professors.

8th. To limit the aggregate appropriation for Laboratory expenses for the current year, 1878-9, to $3.300

9th. The above changes, as far as relates to the cessation and to the special & pro-rata reductions of salaries, shall take effect from Jan. 1st 1879.

[11/11/1878]

Henry P. Kidder
John M. Forbes
James L. Little
E. R. Mudge
S. D. Warren.
John Cummings
W. Endicott Jr.
Geo. C. Richardson
S. R. Payson.
John A. Lowell.
H. B. Rogers.
N. Thayer.
Martin Brimmer
L. A. Shaw.
W. O. Grover.
H. Higginson
R. C. Robbins
G. W. Lyman.
Wm. Mason
R. M. Mason
John L. Bremer.
Chas P. Hemenway
Mrs Hemenway.

Miss Marion Hovey
A. A. Lawrence
R. S. Fay.
Jas. L. Fay.
Peter Smith
Mrs. N. I. Bowditch
Saml. C. Lawrence.
H. D. Parker.
J. S. Morgan.
Russell Sturgis
J. B. Alley.
Fred. L. Ames.
Jonas Fitch.
H. L. Pierce
L. M. Standish
B. Schlesinger.
Geo. Warren.
C. J. Morrill.
J. H. Wolcott.
J. H. Beal.
F. Haven.
Chas Faulkner.
D. N. Skillings.

[11/11/1878]

L. L. Dexter.
E. Atkins
Alex. Agassiz
Thos. Lyman.
J. A. Burnham.
John Foster
G. P. Cooledge.
G. B. Blake.
L. Jones.
N. B. Bacon.
Stanton Blake.
E. D. Jordan.
C. C. Hunewell.
P. C. Brooks Jr.
Ignatius Sargent.
C. W. Chapin.
Edwd Austin.
J. W. Brooks Walton.
Chas. Francis Adams
Wm. S. Eaton
Jos. S. Robinson
Thos. Nickerson
Jos. Nickerson

A. A. Burrage
J. C. Burridge
Augustus Lowell.
W. B. Spooner.
Lyman Nichols
Mrs. Sarah S. Russell.
J. L. Gardner.
John C. Gray.
L. E. Proctor.
Robt. C. Billings
Cyrus Wakefield.
Abbott Lawrence.
W. D. Pickman.
Otis Norcross.
John C. Phillips Jr.
J. L. Bowditch
J. M. Sears
C. H. Dalton
John Bailey
W. L. Weld.
W. G. Weld.
Geo. H. Corliss
John Slater

J. J. Carter.
S. Atkins
Rev. Rogers
Thos. Sumner.
J. H. Newham.
John Carter
J. P. Lodge.
J. B. Blake.
J. Jones.
W. B. Bean.
Lester Blake.
J. Jordan.
Geo. K. Kimmell.
J. L. Brooks Jr.
Augustus Sargent.
S. N. Stafford.
Saml Austin
J. M. Brooks Walter.
Chas. Francis Adams
W. L. Gates
Jos. S. Robinson
Thos. Nickerson
Jos. Nickerson

H. H. Burrage
J. S. Burrage
Augustus Gould.
W. B. Jones.
Lyman Nichols
Thos. Jarvis L. Russell.
J. G. Jordan.
John L. Gray.
J. E. Porter
Geo. L. Billings
Lyon Rodgers.
Robert Sumner.
W. G. Jackson.
Otis Harmon.
John L. Phillips Jr.
J. S. Bowditch
J. W. Gass
L. K. Cotton
John Bailey
W. J. Wales.
N. J. Wales.
Geo. K. Lewis
John Slater

[11/11/1878]

Green.

Geo. Higginson
D. R. Whitney
Wm. Amory.
Thos G. Appleton
E. R. Bigelow
E. Pierson Beebe.
Mrs. J. M. Beebe.
Nord. Gardner Brewer.
Miss Brewer.
Mrs. Saml. Hooper.
Miss Alice Hooper.
D. P. Kimball
H. L. Daggett
Isaac Lenno
E. W. Whitmore
Dr. Donald Kennedy.
Nash Spaulding & Co.
Capt. J. B. Thomas.
John Duff.
Saml. C. Cobb.
P. C. Brooks.
E. H. Baker.

Thos Wigglesworth.
Misses Wigglesworth
Rhodes.
N. J. Bradlee.
Chl. Henry Lee.
R. M. Pulsifer.
Moses Kimball
Mrs. B. H. James.
Mrs. Ellen Sutton
J. B. Moors.
Moses Williams
Barney Cory
Aug. Hemenway.
R. W. Hooper.
Ralph Warner.
Goddard Bros.
T. J. Hill
L. J. Borden.
B. F. Butler
Chas. J. Paine
James Thompson's widow
David Nevins
Leopold Morse.

Mrs. Higginson
Mr. Whitney
Mrs. Amory.
Mrs. J. Appleton
Mrs. Higginson
Mrs. J. Peabody.
Mrs. Parsons Brown
Mrs. J. M. Beebe.
Mrs. Andrew Bowen.
Miss Bowen.
Miss Lord Shaw.
Miss Alice Shaw.
Mr. J. M. Mitchell
Mr. J. Coggeshall
Henry Lewis
S. O. Whitmore
Mr. Gerald Hemenway.
Mrs. Langdon Mills.
Capt. J. R. Thorne.
John Duff.
Lewis G. Todd.
J. S. Weeks.
E. K. Robbins.

Mrs. Higginson
Mr. Higginson
Pirates.
M. J. Beasley.
Wm. Henry Gu.
M. W. Jules Jr.
Miss Kimball
Mrs. R. K. Jones.
Mrs. Ellen Cutter
J. R. Thorne.
Miss Williams
Henry Cory
Mrs. Hemenway.
M. M. Mosher
Rollin Brown.
Woodard Bros.
J. J. Hill
J. J. Borden.
E. E. Butler
Chas. J. Davis
James Thornbers rider
David Harris
Clifford Thorne.

[11/11/1878]

C. P. Talbot & Co.
Amos D. Lockwood.
A. G. Cummock.
J. L. Richardson
Walter Paine 3d
S. P. Rindge
Wm. J. Rotch
Wm. Robson
Nov. Seabury, Treasurer
Calumet & Hecla
Isaac Thatcher
Chas. L. Thayer.
John C. Whiten
E. A. Straw
Garner & Co. by
D. J. Johnston
Tilestow & Wollingsworth
A. H. Rice
Saml. C. Davis
N. W. Harwell.
E. C. Haskell.
L. J. Knowles
Worcester.

Crompton Geo.
Worcester.
Burnham J. C. & P.
C. Montgomery
J. D. Ainsworth.
Avery Plumer.
Alpheus Hardy
Sewall Day & Co.
Saml. Batchelder.
Wales
Cushing
Raff Carl.
W. Boyden.
Jas. S. Amory.
Tucker W. W.
J. Quincy Brown
S. P. Ruggles.
Taft Nuden & Co.
Renfew Jas.
H. B. Wood.
L. L. Brown.
O. W. Perry
Chas L. Harding.

C. P. Talbot & Co.
Hugo D. Schwarz.
H. Schwarz.
E. A. Wickersham
Walter Gains & Co
J. P. Hinds
Wm. J. Hitch
Wm. Hobson
Hon. Sidney Brown
Columbus Rankin
Isaac Theobald
Chas. A. Thayer.
John C. Whitin
E. A. Shaw
Brown Bros. by
D. J. Forrester
Stillwater Wadding Works
A. K. Rice
Saml. C. Davis
N. W. Cornell.
E. C. Rockell.
E. J. Thomas
Worcester.

Bancroft Bros.
Worcester.
Burnham & O. & P.
E. Montgomery
J. D. Sherwood.
Henry Turner.
Alfred Hardy
Samuel Day Jr.
Saml. Batchelder.
Wales
Dunning
Geo. Ford.
W. Ferguson.
Jas. L. Henry.
Turner W. W.
J. Quincy Brown
L. P. Ringe.
Taft Nelson & Co.
Burpee Jas.
W. B. Wood.
E. A. Brown.
O. W. Gray
Chas. A. Harding.

[11/11/1878]

Rufus S Frost.
R. H. White
Nelson Curtis
E. G. Baskell.
W. & F. G. Sayles
Nelson Slater.
Fred'k. Sonnell.

[11/11/1878]

Dear Sir,

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1st To dispense with the chair of Logic and the Philosophy of Science.

2d To relieve the Secretary of the Institute of all labors of instruction in the School, and to limit hereafter the duties of his office to the clerical work of the Corporation and its Committees and of the Society of Arts, leaving the Faculty to choose their Secretary from among their own number; and in virtue of this diminution of labors to reduce the salary of the Secretary to $1000.

3d To discontinue the Chair of Geology, looking to a future new arrangement of the Courses in this and the allied studies: and to restore the duties of Profs. Niles & Hyatt, to the measure of last year, reducing their salaries to what they then were.

[11/11/1878]

4th To dispense with one of the Assistants in each of the several departments of Chemistry, Civil Engineering, Mechanical Engineering & Architecture.

5th To reduce the salary of the Instructor in Architecture to $1600 per an., that of the Instructor in French to $1200, and that of each of the three remaining Instructors, viz; in Mathematics, Drawing and School of Mechanic Arts to $900.

6th To dispense with one of the servants attached to the building, or to reduce wages to the amount of $600.

7th To diminish by 10 per cent the salaries of the remaining thirteen Professors.

8th To limit the aggregate appropriation for Laboratory expenses for the current year, 1878-9, to $3.300

9th The above changes, as far as relates to the cessation and to the special & pro-rata reductions of salaries, shall take effect from Jan. 1st 1879.

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[11/11/1878]

1

Dear Sir,

At a meeting of the Corporation of the Mass. Institute of Technology, held at the Institute on ~~Monday~~ Saturday Nov. 9th 1878, a plan for reducing the expenses of the School of the Institute was adopted in which are included the following changes important to the Faculty and other officers of the School, viz:

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117 Marlborough St
Nov 11. 1878

Dear Dr Kneeland

It gives me more pain than I can express to send you the enclosed communication including as it does a vote of the Corporation which largely effects your salary. In doing so I wish to say that while all these measures of retrenchment received a prompt & unanimous approval their adoption called forth the most earnest expressions of regret that the financial condition of the Inst: should have rendered necessary measures of retrenchment which were to bear so heavily on individuals.

Of yourself personally & of your long & zealous services to the Inst: just & honorable mention was made & I am sure that others joined me in the very kind regard with which your faithful devotion to its interests was remembered. I trust dear Dr that you will accept the action of the Corporation as the result of a calm deliberation upon the measures of economy which have become essential to the safety & welfare of the school & for myself I know that you will need no further words to tell you how sincerely I remain

Yours truly
W. P. C.

Rec'd by E.R.

to BR
to Dr. Jas. Kneeland
Nov. 11 – 1878.

Nov. 11. 1878. Boston.

Dear Prof Howison

In sending you the enclosed statement of the of the votes passed by the Corp.n of the Institute at its meeting on the 9th inst. one of which relates to your department I am requested by the Corp.n to express to you their appreciation of the ability zeal & faithfulness with which you have performed your duties as Prof., ~~as~~ together with their sincere regret that the financial condition of the Institute does not justify their retention of your professorship, in the scheme of instruction of the School of the Inst.

It is but right that I should add that these words of esteem & regret are but an imperfect indication of the respect & regard for you expressed at the meeting by Members of the Corporation

As for myself dear Prof you will I am sure believe that it pains me very deeply to be under the necessity of communicating this result to you, & of looking forward to the withdrawal of the services & companionship in the Inst. of one whose scholarship & personal qualities are so worthy of regard.

Please dear Prof accept my sympathy & the assurance of my wish to do whatever may be in my power to forward your interests in the future & believe me

With sincere regard Yours very truly

W. P. R.

W. B. R.

to Prof. Horsford

Nov. 11. 1878.

To Instructor, Salary & Lectures

117 Marlborough St
Nov: 11th 1878.

Dear Sir

At a meeting of the Corporation of the Institute of Technology held Nov: 9th 1878, among the measures included in "a plan for reducing the expenses of the School," which was unanimously adopted, a vote was passed to the effect.

That --- "The salary of the Instructor in Architecture be reduced to $1600 per annum, the change to take effect from Jan: 1st 1879."

In communicating this vote to you I beg to say that the action of the Corporation has not been due to their want of appreciation of the value of your services to the School, with which all are fully satisfied, but to the fact

To Instructors
Eugene Letang &
Julius Bourgeois
Nov. 11. 1878

that the financial condition of the Institute compels them to provide for a considerable reduction of its expenses.

Trusting that you will concur in the expediency of this measure & looking hopefully to an enlargement of our resources at no distant time I remain dear Sir

Yours very truly & respt.ly

William B Rogers Pres.

(for the Corporation)

Mr. Eugene Letang
Instructor in Architecture.

(Copy.)

Dear Prof. Ordway

I had hoped to have obtained the papyrograph of which I send you a copy in time this morning to prepare the paquets & letters for the Faculty today.

I have had a day of hard & painful work, but cannot close it without sending you a few words of suggestion.

Should the Faculty hold a meeting tomorrow please say to them that it is the wish of the Committee on the School that the Profs. of the Depts indicated in Vote 4 should report to the chairman of the Faculty the name of the Individual in each case with whose services they can best dispense. Be good enough also to make known to Instructors Wells, Mudge & the New Instructor in the School of Mech: Arts the portion of Vote 5 which refers

to them, or if you think it better I shall myself write to them.

As regards Vote 6. we shall rely upon the judgement of yr self & Mr Tappan, with the members of the faculty if desirable for appropriate action.

I earnestly hope that the Faculty will generously acquiesce, hard as it may seem, in the proposed tax on salaries.

Every member of the Corporation desires to increase rather than to diminish the pay of the Profs & I know that they will be eager to do so whenever the financies of the Inst: permit.

Now they are feeling greatly strengthened in the effort to carry forward the subscription by the evidence the Inst: is giving of its determination to live within its means.

I need not say that as the reduction does not begin until the end of the 1st quarter the tax for the year is really 7½ & not 10 per c.

Should the faculty desire my presence I shall willingly attend, tho' this late task has greatly tired me.

Believe me dear Profs in the faith & hope of brighter times for the Institute yours faithfully

WBR.

117 Marlborough St
Nov. 11th 1878.

To Prof. Ordway. Chairman

Nov. 11. 1878

to be read to the Faculty